

Product Catalog 2013 - 2014

Intelligent Systems and Platforms

Transforming the Industrial Cloud Era

- Fanless Embedded Box PCs
- Digital Signage Platforms
- Intelligent Transportation Systems
- Intelligent Micro Computers
- Intelligent Inspection Systems
- Video Wall Controllers
- Industrial Storage
- Pre-configured Systems
- Industrial Computer Chassis
- Server-grade IPCs
- Industrial Motherboards
- Slot SBC & Passive Backplanes
- Industrial Computer Peripherals

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

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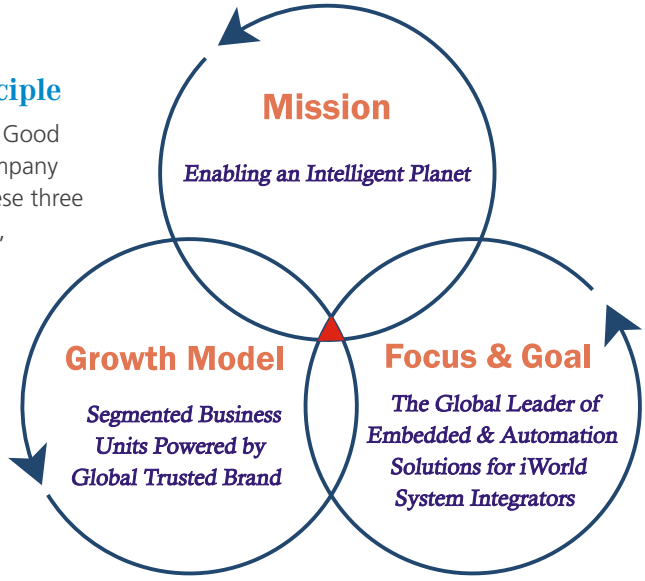
About Advantech

Enabling an Intelligent Planet

Founded in 1983, Advantech is a leader in providing trusted innovative embedded and automation products and solutions. Advantech offers comprehensive system integration, hardware, software, customer-centric design services, and global logistics support; all backed by industry-leading front and back office e-business solutions. We cooperate closely with our partners to help provide complete solutions for a wide array of applications across a diverse range of industries. Advantech has always been an innovator in the development and manufacture of high-quality, high-performance computing platforms, and our mission is to empower these innovations by offering trustworthy products and services that enable an intelligent planet. With Advantech, there is no limit to the applications and innovations our products make possible.

Advantech's Good-to-Great 3-Circle Principle

The Advantech 3-Circle Principle is based on the book "Good to Great," by Jim Collins. According to the book, a company looking for long-term success should clearly address these three fundamental principles, and commit to their continuing, solid execution. Advantech is fully committed to this approach and has defined the Advantech "Good to Great 3-Circle Principle" as a means of adhering to it.



Advantech Corporate Structure and Growth Engines



Advantech Product Group Structure

- **Networks & Communications DMS**

Advantech's integrated DMS "StarFleet" Model provides OEMs and premier key accounts with customer-focused Design and Manufacturing Services (DMS) for winning together through worldwide partnership and collaboration. DMS provides hardware and software integrated solutions. For the telecom and networking markets, Advantech provides mission-critical hardware to the leading equipment manufacturers. Advantech's standard and customized products are embedded in OEM equipment that the world's communications infrastructure depends upon. Through Advantech's premier Design & Manufacturing Services our customers get reliable, open-standard solutions from the leading innovator in network platform development and manufacturing – plus dedicated resources and support to back them up.

- **Applied Computing DMS**

The Applied Computing Group devotes itself to customization services and delivers vertically-driven and application-specific solutions. We specialize in design and manufacture of high quality industrial hardware and tailored software that fulfill exact needs for sectors including gaming, healthcare, portable devices, retail, and embedded systems. We strive to apply the newest technology and debut niche products. With dedicated R&D experts, accumulated domain know-how, flexible manufacturing, and a comprehensive global service net, we offer service that gives customers a dramatic market advantage.







World-Class Recognition

Advantech is an authorized alliance partner of both Intel® and Microsoft®. Our customers find the technologies we use inside our products to be widely compatible with other products in the global marketplace.Starting in 2003, Advantech was recognized by Interbrand, the world-renowned consulting firm, as one of the Top 10 Taiwanese Global Brands, and this recognition has continued every year since. Advantech appreciates this recognition of our efforts to build a trusted, global brand; it also symbolizes a promise we give to our business partners, which is to keep building a trustworthy brand that is recognized everywhere and improves the lives of all.

Model Corporate Citizen

Advantech is committed to being a model corporate citizen by helping to preserve the environment and by giving back to society. Our environmental program focuses on reducing, reusing, and recycling materials used in our manufacturing operations. Advantech's environmental compliance effort includes the following:

- ISO 9001 Certification
- ISO 14001 Certification
- ISO 13485 Certification
- OHSAS 18001 Certification
- TL9000 Quality Management System
- RoHS Directive Compliance
- WEEE Directive Compliance
- Authorized Sony Green Partner



Timely Support at Your Convenience

Advantech has over 14 regional toll-free hotlines, and offices throughout 91 cities in 20 countries, with over 5,000 employees to provide efficient, professional services for customer care, product selection, technical support, and order handling. Through our call centers and online stores, customers worldwide enjoy the convenience of Advantech's multi-service channels to reduce business turnaround time. Together with over ten customer service centers in Taiwan, China, Japan, Korea, Singapore, Australia, Russia, Mexico, Brazil, the Netherlands, Poland, and the United States, our global service network offers an extensive spectrum of services that includes warehousing, logistics, peripheral certification, sourcing and purchasing, and RMA and support services.

• Embedded Core Computing

Embedded Core Computing Group provides a full range of embedded boards, systems, gaming computing, peripheral modules, intelligent display and innovative embedded software services with leading technologies to customers. We also think about how to provide more value to embedded developers via a variety of embedded design-in services. With a range of specialist design-in services backed by our internal and global resources, Advantech is committed to working closely with embedded customers to ensure design success by helping them discover new business opportunities through advanced embedded technologies and services that empower smart applications for an intelligent planet.

• Service Automation

Advantech's Service Automation Group (SAG) aims to enable smart cities by providing products and solutions for three vertical markets: Digital Healthcare, Digital Logistics, and Digital Retail & Hospitality. SAG invests in developing vertical-driven, application-ready platforms and solution-ready packages for use in digital healthcare; digital logistics & warehousing; fleet management; public transportation; digital signage, and self-service computing—for the retail, hospitality, enterprise, and public spaces sectors.
The Service Automation Group offers three vertical solutions that deliver the convenience, safety, and efficiency of smart applications, so that you can experience the best in interactive and innovative technologies and services.

• Intelligent Systems and Platforms

With innovative technologies from cloud computing (industrial servers, GPU servers, video servers), edge computing (fanless, slim & portable devices), to high performance embedded systems (blade computing, network processor platforms, DSP processing), Advantech transforms embedded systems into intelligent systems with smart, secure, energy-saving features, built with remote manageability services and professional System Configure-To-Order Service (System CTOS) and System Design-To-Order Services (System DTOS). Advantech's intelligent systems are designed to target vertical markets in transportation, automation, telecommunication, digital signage, military, and video applications.

• iConnectivity

Advantech's iConnectivity offers a comprehensive line of industrial communication solutions to meet the needs for mission critical applications. These products include: Industrial Ethernet Switches, Wireless Access Points, Media Converters, Serial Device Servers and Modbus Gateways. These products securely transmit critical and sensitive information, remotely monitor and control networked devices, and emphasize high communication capabilities for industrial applications, including railway, intelligent transportation, renewable energy, power automation, environmental & facility management, and Machine Automation. iConnectivity's goal is to provide interconnected solutions - Industrial Networking, Industrial Wireless, and Device Connectivity, to fulfill Advantech's mission of "Enabling an Intelligent Planet".

• Industrial Automation

With the theme of Intelligent Automation, Seamless Integration; the Industrial Automation Group (IAG) of Advantech Corporation is a pioneer in intelligent automation technology. By combining connectivity, flexibility, ruggedness and leading-edge "Internet of Things" technology, IAG has product offerings for intelligent HMI platforms, industrial Ethernet and wireless automation controllers, HMI/SCADA software, embedded automation computers, distributed I/O modules, wireless sensor network solutions, motion I/O and plug-in I/O modules for a wide array of industries, and also focuses on solution markets, such as machine automation, power and energy and factory automation/EFMS solutions. With more than 20 years of experience in providing a full range of products to different vertical markets, IAG is a leading global automation product and services provider.

Intelligent Systems and Platforms

Transforming the Industrial Cloud Era

With innovative technologies from cloud computing (industrial server, GPU server, video server), edge computing (fanless, slim & portable devices), to high performance embedded systems (blade computing, network processor platforms, DSP processing), Advantech transforms embedded systems into intelligent systems with smart, secure, energy-saving features, built with remote manageability services and professional System Configure-To-Order Service (System CTOS) and System Design-To-Order Services (System DTOS). Advantech's intelligent systems are designed to target vertical markets in transportation, automation, telecommunication, digital signage, military, and video applications.



Star Products

Embedded Box Computers



NEW

ARK-1122F

Intel® Atom™ Dual Core N2800 with Diverse Communications

- Intel® Atom™ Dual Core N2800, 1.86 GHz
- Supports 2 x Intel GbE
- Built-in 2 x Mini PCIe slots for Wi-Fi/3G communications (1 w/ SIM)
- Supports independent dual displays interfaces : VGA + HDMI
- Supports 1 x RS-232, Audio line in / line out and 3 USB 2.0 ports
- Supports mSATA storage
- Wide operating temperature -20 ~ 60 C support
- Optional VESA / DIN-Rail / Wall mounts
- Supports SUSIAccess and Embedded Software APIs



NEW

ARK-2150F

3rd Generation Intel® Core™ i7 with 4 x GbE, Isolated DIO & Wide Range Power

- Intel® Core™ i7 processors + Intel QM77 PCH
- 1 x DDR3/DDR3L SO-DIMM, support up to 8 GB
- DirectX11, OpenGL3.1, OpenCL1.1, triple independent display: VGA + HDMI/ DisplayPort+DVI-D
- Support 4ch digital input and 4ch digital output with 2.5KV isolation
- Supports 2 x USB 3.0, 3 x USB 2.0, 4 COMs ports
- Supports 1 x internal mSATA socket and 1 x 2.5" SATA HDD Bay
- 12~24V wide range DC input with lockable connector
- Supports Intel AMT8.0, iManager, SUSIAccess and Embedded Software APIs



ARK-5260

Intel® Atom™ D510 Fanless Embedded Box PC with Dual PCI/PCIe Expansion and Dual Mobile HDDs

- Sealed construction with fanless operation, supports Intel® Atom® D510 up to 1.66 GHz
- Supports 2 Giga LAN and 5 USB 2.0 ports
- Supports 4 RS-232/422/485 with Auto-flow control
- Built-in 1 x PCIe, and 2 x PCI expansion slots
- Rubber anti-vibration card-holder for PC expansion boards
- Supports wide power range of 12~ 24V DC input
- Supports SUSIAccess and Embedded Software APIs



NEW

AiMC-3200

Micro Computer, Intel® Core™ i7/i5/i3 CPU,2 Expansion,250W 80Plus PSU

- Supports LGA1155 Intel® 3rd/2nd Generation Processors with Intel® H61 chipset
- Dual DIMM sockets support DDR3 1600/1333, up to 8GB
- Supports dual GbE LAN; Multi-display VGA/DVI-D
- Smart fan control for thermal and acoustic optimized
- Max 2 PCI-E expansion slot
- All-in-one compact system (230x230x90 mm)

Industrial Motherboards & SBCs



ASMB-584

4th Generation Intel® Core™ Processor-based Micro ATX Server Board

- Supports Intel® Xeon E3 V3 and Core™ i7/i5/i3/Pentium processor with C226 chipset
- Two PCIe x16 slots (x8 link), one PCIe x4 slot, and one PCI slot
- Dual Channel (ECC/Non-ECC) DDR3 1333/1600 up to 32 GB
- Supports USB3.0, SATA3.0
- Supports Intel AMT 9.0 or IPMI (optional) and Embedded software APIs and utilities



AIMB-784

4th Generation Inte® Core™ Processor-based Platform

- Supports Intel® Core™ i7/i5/i3 processor with Q87 chipset
- Dual Channel (Non-ECC) DDR3 1333/1600 up to 32 GB
- Supports USB3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Supports out-of-band remote management with AMT9.0
- Supports Advantech TPM module (LPC I/O)
- Software API's SMBus/HW Monitor/ Watchdog
- Supports triple display (1 VGA and 2 DVI-D)



ASMB-784

4th Generation Intel® Core™ Processor-based ATX Server Board

- Supports Intel® Xeon E3 V3 and Core™ i7/i5/i3/Pentium processor with C226 chipset
- One Gen3.0 PCIe x16 or two PCIe x16 slots with x8 link, two PCIe x1 slots and three PCI slots
- Dual Channel (ECC/Non-ECC) DDR3 1333/1600 up to 32 GB
- Supports Quad/Dual GbE LANs; Triple Display(1 VGA and 2 DVI-D)
- Supports Intel AMT 9.0 or IPMI (optional) and Embedded software APIs and utilities



NEW

ASMB-822I

Intel Xeon LGA2011 E5-2600(v2) ATX Server Board with 6 x DDR3, 5 x PCIe x16 slot (Gen 3.0), USB 3.0, IPMI

- Supports LGA2011 Intel® E5-2600(v2) Processors with Intel® C602J chipset
- 6 DIMM sockets support DDR3 1600/1333, up to 96GB
- Supports PCI-Express Gen3, USB3.0; SATA3.0 with RAID 0,1,5,10
- Supports dual GbE LAN
- Smart fan control for thermal and acoustic optimized
- Supports Five PCIe x16 (x8 link), one PCIe x8 (x4 link), and one PCI



NEW

ASMB-922I

Dual Intel Xeon LGA2011 E5-2600(v2) EATX Server Board with DDR3, 3 PCIe x16 + 1 PCIe x8 (Gen 3.0), PME support

- EATX Server Board with dual Xeon® E5-2600(v2) processor, PME flexible expansion and 128GB memory capacity
- Dual LGA 2011 Intel® Xeon® E5-2600 processors
- DDR3 1600MHz ECC RDIMM up to 128GB
- Three PCIe x16 slot(Gen3.0) + one PCIe x8 slot(Gen3.0) slots and PME xpansion slot
- 0~40° C ambient operation temperature range



PME Expansion Cards

Various Selections Supporting PCI, PCI-X, PCIe x1/x4/x8/x16

- Auto-configued by BIOS
- ASMB-920/922 series plus PME forms a standard EATX motherboard compatible with EATX chassis
- Multiple options for all demands



PCE-5128

4th Generation Intel® Core™ Processor-based Platform

- Supports Intel® Core™ i7/i5/i3 processor with Q87 chipset
- Dual Channel (Non-ECC) DDR3 1333/1600 up to 16 GB
- Supports USB3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Supports Tripple Dislpay (IVGA and 2 DVI-D)
- Software API's SMBus/HW Monitor/ Watchdog



PCE-3026

3rd Generation Intel® Core™ Processor-based Platform

- Complies with PICMG 1.3
- Supports LGA 1155 Intel® Core™ i7/i5/i3 processor
- Intel® H61
- Dual channel 1066/1333 MHz SO-DIMM up to 16 GB
- Three SATA 2.0 ports
- Supports dual 10/100/1000 Mbps Ethernet
- Supports one VGA and one DVI

Star Products

Industrial Enclosures



IPC-6025

5-Slot Desktop/Wallmount Chassis with Scalability for 5U Multi-system Solution

- An ultra compact desktop chassis with scalability to a 5U quad-system rackmount chassis
- LED indicators and alarm notification for system fault detection, including power, HDD, CPU/SYS temperature and CPU/SYS fan
- Shock-resistant disk drive bay to hold two 3.5" disk drives (one front-panel and one internal)
- Supports 5-slot PICMG 1.3/1.0 full-size passive backplane
- Accepts 270W power supply
- Optional one rackmount carrier for multi-system solution



ACP-4320

Quiet 4U Chassis Ready with Dual SAS/SATA HDD Trays

- Supports either an ATX motherboard or a PICMG backplane with up to 15 slots
- Advantech low noise solution
- Supports dual SAS/SATA HDD trays for data monitoring applications
- LED indicators and alarm notification for system fault detection and network connection
- Lockable front door prevents unauthorized access



HPC-7242

2U Rackmount Chassis with up to 4 SAS/SATA HDD Trays

- 4 hot-swap SAS/SATA HDD trays
- 2 internal 2.5" drive bay and 1 slim ODD bay
- 80 Plus single and redundant power supply
- LED indicators and alarm notification for temperature and fan speed
- Smart fan for optimized thermal and acoustic balance



HPC-7442

4U Rackmount/Tower Chassis with up to 8 SAS/SATA HDD Trays

- Up to 8 hot-swap SAS/SATA HDD trays
- 1 internal 3.5" drive bay and 1 slim ODD bay
- 80 Plus single and redundant power upply
- LED indicators and alarm notification for temperature and fan speed
- Smart fan for optimized thermal and acoustic balance

Applicatem Ready Platforms



AIIS-1240

PoE Controller, Support Intel® Core™ i7/i5/i3 CPU, 4-CH GbE PoE

- Supports LGA1155 Intel® 3rd/2nd Generation Processors with Intel® H61 chipset
- 4-CH GbE PoE (Power over Ethernet), IEEE 802.3af compliant
  - Powered Device auto detection and classification
  - Support IEEE 1588 & GigE Vision device
- Compact & thoughtful design
  - Volume less than 3 Liter
  - Easier Fan filter maintenance
  - Internal USB Type-A with lock design (Max. 49mm length)
  - Wall or DIN Rail mounting kit (optional)
  - G-sensor



ITA-1610

Intel® Atom™ D525 Compact System with Dual GigaLAN and Dual Display

- Fanless, Intel® Atom™ D525, 1.8 GHz Dual Core Compact System
- Support 9 ~ 36 V wide range DC input
- Support up to 2 x GbE, 6 x USB 2.0, 6 x COM ports
- Serial ports support RS-232/422/485 with automatic flow control
- Dual display
- Support 8 channel Digital I/O
- Onboard DDR3 memory up to 2 GB and optional NVRAM
- Support 1x 2.5" HDD



PPC-6150/6170

15"/17" Panel PC with Intel® Core™ i3/i5/Celeron® Processor 15"

- Intel® Core™ i3, i5, Celeron® 847E and 1020E + Intel QM77 PCH
- Multiple expansion slots either one PCIe x4 or one PCI + one PCIe x1
- Optional second HDD, supports Intel RAID
- One isolated RS-232/422/485 port (Auto-flow control, selected by BIOS)
- One GPIO(8 channels, TTL) and Dual GbE, supports Intel AMT8.0



PWS-770

10.4" Rugged Tablet PC with Intel Atom N2600 Processor

- 10.4" XGA LED panel, high brightness 300 cd/m2
- Hot swap, high capacity Li-ion battery provides 8 hours of operation
- IP54-certified, 4ft drop rating from 120 cm, lightweight, 1.2 kg
- Complete communication: Wi-Fi/ Bluetooth/GPS/WWAN (3.75G)
- Optional data capture modules: 1D/ 2D barcode scanner / MSR / RFID



MIC-3396

6U CompactPCI 4th Generation Intel® Core™ i3/i5/i7 Processor Blade with ECC support

- Supports 4th Generation Intel® Core™ i3/i5/i7 processors and Intel® QM87 PCH with embedded graphic (up to 3 independent displays)
- Up to 16 GB (DDR3 1600) low voltage ECC memory (max 8GB on board, socket SO-UDIMM x1, max 8GB)
- Optimized single-slot SBC with 2.5" SATA-III HDD/CFast socket/ on-board flash (optional)



MIC-3022

4U CompactPCI® Enclosure for 3U Cards

- Hosts up to eight 3U CompactPCI® boards
- 32bit/66MHz PCI bus backplane
- PICMG 2.11power supplies
- ATX power supply option for cost sensitive applications
- Dual system ready



DSPC-8682

Full-length PCI Express Card with 8 TI 8-core DSPs

- On-board 8 TI TMS320C6678 DSPs with PCIe Gen 3 x8 interface
- 8 TMS320C66x™ DSP Core Subsystems @1.0/1.25 GHz per DSP
- 2 GB DDR-1333 memory per DSP



DSPC-8662

8-ch 3G-SDI PCIe Video Acquisition Card with SDK

- Powered by quad TI TMS320DM8168 SoC
- 8-channel SD-SDI / HD-SDI / 3G-SDI video + audio inputs with H.264 encoding
- Up to 60 fps at Full HD (1080p) resolution per channel
- Dual Giga LAN ports; Multi-port Ethernet and PCIe Express switch support

Machine Automation

Industrial Computers and Integration Services for Automation Applications

Advantech delivers a full range of industrial computers for versatile applications in the automation field, combined with sophisticated system integration services from customization, integration, validation, and certification. A one-stop solution is our commitment in providing rugged systems to customers who require a trusted partner to maximize their applications.



Production Automation



Embedded architectures with excellent expansion capabilities and high compatibility, and flexible and scalable PACs

Vision Inspection



Quality control systems have become very expensive in recent years, creating the demand for more cost-effective alternatives.

Process Control



High computing systems with scalable architectures and time-deterministic control are important factors for process control systems.

Packing Automation



Delivering a high degree of durability with a low total cost of ownership is a key factor for efficient packaging.

Product Solutions



AiMC-2100

Micro Computer, Intel® Mobile Core™ i7/i5/ i3 CPU, 1 Expansion, 250W 80Plus PSU



AiMC-3200

Micro Computer, Intel® Core™ i7/i5/i3 CPU, 2 Expansion, 250W 80Plus PSU



AiMC-3420

Micro Computer, Intel® Core™ i7/i5/i3 CPU, 3 Expansion, 300W 80Plus PSU



AIIS-1240

PoE Controller, Support Intel® Core™ i7/i5/i3 CPU, 4-CH GbE PoE



HPC-7442

4U Rackmount/Tower Chassis for EATX/ATX Motherboard with Up to 8 SAS/SATA HDD



TPC-1840WP

18.5" WXGA TFT LCD Multi-Touch Panel Computer with AMD Dual-core processor

Industrial Cloud

Fully Integrated and Read-to-go Solutuions

Increasingly, industrial customers are asking how IT providers can precisely optimize their investment and manpower through the cloud? As a leading IPC company, Advantech is helping industrial customers to build their own industrial clouds on our reliable hardware platforms. Primarily focusing on data & application synchronization, storage, monitoring & management, and application deployment, Advantech's customers can now enhance their competitiveness and take advantage of dedicated cloud-based services that fulfill today's market demands.



Virtualization Technology



As is often the case with enterprises' diversified applications, the workload is frequently up and down. Virtualization is able to make efficient resource usage and real-time resource adjustments.

Industrial Storage



An industrial storage solution is preferable applicable to enterprises to easily increase capacity with better performance and reliability and to maximize the storage management efficiency

Cloud Management



Through IPMI remote management, the cloud management can be achieved, including out of band and cross-platform management, remote troubleshooting, and KVM over IP.

Industrial Application



An industrial cloud can be quickly deployed, offers services on demand, and provides reliability validation and support for each industrial environment.

Product Solutions



Computing Server

1U Rackmount Chassis with Dual LGA 2011 Intel® Xeon® E5-2600 EATX Server Board with DDR3



Industrial Storage

4U 24-bay Storage Appliance with Reliable Data Protection and Backup Solution



Ethernet Switch

High Performance 10/40G Top of Rack Ethernet Switch



IPMI Module

IPMI2.0 Server-grade Remote Control Solution

SQL Server

Highly Reliable & Productive Database

Intelligent Transportation

Embedded Systems with Industry-Proven Success

Advantech is committed to providing long-term cooperation and reliable platform solutions to enable intelligent transportation in cities all over the world. With a decade of successful experiences, especially in China, Advantech is there to assist customers to build solutions for transportation that are SAFE—Smart development & management, Accurate with sensor data information for real-time control, Faster forecasting to avoid traffic congestion, Environmental protection by reducing traffic & carbon emissions, and Efficient deployment by reducing cabling effort.



Infrastructure



Many cities worldwide are in the midst of improving their transportation system infrastructures, and Advantech is there to provide advanced product solutions for the transportation market.

In-Vehicle



Advantech offers industrial-grade, high performance computing products for rugged operation in a range of in-vehicle applications, including in-vehicle signage, in-vehicle surveillance, and in-vehicle communications to control efficiency and ensure safety.

Passenger Information Display System



Advantech provides industrial-grade Passenger Information Systems that deliver real-time arrival and departure times for trains, buses, and planes. Along with system reliability and safety, they allow operators to provide accurate, current information to keep travelers moving efficiently.

Mobile Computing



Industrial Portable Computers communicate mission critical data and report Status in real-time. They are rugged enough for any in-vehicle and outdoor applications, such as in fleet management, warehouse management, and track inspection.

Product Solutions



ITA-1610

Intel® Atom™ D525 Compact System with Dual GigaLAN and Dual Display



ITA-1710

Intel® Atom™ D525 Compact System with Dual GigaLAN, 10 COM ports and Dual Display



ITA-1910

Intel® Atom™ D525 DC Wide Range Compact System with Dual GigaLAN, 16 COM ports and Multi-Display



ITA-3630

Intel® 3rd Generation Core™ i Processor Fanless System with Multi-Display and Flexible Storage Solution



ISE-7659CPI

Industrial 8 FE + 2 Gigabit Combo port with POE Managed Switch



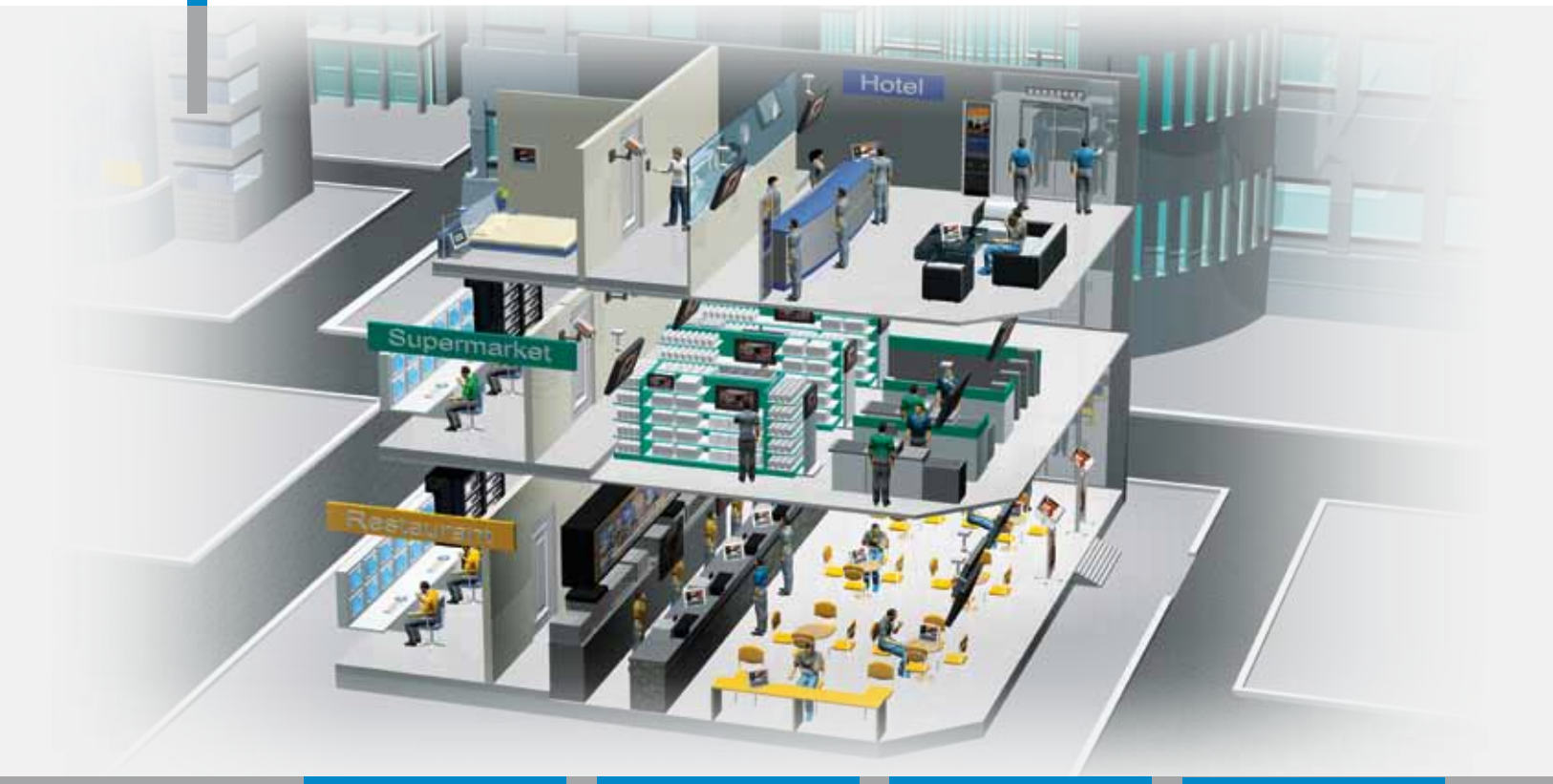
ISE-1502-PHDA

Industrial 1-port Media Converter with PoE+ Injection

Digital Signage

Reliable and Highly Scalable to Power Up Your Digital Signage Network

Digital signage is the most effective media platform to reach target audiences today. Advantech has powered thousands of digital signs across retail, healthcare, hospitality and food service organizations, making it one of the leading platform providers in the market. Advantech digital signage appliances have always been at the forefront of technology in the industry, driving innovation and helping organizations realize the benefits of digital signage networks. Our reliable, stable, and highly scalable products ensure 24x7 operation and are delivered at a lower "total cost of ownership". These world-class hardware solutions are backed by local technical support teams to ensure an efficient, successful roll-out of digital signage networks.



Retail/ Restaurant



- Highlight discounted and promotional items
- Schedule content messages to match the demographics at your location by day, week, or month
- Advertise in waiting areas to entertain customers

Hotel



- Promote hotel amenities
- Real-time schedule updates of business meetings
- Advertise menu specials

Corporate



- Deliver greeting messages to guests and visitors
- Remotely narrowcast corporate announcement to branch offices
- Enhance corporate images

Public Transportation



- Display arrival/departure info with local weather
- Keep travelers informed of information
- Advertisements and entertainment

Product Solutions



AVS-240

8-output Solutions 4U Rackmount Intel® Xeon® E5-2400 Video Wall Controller Powered by Matrox®



AVS-540

20-output Solutions 4U Rackmount Intel® Xeon® E5-2600 Video Wall Controller Powered by Matrox®



AVS-840

40-output Solutions 4U Rackmount Intel® Xeon® E3-1200 V2 Video Wall Controller Powered by Matrox®



ARK-DS262

3rd Generation Intel® Core™ i7 OPS Digital Signage Player



ARK-DS762

3rd Generation Intel® Core™ i7/i5/i3 3 x HDMI Digital Signage Player



DS-060

3rd Generation Intel® Core™ i7/Celeron®/ Atom™ Ultra Slim Digital Signage Player

Video Solutions

Enabling Multicore DSP with Advantech Intelligent Video Platform

Advantech delivers a full range of industrial computer for versatile applications. Today, Advantech has employed the lates DSP technologies in its video acquisition and encoder boards to enable a wide range of customer solution with sophisticated system integration services. The boards address numerous video-related applications requiring single or multi-channel connectivity with analog or digital inputs. They perform high speed processing at SD, HD, and Full HD resolutions, provide analog and HDMI outputs, and supply a wide choice of interfaces for storage, networking, and peripherals. The DSPs provide the highest performance computing power for advanced image processing and video analytics functions. With the high performance industrial computer specifically designed as the video platform, and easy-to-use Software Development Kit, Advantech Intelligent Video Platforms are ideal for system integration in video transcoding, medical imaging, video surveillance, test & automation, and high-performance computing applications.



Broadcasting



- Capture video from tape, live or media files
- Encode, transcode, and brand video content in real time
- Stream and distribute multimedia content to multiple devices on the fly

Video Surveillance



- Secure people and assets with high-definition, high-density video surveillance
- Proactively prevent accidents and crimes
- Analyze video content for law enforcement and business intelligence

Machine Vision



- Examine video content for Automated Optical Inspection
- Assist PCB inspection, Automatic defect detection during manufacturing processes
- Expedite logistics with automated barcode recognition

Medical Imaging



- High-performance image applications in ultrasound, MRI, and X-Ray
- Assist diagnosis and operation with high-definition video
- Record operation procedures for medical education

Product Solutions



HPC-7442
4U Rackmount/Tower Chassis for EATX/ATX Motherboard



HPC-7242
2U Rackmount Chassis for ATX Motherboard



ASMB-822I
ATX Server Board with Intel Xeon® E5-2600(v2) processor



DSPC-8682
Full-length PCI Express Card with 8 TI 8-core DSPs



DSPC-8662
8-ch 3G-SDI PCIe Video Acquisition Card with SDK

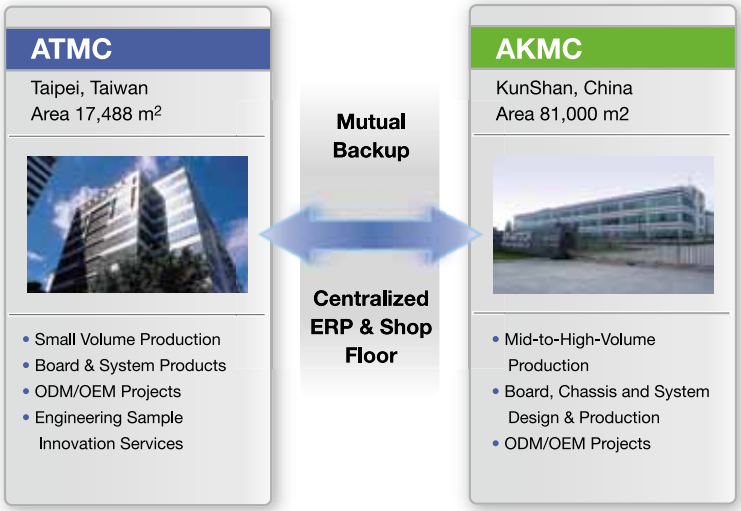


ISE-7516-PHDA
Industrial 16-port Full GbE Managed PoE+ Switch

Advantech iPlanet Care

Manufacturing

Our dual, world-class manufacturing centers in Taiwan and China both maintain precise quality control, and offer a full range of production in a timely and cost-effective manner. To maximize the efficiency of operational procedures, we have implemented a cluster manufacturing system within our segmented manufacturing service units. This unique approach enables a direct, simplified, and highly streamlined design-to-manufacturing process.



- In-house board, chassis, and system production
- Dual world-class manufacturing centers minimize business risks
- Advanced production capabilities and customizable processes
- Rigid quality assurance system
- Most complete ISO standard coverage

Configure To Order Services

Advantech Configure To Order Services (CTOS) makes industrial computing solutions more accessible by offering web-based configuration tools, comprehensive, complex assembly services with high-mix, low-volume box build and customized assembly, modification, system integration and functional testing services.

- Online intelligent configuration
- Comprehensive approach to complex configuration solutions
- Local customized configuration services
- Carry 2 years global warranty covering system & peripherals integrated

ADVANTECH CTOS
Configure To Order Services

Certified Quality Assurance System

Advantech has been designing and manufacturing industrial PCs according to our 3C Quality Statement:

- Always strive for overall customer satisfaction
- Continuous improvement
- Apply closed-loop mechanisms to resolve problems

At Advantech, quality is our main priority. A complete line of safety, EMC and reliability measures such as ESD, vibration, drop testing, temperature, humidity and HALT chambers are available to ensure our products meet the strictest standards. All facilities are at least ISO 9001 and 14001 certified while others hold additional certifications such as ISO 13485, 17025, TL9000 and OHSAS18001. An environmental program that focuses on reducing, reusing and recycling of materials throughout the manufacturing process is also applied at Advantech. All our products are 100% RoHS compliant and Environmental Management Systems such as QC080000 are applied to meet worldwide environmental requests. Advantech's efforts towards environmental protection have been recognized by Sony since 2004 (Sony Green Partner).

- Complete ISO coverage
- Green policies
- Constant quality and reliability monitoring
- Ease of access to quality contacts

RoHS COMPLIANT 2002/95/EC

One-Stop Global Services

Advantech iPlanet Care combines exceptional business expertise, powerful design capacities, and a thorough global service network to provide one-stop global services and total solutions. Our broad range of global support packages adds maximum flexibility and efficiency to your projects.



Global Logistics Services

With strong integrated ERP and SAP supply chain solutions, our worldwide logistics network offers a wide range of options for different delivery models including local and global solutions that meet your unique needs and budget requirements.

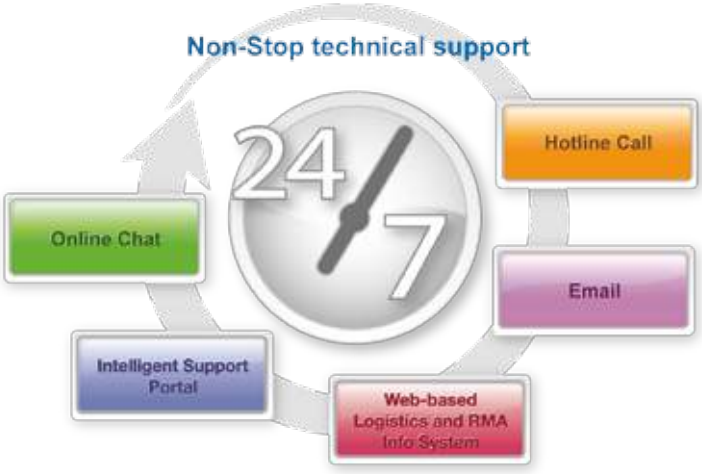
Advantech's Logistics Service gives you the flexibility to simplify your logistical networks, bring your products to market on time, and enjoy a timely return on your investment.

- Optimized and flexible shipping solutions
- Integrated ERP and SAP supply chain solution with global distribution network
- Centralized plants with local delivery

Global Procurement Services

Advantech global procurement network consists of local teams that leverage strong, worldwide supplier relationships and strict vendor and product management to offer quality-guaranteed, compatible peripherals with short lead times and competitive prices.

- Localized procurement with worldwide network support
- Global standardization management; 100% compatible peripherals
- Trusted quality with revision control
- Short lead time and competitive price



Global Customer Support Services

Our global presence provides localized reliable customer support services. We can create an optimized maintenance and support plan, leveraging the full power of our service portfolio to help reduce costs and proactively mitigate business risks to best meet your needs. In addition to our complete technical and repair support, we provide a variety of customizable after-sales services, including extended warranty, advance replacement, upgrade, fast repair, etc. With our knowledgeable local support groups, we enable a consistent support experience around the world and help keep your investment at peak performance and within your budget.

- 24/7 technical support: hotline AE & online chat support
- Global deployment with local full-line repair capability
- Easy-to-use web-based repair and tracking system (eRMA)
- Various value-added, after-sales service packages



System Design to Order Service

Build Your Dream System in 30 Days

With an increasingly diverse market and multiple vertical applications, the needs of customized systems for specific applications are in high growth. Advantech is the dream system provider, supplying quality assurance and integrated services to worldwide customers. With customization, integration, validation, and certification, we are committed to providing a one-stop solution to customers who require a trusted partner to maximize their applications.



System Engineering Expert Group

System design should always start from the customer's perspective. To build up a system that precisely matches a customer's application, the Advantech professional engineering team always puts the customer first, from system working environment, ergonomics, to maintenance. The professional engeering team and rich experience from over 100 successful cases make Advantech the dream system builder for your business.

Worldwide Orders, Local Services

Our global presence provides reliable, localized customer support service, with customizable after-sales services, including extended warranty, advance replacement, and upgrade. We provide an optimized, within-budget, maintenance and support plan around the world to keep your investment at peak performance.

- 24/7 hotline AE
- Global RMA System

Certified Quality Assurance Systems

At Advantech, quality is our main priority. A complete line of safety, EMC, and reliability test equipment, such as hi-pot, ESD, vibration, drop test, temperature, humidity and HALT chambers are available to ensure our products meets the strictest standards. Also Advantech has an applied environmental program that focuses on reducing, reusing and recycling of materials throughout the manufacturing process. All our products are 100% RoHS compliant and Environmental Management Systems such as QC080000 are applied to meet worldwide environmental requirements.

World-class Manufacturing Center

Our dual, world-class manufactring centers in Taiwan and China both maintain precise quality control, and offer a full range of production in a timely and cost-effective manner. To maximize efficiency of operational procedures, we have implemented a cluster manufacturing system within our segmented manufacturing service units. This unique approach enables a direct, simplified, and highly streamlined design-to-manufacturing process.

ATMC

Taipei, Taiwan Area 17,488 m²



- Small Volume Production
- Board & System Products
- ODM/OEM Projects
- Engineering Samples & Innovation Services

Mutual Backup

Centralized ERP & Shop Floor

AKMC

KunShan, China Area 18,000 m²



- Mid-to-high Volume Production
- Board, Chassis and System Design & Production
- ODM/OEM Projects

1

Fanless Embedded Box PCs

Selection Guide		*1-2*
Ultra Small Series		
ARK-1122H/HS	Intel® Atom™ Dual Core N2600 with Independent Dual Displays	*1-8*
ARK-1122C	Intel® Atom™ Dual Core N2600 with 4 COM Port Extendibility	*1-10*
ARK-1122F	Intel® Atom™ Dual Core N2800 with Diversity Communications	*1-12*
ARK-1123L	Intel® Atom Dual Core E3825 SoC with Dual COM and GPIO	*1-14*
ARK-1123C	Intel® Atom Dual Core E3825 SoC with Dual GbE and Dual COM	*1-16*
ARK-1123H	Intel® Celeron Quad Core J1900 SoC with Dual HDMI and Dual GbE	*1-18*
Slim and Mountable Series		
ARK-1550	4th Generation Intel® Core i5 4300U / Celeron 2980U SoC with Flexible Mounting	*1-20*
Multiple I/O Series		
ARK-2120F	Intel® Atom™ Dual Core N2600/D2550 with 3 GbE, 6 COM & Wide Range Power	*1-22*
ARK-2150F	3rd Generation Intel® Core i7 with 4 x GbE, Isolated DIO & Wide Range Power	*1-24*
ARK-3360F	Intel® Atom™ N450/D510 with 3 GbE, Isolated COM & Wide Range Power	*1-26*
High Performance & Rich Expansion Series		
ARK-3500	3rd Gen. Intel® Core i3/ i5/ i7 with 2 Expansion Slots and Wide Range Power	*1-28*
ARK-3510	3rd Gen. Intel® Core i3/ i5/ i7 with 2 x 2.5" Removable HDD Bays	*1-30*
Value Series		
ARK-6322	Intel® Celeron Quad Core J1900 SoC with 6 COM and 8 USB	*1-32*
Surveillance & In-Vehicle Series		
ARK-2121S	Intel® Atom™ Quad Core E3845 SoC Outdoor NVR with 4 PoE	*1-34*
ARK-2151S	4th Generation Intel® Core i5 4300U SoC Outdoor NVR with 4 PoE	*1-36*
ARK-2121V	Intel® Atom™ Dual Core E3825 / Atom Quad Core E3845 SoC In-Vehicle NVR with 4 PoE	*1-38*
ARK-2151V	4th Generation Intel® Core i5 4300U / Celeron 2980U SoC In-Vehicle NVR with 4 PoE	*1-40*
ARK-VH200	Intel Atom Dual Core D510 In-Vehicle DVR with 4 BNC	*1-42*

To view all of Advantech's Embedded Box PCs, please visit www.advantech.com/products.



Ultra Small and Slim Series

Selection Guide







Model Name		ARK-1120L ARK-1120LX	ARK-1120F	NEW ARK-1122H ARK-1122HS	NEW ARK-1122C	NEW ARK-1122F
Processor System	CPU	Intel Atom N455	Intel Atom N455	Intel Atom N2600	Intel Atom N2600	Intel Atom N2800
	Frequency	1.66 GHz	1.66 GHz	1.6 GHz	1.6 GHz	1.86 GHz
	Core Number	1	1	2	2	2
	BIOS	AMI EFI 16Mbit	AMI EFI 16Mbit	AMI EFI 16Mbit	AMI EFI 16Mbit	AMI EFI 16Mbit
	Chipset	Intel ICH8-M	Intel ICH8-M	Intel NM10	Intel NM10	Intel NM10
Memory	Technology	DDR3 667MHZ	DDR3 667MHZ	DDR3 800MHz	DDR3 800MHz	DDR3 1066MHz
	Max. Capacity	2 GB	2 GB	4 GB	4 GB	4 GB
	Socket	1 x 204-pin SODIMM/ 2 GB Built-In (LX SKU)	1 x 204-pin SODIMM	1 x 204-pin SODIMM/ 2GB Built-In (HS SKU)	1 x 204-pin SODIMM	1 x 204-pin SODIMM
Display	VGA	Up to 1600 x 1200	Up to 1600 x 1200	Up to 1920 x 1200	Up to 1920 x 1200	Up to 1920 x 1200
	LCD (TTL/LVDS/eDP)	-	-	-	-	-
	DDI (HDMI/DVI/ DisplayPort)	-	-	Lockable HDMI: 1920 x 1200, lockable supported	-	Lockable HDMI: 1920 x 1200, lockable supported
	Multiple Display	-	-	Dual	-	Dual
Expansion Interface	Mini PCIe	1 x half-size Mini PCIe	1 x half-size Mini PCIe	1 x half-size Mini PCIe	1 x half-size Mini PCIe	1 x half-size Mini PCIe 1 x full-size Mini PCIe w/ SIM Holder
	SIM Socket	-	-	-	-	1
Ethernet	Controller	GbE1: Intel 82567V, support wake on LAN	GbE1 : Intel 82567V, support wake on LAN	GbE1: Intel 82583V, support wake on LAN	GbE1: Intel 82583V, support wake on LAN	GbE1: Intel 82583V, GbE2: Intel 82583V, All support wake on LAN
	Speed	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps
Audio	Audio Interface	HD Audio	-	HD Audio	-	HD Audio
	CODEC	Realtek ALC892	-	Realtek ALC892	-	Realtek ALC892
	Connector	2 (Line-in, Line out)	-	2 (Line-in, Line out)	-	2 (Line-in, Line out)
WatchDog Timer		Yes	Yes	Yes	Yes	Yes
Storage	SATA	1 x 2.5" SATA HDD bay 1 x 320 GB SATA II HDD Built-In (LX SKU)	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay 1 x 500 GB SATA II HDD Built-In (HS SKU)	1 x 2.5" SATA HDD bay (Optional by T-PN)	-
	mSATA	-	-	Support 1 x Full Size mSATA	Support 1 x Full Size mSATA	Support 1 x Full Size mSATA
	CompactFlash/ CFast	CompactFlash Type I/II	CompactFlash Type I/II	-	-	-
I/O	USB3.0	-	-	-	-	-
	USB2.0	4	2	4	4 (Standard) or 2 (Option 2.5" drive bay version)	3
	GPIO	-	-	-	-	-
	COM Port	2 (2 x RS-232)	2 x RS-232, 2 x RS-232/422/485 (by BIOS setting)	1 (1 x RS-232)	4 (2 x RS-232, 2 x RS-232/422/485, selected by BIOS)	1 (1 x RS-232)
Power	Power Type	ATX	ATX	ATX	ATX	ATX
	Power Supply Voltage	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%
	Connector	DC jack with power adaptor locker	DC jack with power adaptor locker	Lockable DC Jack	Lockable DC Jack	Lockable DC Jack
	Power Consumption (Idle)	9.12W	9.12W	6.89W	5.4W	7.84W
	Power Consumption (Full Load)	10.8W	10.8W	11.45W	9.47W	13.15W
	Power Adaptor	AC to DC, DC12 V/3 A, 36 W	AC to DC, DC12 V/3 A, 36 W	Lockable AC to DC, DC12 V/3 A, 36 W	Lockable AC to DC, DC12 V/3 A, 36 W	Lockable AC to DC, DC12 V/3 A, 36 W
Environment	Operating Temperature (air flow 0.7 m/sec)	0 ~ 40° C	0 ~ 40° C	With standard temperature HDD/SSD/mSATA devices: 0 ~ 40° C With extended temperature SSD/mSATA devices: -20 ~ 60° C	With standard temperature HDD/SSD/mSATA devices: 0 ~ 40° C With extended temperature SSD/mSATA devices: -20 ~ 60° C	With standard temperature mSATA devices: 0 ~ 40° C With extended temperature mSATA devices: -20 ~ 60° C
	Non-operating Temperature	-40~ 85° C and 95% @ 40° C Non-Condensing	-40~ 85° C and 95% @ 40° C Non-Condensing	-40~ 85° C and 95% @ 40° C Non-Condensing	-40~ 85° C and 95% @ 40° C Non-Condensing	-40~ 85° C and 95% @ 40° C Non-Condensing
	Vibration Resistance	With CompactFlash disk: 3Grm	With CompactFlash disk: 3Grm	With SSD/mSATA: 3Grm	With SSD/mSATA: 3Grm	With mSATA: 3Grm
	Shock Protection	With CompactFlash disk: 30G	With CompactFlash disk: 30G	With SSD/mSATA: 30G	With SSD/mSATA: 30G	With mSATA: 30G
Physical Characteristics	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm	133.8 x 43.1 x 94.2 mm	133.8 x 43.1 x 94.2 mm	133.8 x 43.1 x 94.2 mm	133.8 x 43.1 x 94.2 mm
	Weight	1.2 kg (2.65 lb)	1.2 kg (2.65 lb)	1.2 kg (2.65 lb)	1.2 kg (2.65 lb)	1.2 kg (2.65 lb)
	Mounting	Optional DIN Rail/ VESA/ Wall mounting	Optional DIN Rail/ VESA/ Wall mounting	Optional DIN Rail/ VESA/ Wall mounting	Optional DIN Rail/ VESA/ Wall mounting	Optional DIN Rail/ VESA/ Wall mounting
Operating System	Microsoft Windows	Yes/ WES2009 Built-In (LX SKU)	Yes	Yes (XP, XPE by project support)/ WES 7 Built-In (HS SKU)	Yes (XP, XPE by project support)	Yes (XP, XPE by project support)
	Linux	Yes (Ubuntu v10.04.1)	Yes (Ubuntu v10.04.1)	Yes (Ubuntu 12.04, Fedora 16)	Yes (Ubuntu 12.04, Fedora 16)	Yes (Ubuntu 12.04 ,Fedora 16)
APIs	SUSIAccess	Yes	Yes	Yes	Yes	Yes
	iManager	-	-	-	-	-
	Other	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis
Certification	EMC	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI
	Safety Certifications	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB
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NEW NEW NEW NEW NEW








ARK-1123L	ARK-1123C	ARK-1123H	ARK-1503	ARK-1504	ARK-1550
Intel® Atom DC E3825	Intel® Atom DC E3825	Intel® Celeron QC J1900	Intel Atom D425/D525	Intel® Atom DC E3825 Intel® Celeron QC J1900	Intel® Celeron 2980U Intel® Core i5 4300U
1.33 GHz	1.33 GHz	2.0 GHz	1.8 GHz	1.33 GHz / 2.0 GHz	1.6 GHz / 1.9 GHz
2	2	4	1/2	2 / 4	2
AMI EFI 64 Mbit	AMI EFI 64 Mbit	AMI EFI 64 Mbit	AMI EFI 16Mbit	AMI EFI 64 Mbit	AMI EFI 128 Mbit
Intel® Atom DC E3825	Intel® Atom DC E3825	Intel® Celeron QC J1900	Intel ICH8-M	Intel® Atom DC E3825 Intel® Celeron QC J1900	Intel® Celeron 2980U Intel® Core i5 4300U
DDR3L 1066MHz	DDR3L 1066MHz	DDR3L 1333MHz	DDR3 1066/1333MHz	DDR3L 1066/1333MHz	DDR3L 1333/1600MHz
8GB	8GB	8GB	4 GB	8GB	8GB
1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM
-	-	-	Up to 2048 x 1536	1 (up to 1600 x 1200)	1 (up to 1920 x 1200)
-	-	-	LVDS: Single channel 24-bit LVDS up to WXGA 1366 x 768 (Integrated in I-Panel Link)	LVDS (optional)	LVDS (optional)
1 x lockable HDMI, up to 1080p	1 x lockable HDMI, up to 1080p	2 x lockable HDMI, up to 1080p	-	1 x lockable HDMI, up to 1080p	1 x lockable HDMI, up to 1080p
-	-	-	Dual	Dual	Dual
1 x Half-size Mini PCIe 1 x Full-size Mini PCIe	1 x Half-size Mini PCIe 1 x Full-size Mini PCIe	1 x Half-size Mini PCIe 1 x Full-size Mini PCIe	1 x full-size Mini PCIe	1 x Full-size Mini PCIe 1 x Full-size Mini PCIe w/ SIM	1 x Half-size Mini PCIe 1 x Full-size Mini PCIe w/ SIM
-	-	-	-	1	1
GbE 1 : Intel i210 All support Wake On LAN	GbE 1 : Intel i210 GbE 2 : Intel i210 All support Wake On LAN	GbE 1 : Intel i210 GbE 2 : Intel i210 All support Wake On LAN	GbE1 : Intel 82567V, GbE2 : Intel 82583V, All support wake on LAN	GbE 1 : Intel i210 GbE 2 : Intel i210 All support Wake On LAN	GbE 1 : Intel i218 GbE 2 : Intel i210 All support Wake On LAN
10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps
HD Audio	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
ALC-888S-VD2-GR	ALC-888S-VD2-GR	ALC-888S-VD2-GR	Realtek ALC892	ALC-888S	Realtek ALC888S
2 (Line-in, Line out)	2 (Line-in, Line out)	2 (Line-in, Line out)	1 (Line-out)	3 (Line-in, Line-out, Mic-in)	3 (Line-in, Line-out, Mic-in)
Yes	Yes	Yes	Yes	Yes	Yes
1 x 2.5" SATA HDD bay	1 x 2.5" SATA drive bay	1 x 2.5" SATA drive bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
1 x Half-Size mSATA	1 x Half-Size mSATA	1 x Half-Size mSATA	-	1 x Full-size mSATA	1 x Full-size mSATA
-	-	-	CompactFlash Type I/II	-	-
1	1	1	-	1	2
1	2	2	4	3	2
8-bit Programmable DIO	-	-	8-bit Programmable DIO	8-bit Programmable DIO	8-bit Programmable DIO
2 (1 x RS-232 & 1 x RS-232/422/485)	2 (2 x RS-232/422/485)	1 (1 x RS-232/422/485)	2 (1 x RS232, 1 x RS232/422/485)	3 (1 x RS-232, 2 x RS-232/422/485)	3 (1 x RS-232, 2 x RS-232/422/485)
ATX	ATX	ATX	AT/ATX	ATX/AT	ATX/AT
12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%
Lockable DC Jack	Lockable DC Jack	Lockable DC Jack	DC jack with power adaptor locker	DC jack with power adaptor locker	DC jack with power adaptor locker
TBD	TBD	TBD	10.92W (D425) / 11.88W (D525)	TBD	TBD
TBD	TBD	TBD	13.08W (D425) / 16.44W (D525)	TBD	TBD
Lockable AC to DC, DC12 V/3 A, 36 W	Lockable AC to DC, DC12 V/3 A, 36 W	Lockable AC to DC, DC12 V/3 A, 36 W	AC to DC, DC 12V/5A 60W (optional)	AC to DC, DC 12V/5A 60W (optional)	AC to DC, DC 12V/5A 60W (optional)
With extend temperature peripherals: -20 ~ 60° C With standard temperature peripherals: 0 ~ 40° C	With extend temperature peripherals: -20 ~ 60° C With standard temperature peripherals: 0 ~ 40° C	With extend temperature peripherals: -20 ~ 60° C With standard temperature peripherals: 0 ~ 40° C	With extended temperature peripherals: -20 ~ 60° C With standard temperature peripherals: 0 ~ 40° C	With extend temperature peripherals: -20 ~ 60° C With standard temperature peripherals: 0 ~ 40° C	With extend temperature peripherals: -20 ~ 55° C With standard temperature peripherals: 0 ~ 40° C
-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 95% @ 40° C Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing
With mSATA/SSD : 3 Grms	With mSATA/SSD : 3 Grms	With mSATA/SSD : 3 Grms	With Compact Flash/SSD: 5 Grms	With mSATA/SSD : 5 Grms	With mSATA/SSD : 5 Grms
With mSATA/SSD: 30 G	With mSATA/SSD: 30 G	With mSATA/SSD: 30 G	With Compact Flash/SSD: 50G	With mSATA/SSD: 50 G	With mSATA/SSD: 50 G
133.8 x 43.1 x 94.2 mm	133.8 x 43.1 x 94.2 mm	133.8 x 43.1 x 94.2 mm	230.6 x 44.4 x 133.0 mm	223 x 46.6 x 133.0 mm	223 x 46.6 x 133.0 mm
1.2 kg (2.65 lb)	1.2 kg (2.65 lb)	1.2 kg (2.65 lb)	1.9 kg (4.18 lbs)	1.9 kg (4.18 lbs)	1.9 kg (4.18 lbs)
Optional DIN Rail/ VESA/ Wall mounting	Optional DIN Rail/ VESA/ Wall mounting	Optional DIN Rail/ VESA/ Wall mounting	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)
Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)
Yes (by Project)	Yes (by Project)	Yes (by Project)	Yes (Ubuntu v10.04.1)	Yes (by Project)	Yes (by Project)
Yes	Yes	Yes	Yes	Yes	Yes
-	-	-	-	-	-
McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis
CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, BSMI, CCC, KCC	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI
UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB
1-14	1-16	1-18	online	online	1-20

Multiple I/O Series

Selection Guide





Model Name		ARK-2120L	ARK-2120F
Processor System	CPU	Intel Atom N2600 / Intel Atom D2550	Intel Atom N2600 / Intel Atom D2550
	Frequency	1.6 GHz / 1.86 GHz	1.6 GHz / 1.86 GHz
	Core Number	2	2
	BIOS	AMI EFI 16Mbit	AMI EFI 16Mbit
	Chipset	Intel NM10	Intel NM10
Memory	Technology	DDR3 800MHz	DDR3 800MHz
	Max. Capacity	4 GB	4 GB
	Socket	1 x 204-pin SODIMM	1 x 204-pin SODIMM
Display	Graphic Engine	DirectX 9 and OpenGL 3.0 support	DirectX 9 and OpenGL 3.0 support
	VGA	Up to 1920 x 1200	Up to 1920 x 1200
	LCD (TTL/LVDS/eDP)	-	LVDS: Dual channel 48-bit up to 2560 x 1600
	DDI (HDMI/DVI/DisplayPort)	HDMI:1920 x 1200 @ 60Hz	HDMI:1920 x 1200 @ 60Hz
	Multiple Display	Dual	Dual
Expansion Interface	Mini PCIe	1	1
	SIM Socket	1	1
Ethernet	Controller	GbE1: Intel 82583V, GbE2: Intel 82583V, All support wake on LAN	GbE1: Intel 82583V, GbE2: Intel 82583V, GbE3: Intel 82583V, All support wake on LAN
	Speed	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps
Audio	Audio Interface	HD Audio	HD Audio
	CODEC	Realtek ALC892	Realtek ALC892
	Connector	1 (Line-in, Line out, Mic-in)	1 (Line-in, Line out, Mic-in)
WatchDog Timer		Yes	Yes
Storage	SATA	1 x 2.5" SATAII HDD bay	1 x 2.5" SATAII HDD bay
	mSATA	-	-
	CompactFlash/ CFast	1 CFast	1 CFast
I/O	USB3.0	-	-
	USB2.0	6	5
	GPIO	8-bit Programmable DIO	8-bit Programmable DIO
	LPT	-	-
	COM Port	4 (3 x RS232, 1 x RS232/ 422/ 485)	6 (2 x RS232, 4 x RS232/ 422/ 485)
Power	Power Type	ATX, AT	ATX, AT
	Power Supply Voltage	12 V_{DC}, ± 10%	12 ~ 24 V_{DC}
	Connector	Lockable DC Jack	2-pin phoenix head
	Power Consumption (Idle)	8.9W	9.2W
	Power Consumption (Full Load)	11W	11.59W
	Power Adaptor	Lockable AC to DC, DC12 V/3 A, 36 W (Optional)	Lockable AC to DC, DC19 V/3.42 A, 65 W (Optional)
Environment	Operating Temperature (air flow 0.7 m/sec)	With extend temperature peripherals: -20 ~ 60° C With HDD: 0 ~ 45° C	With extend temperature peripherals: -20 ~ 60° C With HDD: 0 ~ 45° C
	Non-operating Temperature	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing
	Vibration Resistance	With SSD: 5 Grms	With SSD: 5 Grms
	Shock Protection	With SSD: 50 G	With SSD: 50 G
Physical Characteristics	Dimensions (W x H x D)	264.5 x 68.4 x 133.0 mm	264.5 x 68.4 x 133.0 mm
	Weight	2.3 kg (5.07 lb)	2.5 kg (5.51 lb)
	Construction	Aluminum/Iron	Aluminum/Iron
	Mounting	Desk/ Wall/ VESA/ DIN-Rail mounting	Desk/ Wall/ VESA/ DIN-Rail mounting
Operating System	Microsoft Windows	Yes (XP, XPE for project support)	Yes (XP, XPE for project support)
	Linux	Yes (Ubuntu 12.04 ,Fedora 16)	Yes (Ubuntu 12.04 ,Fedora 16)
APIs	SUSIAccess	Yes	Yes
	iManager	Yes	Yes
	Other	McAfee, Acronis	McAfee, Acronis
Certification	EMC	CE, FCC, CCC, BSMI	CE, FCC, CCC, BSMI
	Safety Certifications	UL, CCC, BSMI	UL, CCC, BSMI
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ARK-2150L	ARK-2150F	ARK-3360L	ARK-3360F
3rd Gen' Intel Celeron 1047UE / Core i3-3217UE / Core i7-3517UE	3rd Gen' Intel Core i7-3517UE	Intel Atom N450/D510	Intel Atom N450/D510
1.4GHz / 1.6 GHz/ 1.7 GHz (up to 2.8GHz)	1.7 GHz (up to 2.8GHz)	1.66 GHz	1.66 GHz
2	2	2	2
AMI EFI 64Mbit	AMI EFI 64Mbit	AMI EFI 16Mbit	AMI EFI 16Mbit
Intel QM77	Intel QM77	Intel ICH8-M	Intel ICH8-M
DDR3 1600MHz, DDR3L 1333 MHz	DDR3 1600MHz, DDR3L 1333 MHz	DDR2 667MHz	DDR2 667MHz
8 GB	8 GB	2 GB	2 GB
1 x 204-pin SODIMM	1 x 204-pin SODIMM	1 x 200-pin SODIMM	1 x 200-pin SODIMM
DirectX11, OpenGL 3.1, and Open CL 11	DirectX11, OpenGL 3.1, and Open CL 11	DirectX 9 and MPEG2 HW Decode	DirectX 9 and MPEG2 HW Decode
Up to 2048 x 1536	Up to 2048 x 1536	Up to 2048 x 1563	Up to 2048 x 1563
-	-	-	-
HDMI:1920 x 1200 @ 60Hz	HDMI:1920 x 1200 @ 60Hz DVI-D: 1920 x 1200	-	-
Dual	Dual	-	-
3	3	1	1
1	1	-	-
GbE1: Intel 82579LM, GbE2: Intel 82583V, All support wake on LAN	GbE1: Intel 82579LM, GbE 2/ 3/ 4: Intel 82583V All support wake on LAN	GbE1: Intel 82567V, GbE2: Intel 82583V, All support wake on LAN	GbE1: Intel 82567V, GbE2: Intel 82583V, GbE3: Intel 82541PI, All support wake on LAN
10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps
HD Audio	HD Audio	HD Audio	HD Audio
Realtek ALC892	Realtek ALC892	Realtek ALC886	Realtek ALC886
1 (Line-in, Line out, Mic-in)	1 (Line-in, Line out, Mic-in)	1 (Line-in, Line out, Mic-in)	1 (Line-in, Line out, Mic-in)
Yes	Yes	Yes	Yes
1 x 2.5" SATAIII HDD bay (Max. Data Transfer Rate 600 MB/s)	1 x 2.5" SATAIII HDD bay (Max. Data Transfer Rate 600 MB/s)	1 x 2.5" SATAII HDD bay (Max. Data Transfer Rate 300 MB/s)	1 x 2.5" SATAII HDD bay (Max. Data Transfer Rate 300 MB/s)
1 (Supports either mSATA or full size miniPCIe, selected by BIOS, default support miniPCIe)	1 (Supports either mSATA or full size miniPCIe, selected by BIOS, default support miniPCIe)	-	-
-	-	1 CompactFlash	1 CompactFlash
2	3	-	-
4	3	6	6
8-bit Programmable DIO	4ch digital input and 4ch digital output with 2.5KV isolation	8-bit Programmable DIO	8-bit Programmable DIO
-	-	-	-
4 (2 x RS232, 2 x RS232/ 422/ 485)	4 (4 x RS232/ 422/ 485)	4 (3 x RS232, 1 x RS232/422/485)	6 (1 x RS232, 3 x RS232/ 422/ 485, 2 x RS-422/ 485 with 7.5KV isolation)
ATX, AT	ATX, AT	ATX, AT	ATX, AT
12 V_{DC}, ± 10%	12 ~ 24 V_{DC}	12 V_{DC}	12 ~ 24 V_{DC}
Lockable DC Jack	2-pin phoenix head	DC Jack	2-pin phoenix head
9.6W	10.3W	11W	12.12W
24.98W	25.7W	15W	14.96W
Lockable AC to DC, DC12 V/5 A, 60 W (Optional)	Lockable AC to DC, DC19 V/3.42 A, 65 W (Optional)	ACto DC, DC12V/3A, 36W (Optional)	Lockable AC to DC, DC19 V/3.42 A, 65 W (Optional)
With extend temperature peripherals: -20 ~ 60° C With HDD: 0 ~ 45° C	With extend temperature peripherals: -20 ~ 60° C With HDD: 0 ~ 45° C	With extend temperature peripherals: -20 ~ 60° C With HDD: 0 ~ 45° C	With extend temperature peripherals: -20 ~ 60° C With HDD: 0 ~ 45° C
-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing
With SSD: 5 Grms	With SSD: 5 Grms	With SSD: 5 Grms With HDD: 1 Grms	With SSD: 5 Grms With HDD: 1 Grms
With SSD: 50 G	With SSD: 50 G	With SSD: 50 G With HDD: 20 G	With SSD: 50 G With HDD: 20 G
264.5 x 75.1 x 133.0 mm	264.5 x 75.1 x 133.0 mm	264.5 x 69.2 x 137.25 mm	264.5 x 69.2 x 137.25 mm
2.3 kg (5.07 lb)	2.8kg (6.17lb)	2 kg (4.4 lb)	2 kg (4.4 lb)
Aluminum/Iron	Aluminum/Iron	Aluminum/Iron	Aluminum/Iron
Desk/ Wall/ VESA/ DIN-Rail mounting	Desk/ Wall/ VESA/ DIN-Rail mounting	Desk/ Wall/ VESA/ DIN-Rail mounting	Desk/ Wall/ VESA/ DIN-Rail mounting
Yes	Yes	Yes	Yes
Yes (Ubuntu v12.04/CentOS 6.6)	Yes (Ubuntu v12.04/CentOS 6.6)	Yes (Ubuntu v10.04.1)	Yes (Ubuntu v10.04.1)
Yes	Yes	Yes	Yes
Yes	Yes	-	-
Intel AMT 8.0, McAfee, Acronis	Intel AMT 8.0, McAfee, Acronis	McAfee, Acronis	McAfee, Acronis
CE, FCC, CCC, BSMI	CE, FCC, CCC, BSMI	CE, FCC, CCC, BSMI, KC	CE, FCC, CCC, BSMI, KC
UL, CCC, BSMI	UL, CCC, BSMI	UL, CCC, BSMI, KC	UL, CCC, BSMI, KC
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High Performance and Value Series

Selection Guide

Model Name		ARK-3440 A2	ARK-3500	ARK-3510	ARK-6320	ARK-6322
			NEW	NEW		NEW
						
Processor System	CPU	Intel Core i7 610E/i5 520E/ i3 330E	3rd gen' Intel Core i7-3610QE/ i5-3610ME/i3-3120ME/ Celeron 1020E rPGA processor support	3rd gen' Intel Core i7-3610QE/ i5-3610ME/i3-3120ME/ Celeron 1020E rPGA processor support	Intel Atom Processor D510/ D525	Intel Celeron J1900 SoC
	Frequency	2.53GHz/2.4GHz/2.13GHz	2.3 GHz/2.7 GHz/2.4 GHZ/2.2 GHz	2.3 GHz/2.7 GHz/2.4 GHZ/2.2 GHz	1.66 GHz/1.8 GHz	2.0 GHz
	Core Number	2	4/2/2/2	4/2/2/2	2	4
	BIOS	AMI SPI 16Mbit	AMI EFI 64Mbit	AMI EFI 64Mbit	AMI 16 Mbit SPI	AMI 16Mbit SPI
	Chipset	Intel QM57	Intel QM77	Intel QM77	ICH8M	-
Memory	Technology	DDR3 1066/1333	DDR3/DDR3L 1600MHz	DDR3/DDR3L 1600MHz	DDR2 667MHz / DDR3 800MHz	DDR3 1333MHz SDRAM
	Max. Capacity	8GB	16GB	16GB	2GB / 4GB	8GB
	Socket	2x204-pin SODIMM	2x204-pin SODIMM	2x204-pin SODIMM	1 x 200-pin SODIMM / 2 x 204-pin SODIMM	2 x 204pin SODIMM
Display	VGA	up to 2048x1536	VGA integrated in DVI-I port	VGA integrated in DVI-I port	Supports up to SXGA 2046 x 1536 @ 60Hz	Support up to SXGA 1920 x 1200 @ 60 MHz
	LCD (TTL/LVDS/eDP)	LVDS: 24 bit up to 1920x1200(optional)	-	-	LVDS : Single channel 18-bit and up to WXGA 1366 x 768 (Optional)	-
	DDI (HDMI/DVI/ DisplayPort)	HDMI: HDMI 1.3 up to 2560x 1600p75 DVI-D: up to 1920 x 1200	DVI-I: 1920 x 1200 @ 60 Hz HDMI: HDMI 1.4, 1920 x 1200 @ 60Hz Display port: 2560 x 1600 @ 60Hz (Video only, and only on 3rd gen' processor)	DVI-I: 1920 x 1200 @ 60 Hz HDMI: HDMI 1.4, 1920 x 1200 @ 60Hz Display port: 2560 x 1600 @ 60Hz (Video only, and only on 3rd gen' processor)	DVI-D:1600 x 1200	DisplayPort : DP++1.2, resolution up to 2560 x 1600 x 24bpp @ 60Hz
	Multiple Display	Dual	Triple/Dual	Triple/Dual	Dual	Dual
Expansion Interface	PCI Express x 4	1 (optional)	1 slot, ARK-3500F	-	-	-
	PCI Express x 1	1 (default)/2/-	1 slot, ARK-3500F	-	-	-
	Mini PCIe	2	2 (share with mSATA), with SIM	2 (share with mSATA), with SIM	-	2 (1 full size, 1 half size)
	PCI	1(default)/2/NA	2 slots, ARK-3500P	-	-	-
Ethernet	Controller	GbE1: Intel 82577LM GbE2: Intel 82583V	GbE1: Intel 82579LM GbE2 : Intel I-210IT	GbE1: Intel 82579LM GbE2 : Intel I-210IT	GbE1: Intel 82567V; GbE2: Intel 82583V	GbE1: RTL8111E GbE2: RTL8111E
	Speed	10/100/1000Mbps	10/100/1000Mbps	10/100/1000Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Audio	Audio Interface	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
	CODEC	Realtek ALC888	Realtek ALC892	Realtek ALC892	Realtek ALC892	Realtek ALC892
	Connector	1 (Line-in, Line out, Mic-in)	Line out, Mic in	Line out, Mic in	3 (Mic-In, Line-In, Line-Out)	1 (Line out)
WatchDog Timer		-	Yes	Yes	Yes	Yes
Storage	SATA	2 x 2.5" SATAII HDD bay	2 x 2.5" SATAIII HDD bay	2 x 2.5" SATAIII HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" or 3.5" SATA HDD bay
	CompactFlash/ CFast	1 CompactFlash	1 CFast	1 CFast	1 CompactFlash type I/II socket (on the solder side of the motherboard)	-
	mSATA	-	2 (Share with mini-PCIe)	2 (Share with mini-PCIe)	-	1 (Share with mini-PCIe)
I/O	USB 3.0	-	4	4	-	1
	USB2.0	6	2	2	8	7
	LPT	1 (optional)	-	-	-	-
	COM Port	2 (2 x RS232, 1 x RS232/ 422/ 485)	4 x RS232, 4 x RS232/422/485	2 x RS-232, 2 x RS-232/422/485	5 x RS232, 1 x RS232/ 422/485	5 x RS-232 1 x RS232/422/485
Power	Power Type	ATX, AT	ATX, AT	ATX, AT	ATX	ATX
	Power Supply Voltage	9 V_{DC} ~ 34 V_{DC}	9 V_{DC} ~ 34 V_{DC}	12 V_{DC}, ± 10% (optional 9 ~ 34 V_{DC})	12 V_{DC}, ± 10%	12 V_{DC}, ± 10%
	Connector	4pin terminal block	4pin terminal block	Lockable DC jack	-	-
	Power Consumption (Idle)	38W	14.8W	14.8W	23W	TBD
	Power Consumption (Full Load)	53W	60W (w/o add on card)	60W	37W	TBD
	Power Adaptor	Optional	120W (optional)	Lockable AC to DC, 84W (Optional)	AC to DC, DC12V/5A, 60 W (Optional)	AC to DC, DC12V/5A, 60 W (Optional)
Environment	Operating Temperature (air flow 0.7 m/sec)	With extend temperature peripherals: -10 ~ 55° C With HDD: 0 ~ 45° C	With SSD: -10 ~ 60° C With HDD: 0 ~ 40° C	With SSD: -10 ~ 60° C With HDD: 0 ~ 40° C	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)
	Non-operating Temperature	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C	-40~ 85° C
	Vibration Resistance	With SSD: 5 Grms With HDD: 1 Grms	With SSD: 5 Grms With HDD: 1 Grms	With SSD : 3Grms With HDD : 1 Grms	0.5 Grm	TBD
	Shock Protection	With SSD: 50 G With HDD: 20 G	With HDD: 20G	With HDD: 20G	20G	TBD
Physical Characteristics	Dimensions (W x H x D)	220 x 117 x 200 mm	290 x 110 x 232 mm	290 x 90 x 232 mm	200 x 73 x 200 mm	200 x 62 x 200 mm
	Weight	4kg (8.8lb)	4.8kg (10.56lb)	4.53kg (10lb)	4.14 kg (8.8 lb)	4.14 kg (8.8 lb)
	Mounting	Desk/ Wallmounting	Desk/Wallmounting	Desk/Wallmounting	Desk (Optional)	Desk (Optional)
Operating System	Microsoft Windows	Yes	Yes	Yes	Yes	Yes
	Linux	Yes	Yes	Yes	Yes	Yes
APIs	SUSIAccess	Yes (don't support HW monitor)	Yes	Yes	Yes	Yes
	iManager	-	-	-	Yes	Yes
	Other	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis	McAfee, Acronis
Certification	EMC	CE, FCC, CCC, BSMI, KC	CE, FCC, CCC, BSMI	CE, FCC, CCC, BSMI	CE/FCC/CCC/BSMI	CE/FCC/CCC/BSMI
	Safety Certifications	UL, CCC, BSMI, KC	UL, CCC, BSMI	UL, CCC, BSMI	CCC/BSMI	CCC/BSMI
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Surveillance & In-Vehicle Series

Selection Guide

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Model Name		ARK-2121S	ARK-2151S	ARK-2121V	ARK-2151V	ARK-VH200
Processor System	CPU	Intel® Atom QC E3845	4th Gen Intel® Core i5 4300U	Intel® Atom DC E3825 Intel® Atom QC E3845	4th Gen Intel® Celeron 2980U 4th Gen Intel® Core i5 4300U	Intel Atom™ D510
	Frequency	1.91 GHz	1.9 GHz	1.33 GHz / 1.91 GHz	1.6 GHz / 1.9 GHz	1.66 GHz
	Core Number	4	2	2 / 4	2	2
	BIOS	AMI EFI 64 Mbit	AMI EFI 128 Mbit	AMI EFI 64 Mbit	AMI EFI 128 Mbit	AMI EFI 16Mbit
	Chipset	Intel® Atom QC E3845	4th Gen Intel® Core i5 4300U	Intel® Atom DC E3825 Intel® Atom QC E3845	4th Gen Intel® Celeron 2980U 4th Gen Intel® Core i5 4300U	Intel™ ICH8-M
Memory	Technology	DDR3L 1333 MHz	DDR3L 1600 MHz	DDR3L 1066/1333 MHz	DDR3L 1333/1600 MHz	DDR2 667MHz
	Max. Capacity	8 GB	8 GB	8GB	8GB	2 GB
	Socket	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 200-pin SODIMM
Display	Graphic Memory	Intel Gen 7 Graphics Engines	GT3 Graphics, Generation 7.5 graphics core architecture	Intel Gen 7 Graphics Engines	GT3 Graphics, Generation 7.5 graphics core architecture	-
	VGA	1 (up to 1600 x 1200)	1 (up to 1920 x 1200)	1 (up to 1600 x 1200)	1 (up to 1920 x 1200)	1
	LCD (TTL/LVDS/eDP)	-	-	-	-	LVDS
	DDI (HDMI/DVI/ DisplayPort)	1 x lockable HDMI, up to 1900 x 1200	1 x lockable HDMI, up to 1900 x 1200	1 x lockable HDMI, up to 1900 x 1200	1 x lockable HDMI, up to 1900 x 1200	-
	Multiple Display	Dual	Dual	Dual	Dual	-
Expansion Interface	Mini PCIe	1 x Full-size Mini PCIe (mSATA) 1 x Full-size Mini PCIe (WLAN) 2 x Full-size Mini PCIe w/SIM holders (WWAN)	1 x Half-size Mini PCIe (WLAN) 1 x Full-size Mini PCIe (mSATA) 2 x Full-size Mini PCIe w/SIM holders (WWAN)	1 x Full-size Mini PCIe (mSATA) 1 x Full-size Mini PCIe (WLAN) 2 x Full-size Mini PCIe w/SIM holders (WWAN)	1 x Half-size Mini PCIe (WLAN) 1 x Full-size Mini PCIe (mSATA) 2 x Full-size Mini PCIe w/SIM holders (WWAN)	2 x Full-Size
	SIM Socket	2	2	2	2	1
Ethernet	Controller	GbE 1 : Intel i210 GbE 2 : Intel i210 All support Wake On LAN	GbE 1 : Intel i218 GbE 2 : Intel i210 All support Wake On LAN	GbE 1 : Intel i210 GbE 2 : Intel i210 All support Wake On LAN	GbE 1 : Intel I218 GbE 2 : Intel i210 All support Wake On LAN	GbE1: Intel 82574L, GbE2: Intel 82574L, All support wake on LAN
	Speed	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps	10/ 100/ 1000 Mbps
Audio	Audio Interface	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
	CODEC	Realtek ALC888S	Realtek ALC888S	Realtek ALC888S	Realtek ALC888S	Realtek ALC888
	Connector	3 (Line in, Line out, Mic-in)	3 (Line in, Line out, Mic-in)	3 (Line in, Line out, Mic-in)	3 (Line in, Line out, Mic-in)	2 (Line out, Mic-in)
	Cellular Voice	-	-	Support WWAN voice function, Line-out,Mic-in	Support WWAN voice function, Line-out,Mic-in	-
WatchDog Timer		Yes	Yes	Yes	Yes	Yes
Storage	SATA	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
	CompactFlash/ CFast	-	-	-	-	CompactFlash Type I/II
	mSATA	1 x Full-size mSATA	1 x Full-size mSATA	1 x Full-size mSATA	1 x Full-size mSATA	-
I/O	USB3.0	1	2	1	2	-
	USB2.0	3	2	3	2	4
	COM Port	2 (2 x RS-232/422/485)	2 (2 x RS-232/422/485)	Up to 4 (2 x RS-232 & 2 x RS-232/422/485)	Up to 4 (2 x RS-232 &]2 x RS-232/422/485)	2 (2 x RS232, 1 x RS232/ 422/ 485 optional)
	GPIO	6 x DI & 2 x DO	6 x DI & 2 x DO	6 x DI & 2 x DO	6 x DI & 2 x DO	Yes
	Video Input	-	-	-	-	4CH Video Inputs, BNC
	Optional COM or CANBus	-	-	2 x RS-232 or 2 x CANBus 2.0A/B	2 x RS-232 or 2 x CANBus 2.0A/B	-
Other	GPS	-	-	On board high sensitivity GPS	On board high sensitivity GPS	On board GPS
	G-Sensor	-	-	Yes	Yes	-
	PoE	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 - 2ports full-load, IEEE802.3af Class 3	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 - 2ports full-load, IEEE802.3af Class 3	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 - 2ports full-load, IEEE802.3af Class 3	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 - 2ports full-load, IEEE802.3af Class 3	-
Power	Power Type	ATX/AT	ATX/AT	ATX/AT	ATX/AT	ATX, AT
	Power Supply Voltage	9 ~ 36VDC w/ isolation	9 ~ 36VDC w/ isolation	PC Mode: 9 ~ 36 VDC VH Mode: 12 V battery (11 ~ 16 VDC), 24 V battery (22 ~ 32 VDC)	PC Mode: 9 ~ 36 VDC VH Mode: 12 V battery (11 ~ 16 VDC), 24 V battery (22 ~ 32 VDC)	9 VDC ~ 32 VDC (for In Vehicle)
	Power Consumption (Idle)	TBD	TBD	TBD	TBD	19W
	Power Consumption (Full Load)	TBD	TBD	TBD	TBD	22W
	Power Adaptor	AC-to-DC Adapter, DC19 Power Plug (Optional)	AC-to-DC Adapter, DC19 Power Plug (Optional)	AC-to-DC Adapter, Phoenix Power Plug (Optional)	AC-to-DC Adapter, Phoenix Power Plug (Optional)	AC to DC, DC19 V/ 3.42 A, 65 W (Optional)
Environment	Operating Temperature (air flow 0.7 m/sec)	With extended temperature SSD/ mSATA/RAM :-20 ~ 60° C With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C	With extended temperature SSD/ mSATA/RAM :-20 ~ 60° C With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C	With extended temperature SSD/mSATA/RAM :-20 ~ 60° C With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C	With extended temperature SSD/mSATA/RAM :-20 ~ 60° C With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C	-20 ~ 60° C (operating humidity: 40° C @ 95% RH Non-Condensing)
	Non-operating Temperature	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40 ~ 85° C and 40° C @ 95% RH Non-Condensing	-40~ 85° C and 40° C @ 95% RH Non-Condensing
	Vibration Resistance	With mSATA/SSD : 5 Grms	With mSATA/SSD : 5 Grms	With mSATA/SSD: IEC 60721-3-5 Class 5M3	With mSATA/SSD: IEC 60721-3-5 Class 5M3	With CF/SSD : 5 Grms With HDD : 1 Grms
	Shock protection	With mSATA/SSD: 50 G	With mSATA/SSD: 50 G	With mSATA/SSD: IEC 60721-3-5 Class 5M3	With mSATA/SSD: IEC 60721-3-5 Class 5M3	With CF/SSD : 50 G With HDD : 20 G
Physical Characteristics	Dimensions (W x H x D)	264.5 x 69.2 x 133.0 mm	264.5 x 75.1 x 133.0 mm	264.5 x 69.2 x 133.0 mm	264.5 x 75.1 x 133.0 mm	260 x 77 x 134 mm
	Weight	2.3 kg (5.07 lb)	2.5 kg (4.18 lbs)	2.3 kg (5.07 lb)	2.5 kg (4.18 lbs)	3 kg (6.6 lb)
	Mounting	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)	Wall Mounting (Standard) / VESA & DIN-Rail Mounting Kit (Optional)	Desk/ wall mounting
Operating System	Microsoft Windows	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes (Windows 7, Windows 8)	Yes
	Linux	Yes (by Project)	Yes (by Project)	Yes (by Project)	Yes (by Project)	Yes (Ubuntu v10.04.1)
APIs	SUSIAccess	Yes	Yes	Yes	Yes	Yes
	iManager	Yes	Yes	Yes	Yes	-
Certification	EMC	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE/FCC Class A, CCC, BSMI	CE, FCC
	Safety Certifications	UL, CCC, BSMI, CB	UL, CCC, BSMI, CB	UL, CCC, BSMI, E13	UL, CCC, BSMI, E13	UL, CCC, E13
Page		1-34	1-36	1-38	1-40	1-42

ARK-1122H

Intel® Atom™ Dual Core N2600 with Independent Dual Displays Fanless Box PC



Features

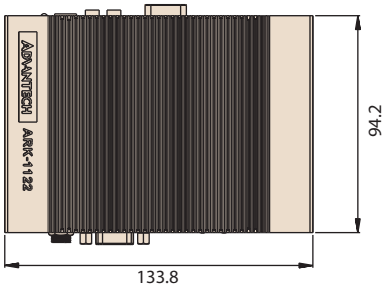
- Intel® Atom™ Dual Core N2600, 1.6 GHz
- Palm-size form factor : 133.8(W) x 43.1(H) x 94.2(D) mm
- Supports independent dual displays interfaces : VGA + HDMI
- Supports 1 x GbE and 4 USB 2.0 ports
- Supports 1 x RS-232 and Audio line in / line out
- Built-in 1 x half size Mini PCIe expansion slot (i.e.: Wi-Fi module)
- Supports mSATA and/or 2.5" SATA HDD bay
- Wide operating temperature -20 ~ 60° C support
- Optional VESA / DIN-Rail / Wall mounts
- Lockable DC jack design
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

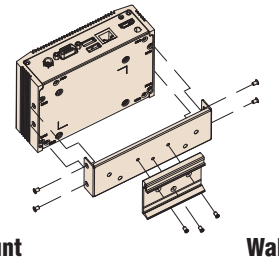
		ARK-1122H-S6A1E
Processor System	CPU	Intel Atom Dual Core N2600 1.6 GHz
	L2 Cache	1MB
	System Chipset	Intel NM10
	BIOS	AMI EFI 16 Mbit
Memory	Technology	DDR3 800 MHz up to 4 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel Atom N2600
	Interface	VGA (1920 x 1200) HDMI (1920 x 1200) with lockable design
Ethernet	LAN	1 x 10/100/1000 Mbps Intel 82583V GbE, supports wake on LAN
Audio	Chipset	Realtek ALC892, High Definition Audio (HD)
	Interface	Line-in and Line-out
I/O Interface	Serial Ports	1 x RS-232
	USB Interface	4 x USB ports, USB2.0 Compliant
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe	1 x half-size Mini PCIe
Storage	2.5" HDD/SSD	1 x SATA II HDD Bay
	mSATA	1 x full-size Mini PCIe slot
Software Support	Microsoft Windows	Windows 7 Pro, WES7, XP Embedded (XP Embedded by project support)
Power Requirement	Power Input Voltage	12 V_{DC}, ± 10%
	DC Jack Type	Support lockable design
	Power Adaptor	AC to DC, DC12 V/3 A, 36 W with lockable design
Power Consumption	Typical	6.89 W
	Max	11.45 W
Mechanical	Construction	Aluminum housing
	Mounting	Support VESA/DIN Rail/Wall mounting (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environmental and Certifications	Operating Temperature	With standard temperature HDD/SSD/mSATA devices: 0 ~ 40° C With extended temperature SSD/mSATA devices: -20 ~ 60° C
	Storage Temperature	-40 ~ 85° C
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With SSD/mSATA: 3Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis
	Shock During Operation	With SSD/mSATA:30Grms, IEC 60068-2-27, half sine, 11ms duration
	EMC	CE/FCC Class A, CCC, BSMI
	Safety Certifications	CB, UL, CCC, BSMI

Dimensions

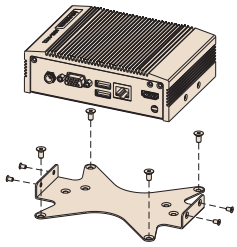
Unit: mm



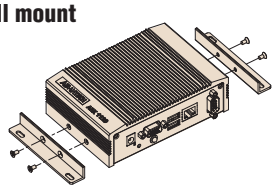
DIN Rail



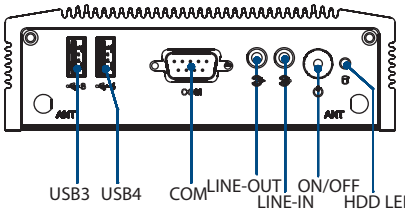
VESA mount



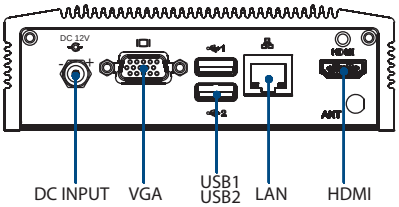
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	VGA	HDMI	Audio	GbE	2.5" HDD bay	mSATA Storage	USB 2.0	RS-232	RS-232/ 422/485	MiniPCIe	Operating Temp.	OS
ARK-1122H-S6A1E	Atom N2600 1.6GHz	Up to 4GB	1	1	Line in Line out	1	1	1	4	1	N/A	1 Half size	-20 ~ 60° C	-
ARK-1122HS-S6A1E	Atom N2600 1.6GHz	2GB Built in	1	1	Line in Line out	1	500GB HDD built in	1	4	1	N/A	1 Half size	0 ~ 40° C	WES7 Built-in

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1122 unit
-	1 x Driver/Utility CD/Manual
-	1 x Traditional Chinese user manual for CCC
-	1 x China RoHS
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with lockable design

Embedded OS (Only available for T-Parts OEM, and CTOS service)

Part Number	Description
2070011879	WES7 for ARK-1122H & ARK-1122F

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit

ARK-1122C

Intel® Atom™ Dual Core N2600 with 4 COM Port Extendibility Fanless Box PC



Features

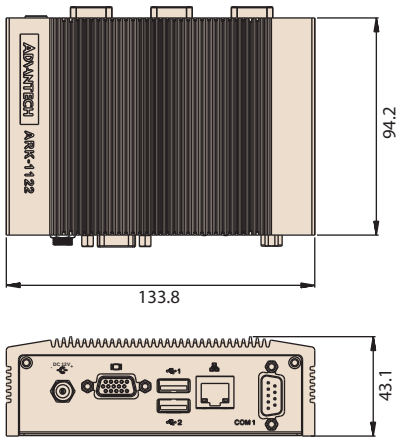
- Intel® Atom™ Dual Core N2600, 1.6 GHz
- Palm-size form factor : 133.8(W) x 43.1(H) x 94.2(D) mm
- Supports 4 x COM ports (2 x RS-232 & 2 x RS-232/422/485, select by BIOS)
- Supports 1 x VGA and 4 x USB 2.0 ports
- Built-in 1 x half size Mini PCIe expansion slot (i.e.: Wi-Fi module)
- Supports mSATA storage (Hard drive bay by request)
- Wide operating temperature -20 ~ 60° C support
- Optional VESA / DIN-Rail / Wall mounts
- Lockable DC jack design
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

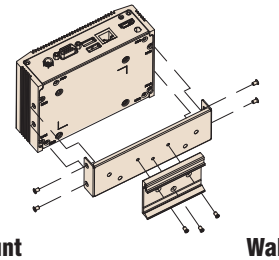
		ARK-1122C-S6A1E
Processor System	CPU	Intel Atom Dual Core N2600 1.6 GHz
	L2 Cache	1MB
	System Chipset	Intel NM10
	BIOS	AMI EFI 16 Mbit
Memory	Technology	DDR3 800 MHz, up to 4 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel Atom N2600
	Interface	VGA (1920 x 1200)
Ethernet	LAN	1 x 10/100/1000 Mbps Intel 82583V GbE
I/O Interface	Serial Ports	2 x RS-232, 2 x RS-232/422/485, selected by BIOS
	USB Interface	4 x USB ports, USB2.0 Compliant (Standard) or 2 x USB ports (Option 2.5" drive bay version)
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe	1 x half-size Mini PCIe
Storage	2.5" HDD/SSD	1 x SATA II HDD bay (Optional by T-Part)
	mSATA	1 x full-size Mini PCIe slot
Software Support	Microsoft Windows	Windows 7 Pro, WES7, XP Embedded (XP Embedded by project support)
Power Requirement	Power Input Voltage	12 V_{DC}, ± 10%
	DC Jack Type	Support lockable design
	Power Adaptor	AC to DC, DC12 V/3 A, 36 W with lockable design
Power Consumption	Typical	5.4 W
	Max	9.47 W
Mechanical	Construction	Aluminum housing
	Mounting	Support VESA/DIN Rail/Wall mounting (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environmental and Certifications	Operating Temperature	With standard temperature HDD/SSD/mSATA devices: 0 ~ 40° C With extended temperature SSD/mSATA devices: -20 ~ 60° C
	Storage Temperature	-40 ~ 85° C
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With SSD/mSATA: 3Grms, IEC 60068-2-27, half sine, 11ms duration
	Shock During Operation	With SSD/mSATA: 30Grms, IEC 60068-2-27, half sine, 11ms duration
	EMC	CE/FCC Class A, CCC, BSMI
	Safety Certifications	CB, UL, CCC, BSMI

Dimensions

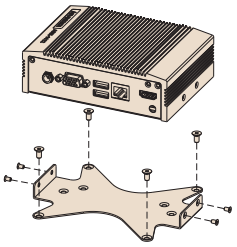
Unit: mm



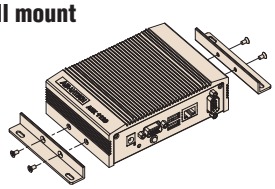
DIN Rail



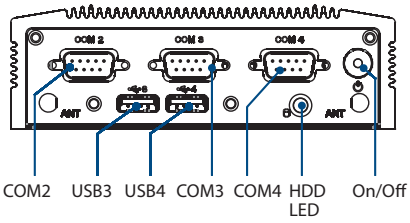
VESA mount



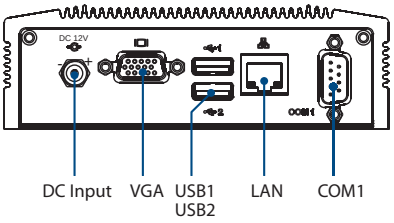
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	VGA	HDMI	Audio	GbE	2.5" HDD bay	mSATA Storage	USB 2.0	RS-232	RS-232/ 422/485	MiniPCIe	Operating Temp.
ARK-1122C-S6A1E	Atom N2600 1.6GHz	Up to 4GB	1	N/A	N/A	1	Optional by T-PN	1	4 (Standard) ; 2 (Option 2.5" HDD bay version)	2	2	1 Half size	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1122 unit
-	1 x Driver/Utility CD/Manual
-	1 x Traditional Chinese user manual for CCC
-	1 x China RoHS
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with lockable design

Embedded OS

Part Number	Description
2070011881	WES7 for ARK-1122C
2070012167	XPE for ARK-1122C

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit

ARK-1122F

Intel® Atom™ Dual Core N2800 with Diverse Communications Fanless Box PC



Features

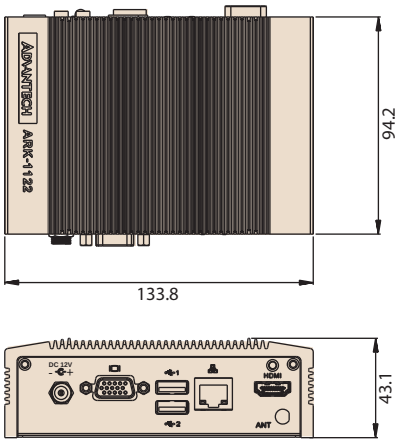
- Intel® Atom™ Dual Core N2800, 1.86 GHz
- Palm-size form factor : 133.8(W) x 43.1(H) x 94.2(D) mm
- Supports 2 x Intel GbE
- Built-in 2 x Mini PCIe slots for Wi-Fi/3G communications (1 w/ SIM)
- Supports independent dual displays interfaces : VGA + HDMI
- Supports 1 x RS-232, Audio line in / line out and 3 USB 2.0 ports
- Supports mSATA storage
- Wide operating temperature -20 ~ 60 C support
- Optional VESA / DIN-Rail / Wall mounts
- Lockable DC jack design
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

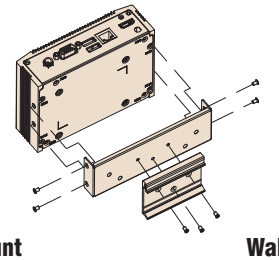
		ARK-1122F-S8A1E
Processor System	CPU	Intel Atom Dual Core N2800 1.86 GHz
	L2 Cache	1MB
	System Chipset	Intel NM10
	BIOS	AMI EFI 16 Mbit
Memory	Technology	DDR3 1066 MHz up to 4 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel Atom N2800
	Interface	VGA (1920 x 1200) HDMI (1920 x 1200) with lockable design
Ethernet	LAN	2 x 10/100/1000 Mbps Intel 82583V GbE
Audio	Chipset	Realtek ALC892, High Definition Audio (HD)
	Interface	Line-in and Line-out
I/O Interface	Serial Ports	1 x RS-232
	USB Interface	3 x USB ports, USB2.0 Compliant
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe	1 x half-size Mini PCIe 1 x full-size Mini PCIe w/SIM Holder
Storage	mSATA	1 x full-size Mini PCIe slot
Software Support	Microsoft Windows	Windows 7 Pro, WES7, XP Embedded (XP Embedded by project support)
Power Requirement	Power Input Voltage	12 V_{DC}, ± 10%
	DC Jack Type	Support lockable design
	Power Adaptor	AC to DC, DC12 V/3 A, 36 W with lockable design
Power Consumption	Typical	7.84 W
	Max.	13.15 W
Mechanical	Construction	Aluminum housing
	Mounting	Support VESA/DIN Rail/Wall mounting (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environmental and Certifications	Operating Temperature	With standard temperature mSATA devices: 0 ~ 40° C With extended temperature mSATA devices: -20 ~ 60° C
	Storage Temperature	-40 ~ 85° C
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA: 3Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis
	Shock During Operation	With mSATA:30Grms, IEC 60068-2-27, half sine, 11ms duration
	EMC	CE/FCC Class A, CCC, BSMI
	Safety Certifications	CB, UL, CCC, BSMI

Dimensions

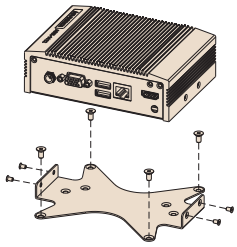
Unit: mm



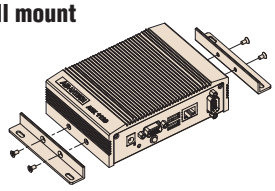
DIN Rail



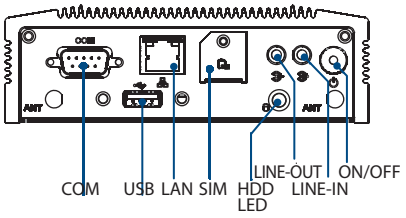
VESA mount



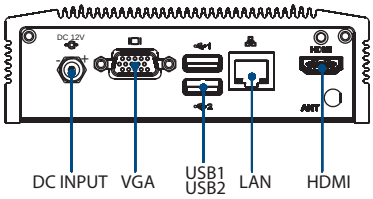
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	VGA	HDMI	Audio	GbE	2.5" HDD bay	mSATA Storage	USB 2.0	RS-232	RS-232/ 422/485	MiniPCIe	Operating Temp.
ARK-1122F-S8A1E	Atom N2800 1.8GHz	Up to 4GB	1	1	Line in, Line out	2	N/A	1	3	1	N/A	1 Half size, 1 Full size w/ SIM	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1122 unit
-	1 x Driver/Utility CD/Manual
-	1 x Traditional Chinese user manual for CCC
-	1 x China RoHS
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with lockable design
9680015085	1 x L type Wrench 18x51mm for SIM cover

Embedded OS (Only available for T-Parts OEM, and CTOS service)

Part Number	Description
2070011879	WES7 for ARK-1122H & ARK-1122F

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit

ARK-1123L

Intel® Atom E3825 SoC with Dual COM and GPIO Palm-Size Fanless Box PC



Features

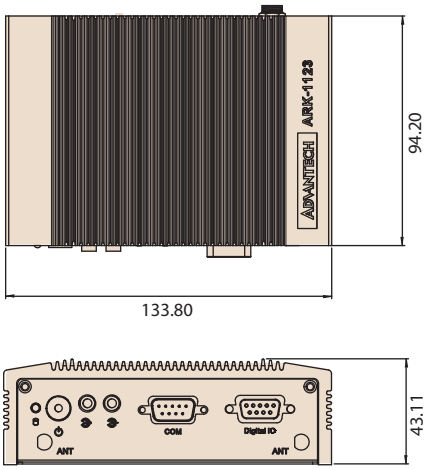
- Intel® Atom™ Processor E3825 Dual Core 1.33 GHz SoC
- 1 x 2.5" SATA HDD/SSD Bay
- 1 x GbE & 1 x HDMI & 1 x GPIO
- 1 x RS-232 & 1 x RS-232/422/485
- 1 x Full-Size MiniPCIe (ex. WLAN or WWAN module)
- 1 x Half Size MiniPCIe (ex. mSATA)
- Optional VESA / DIN Rail / Wall Mounting kits
- Lockable DC jack design
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

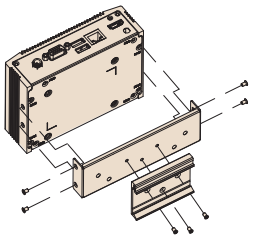
		ARK-1123L-S3A1E
Processor System	CPU	Intel Atom E3825 Dual Core SoC
	Frequency	1.33 GHz
	L2 Cache	1 MB
	BIOS	AMI EFI
Memory	Technology	DDR3L 1066MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	7th Gen. Intel Graphic core
	Graphic Engine	DirectX* 11.1, OGL 3.0, OCL 1.1, OGL ES 2.0 support Encode: H264, MPEG2/4, VC1, WMV9 Decode: H264, MPEG2
	HDMI	1 x Lockable HDMI connector
Audio	Main System	ALC-888S, High Definition Audio. Line-out & Line-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
I/O Interface	Serial Ports	1 x RS-232 & 1 x RS-232/422/485 (BIOS selectable)
	USB Interface	1 x USB 2.0 & 1 x USB3.0
Other	Watchdog timer	255-level timer interval, setup by software
	GPIO	8 bit GPIO
Expansion	Mini PCIe #1	1 x Full-size Mini PCIe, support WLAN or WWAN module
	Mini PCIe #2	1 x Half-size Mini PCIe, support mSATA module
Storage	2.5" Drive Bay	1 x 2.5" SATA HDD Bay (Max Height 9.5mm)
	mSATA	Leverage MiniPCIe #2 slot
Software Support	Microsoft Windows	WES8, Windows 8, WES7 (TBC), Windows 7 (TBC)
	Linux	Support (by Project)
Power Requirement	Power Input Voltage	12 V_{DC}, ± 10%
	Power Adapter	AC to DC, DC12 V/3 A, 36 W with lockable design
Mechanical	Construction	Aluminum housing
	Mounting	VESA/DIN Rail/Wall Mounting Kits (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environment	Operating Temperature	With extended temperature SSD/mSATA/RAM : -20 ~ 60° C with 0.7m/s air flow With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40~185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis with HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
	Shock During Operation	With mSATA/SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration with HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	UL, CCC, BSMI, CB

Dimensions

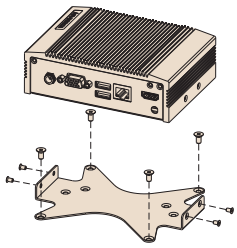
Unit: mm



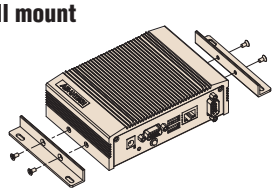
DIN Rail



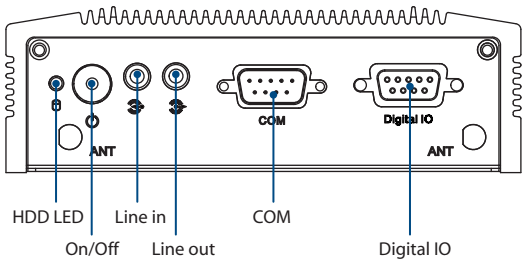
VESA mount



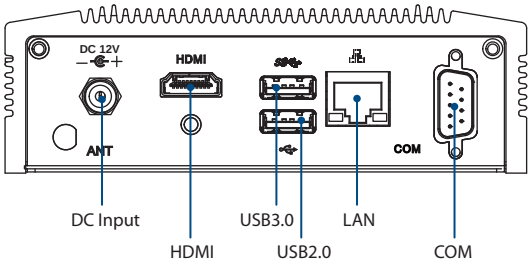
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	HDMI	GbE	USB 2.0	USB 3.0	RS-232	RS-232/ 422/485	GPIO	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-1123L-S3A1E	Intel Atom E3825	Up to 8GB	1	1	1	1	1	1	1	Line in Line out	1 Half size 1 Full size	1	1	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1123L Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with lockable design

Embedded OS (Only available for T-Parts OEM, and CTOS service)

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit

ARK-1123C

Intel® Atom E3825 SoC with Dual GbE and Dual COM Fanless Box PC



Features

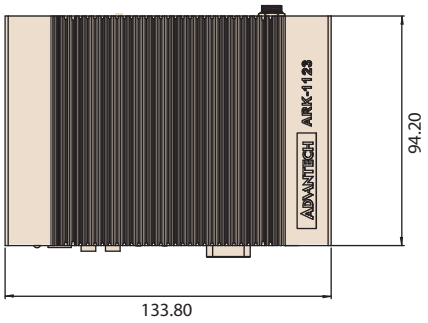
- Intel® Atom™ E3825 Dual Core 1.33 GHz SoC
- 1 x 2.5" SATA HDD/SSD Bay & 1 x HDMI
- 2 x GbE for Multiple Internet Transmission
- 2 x RS-232/422/485 (BIOS selection)
- 1 x Full-Size MiniPCIe (ex. WLAN or WWAN module)
- 1 x Half Size MiniPCIe (ex. mSATA)
- Optional VESA / DIN Rail / Wall Mounting kits
- Lockable DC jack design
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

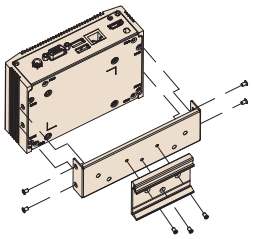
		ARK-1123C-S3A1E
Processor System	CPU	Intel Atom Processor E3825 Dual Core SoC
	Frequency	1.33 GHz
	L2 Cache	1 MB
	BIOS	AMI EFI
Memory	Technology	DDR3L 1066MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	7th Gen. Intel Graphic core
	Graphic Engine	DirectX* 11.1, OGL 3.0, OCL 1.1, OGL ES 2.0 support Encode: H264, MPEG2/4, VC1, WMV9 Decode: H264, MPEG2
	HDMI	1 x Lockable HDMI connector
Audio	Main System	ALC-888S, High Definition Audio. Line-out & Line-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
I/O Interface	Serial Ports	2 x RS-232/422/485 (BIOS selectable)
	USB Interface	2 x USB 2.0 & 1 x USB3.0
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe #1	1 x Full-size Mini PCIe, support WLAN or WWAN module
	Mini PCIe #2	1 x Half-size Mini PCIe, support mSATA module
Storage	2.5" Drive Bay	1 x 2.5" SATA HDD Bay (Max Height 9.5mm)
	mSATA	Leverage MiniPCIe #2 slot
Software Support	Microsoft Windows	WES8, Windows 8, WES7 (TBC), Windows 7 (TBC)
	Linux	Support (by Project)
Power Requirement	Power Input Voltage	12 V_{DC}, ± 10%
	Power Adapter	AC to DC, DC12 V/3 A, 36 W with lockable design
Mechanical	Construction	Aluminum housing
	Mounting	VESA/DIN Rail/Wall Mounting Kits (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environment	Operating Temperature	With extended temperature SSD/mSATA/RAM : -20 ~ 60° C with 0.7m/s air flow With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40~185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis with HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
	Shock During Operation	With mSATA/SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration with HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	UL, CCC, BSMI, CB

Dimensions

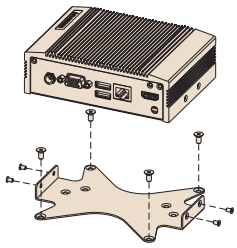
Unit: mm



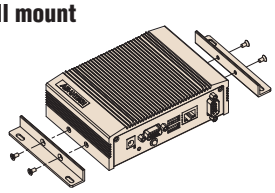
DIN Rail



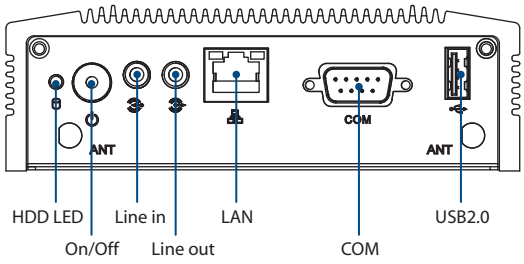
VESA mount



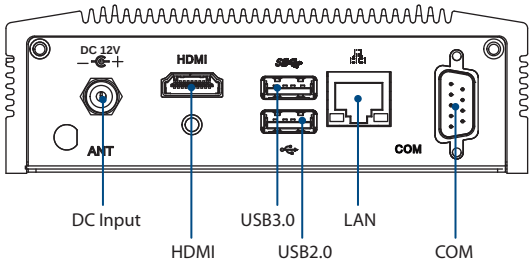
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	CPU	RAM	HDMI	GbE	USB 2.0	USB 3.0	RS-232/ 422/485	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-1123C-S3A1E	Intel Atom E3825	Up to 8GB	1	2	2	1	2	Line in Line out	1 Half size 1 Full size	1	1	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1123C Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with lockable design

Embedded OS (Only available for T-Parts OEM, and CTOS service)

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit

ARK-1123H

Intel® Celeron Quad Core J1900 SoC with Dual HDMI and Dual GbE Fanless Box PC



Features

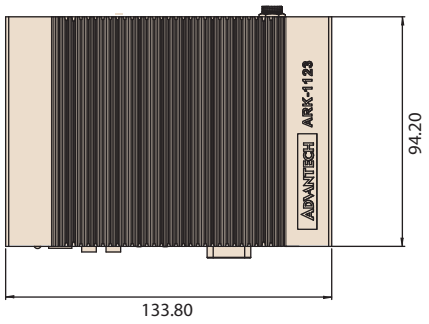
- Intel® Celeron™ J1900 Quad Core 2.0 GHz SoC
- 1 x 2.5" SATA HDD/SSD Bay
- 2 x GbE for Multiple Internet Transmission
- 2 x Independent HDMI
- 1 x RS-232/422/485 (BIOS selection)
- 1 x Full-Size MiniPCIe (ex. WLAN or WWAN module)
- 1 x Half Size MiniPCIe (ex. mSATA)
- Optional VESA / DIN Rail / Wall Mounting kits
- Lockable DC jack design
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

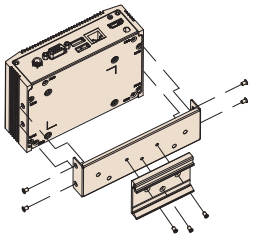
		ARK-1123H-U0A1E
Processor System	CPU	Intel Celeron Processor J1900 Quad Core SoC
	Frequency	2.0 GHz
	L2 Cache	2 MB
	BIOS	AMI EFI
Memory	Technology	DDR3L 1333MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	7th Gen. Intel Graphic core
	Graphic Engine	DirectX* 11.1, OGL 3.0, OCL 1.1, OGL ES 2.0 support Encode: H264, MPEG2/4, VC1, WMV9 Decode: H264, MPEG2
	HDMI	2 x Lockable HDMI connector
Audio	Main System	ALC-888S, High Definition Audio. Line-out & Line-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
I/O Interface	Serial Ports	1 x RS-232/422/485 (BIOS selectable)
	USB Interface	2 x USB 2.0 & 1 x USB3.0
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe #1	1 x Full-size Mini PCIe, support WLAN or WWAN module
	Mini PCIe #2	1 x Half-size Mini PCIe, support mSATA module
Storage	2.5" Drive Bay	1 x 2.5" SATA HDD Bay (Max Height 9.5mm)
	mSATA	Leverage MiniPCIe #2 slot
Software Support	Microsoft Windows	WES8, Windows 8, WES7 (TBC), Windows 7 (TBC)
	Linux	Support (by Project)
Power Requirement	Power Input Voltage	12 V_{DC}, ± 10%
	Power Adapter	AC to DC, DC12 V/3 A, 36 W with lockable design
Mechanical	Construction	Aluminum housing
	Mounting	VESA/DIN Rail/Wall Mounting Kits (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.7" x 3.71")
Environment	Operating Temperature	With extended temperature SSD/mSATA/RAM : -20 ~ 60° C with 0.7m/s air flow With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40~185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis with HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
	Shock During Operation	With mSATA/SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration with HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	UL, CCC, BSMI, CB

Dimensions

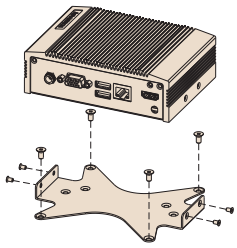
Unit: mm



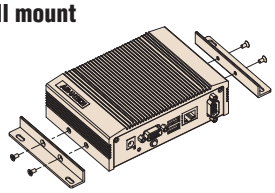
DIN Rail



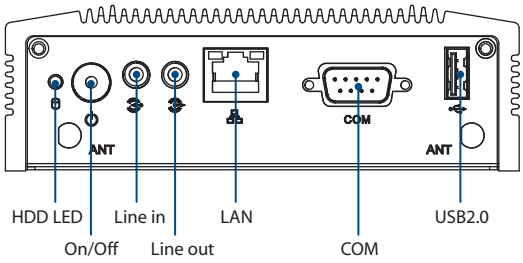
VESA mount



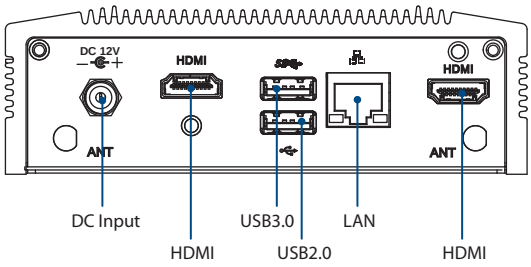
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	CPU	RAM	HDMI	GbE	USB 2.0	USB 3.0	RS-232/ 422/485	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-1123H-U0A1E	Intel Celeron J1900	Up to 8GB	2	2	2	1	1	Line in Line out	1 Half size 1 Full size	1	1	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1123H Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1757004096-01	1 x AC to DC adapter DC12 V/3 A 36 W, 0 ~ 40° C with lockable design

Embedded OS (Only available for T-Parts OEM, and CTOS service)

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180cm, USA type (For power adapter 1757004096-01)
170203183C	Power Cable 3-pin 180cm, Europe type (For power adapter 1757004096-01)
170203180A	Power Cable 3-pin 180cm, UK type (For power adapter 1757004096-01)
1700008921	Power Cable 3-pin PSE Mark 183cm (For power adapter 1757004096-01)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V003E	ARK-112X series VESA mounting kit
AMK-R001E	ARK-112X series DIN-rail mounting kit
AMK-W001E	ARK-112X series Wall mounting kit

ARK-1550

Intel® 4th Generation Core i5 4300U / Celeron 2980U SoC Slim and Panel Mountable Fanless Box PC



Features

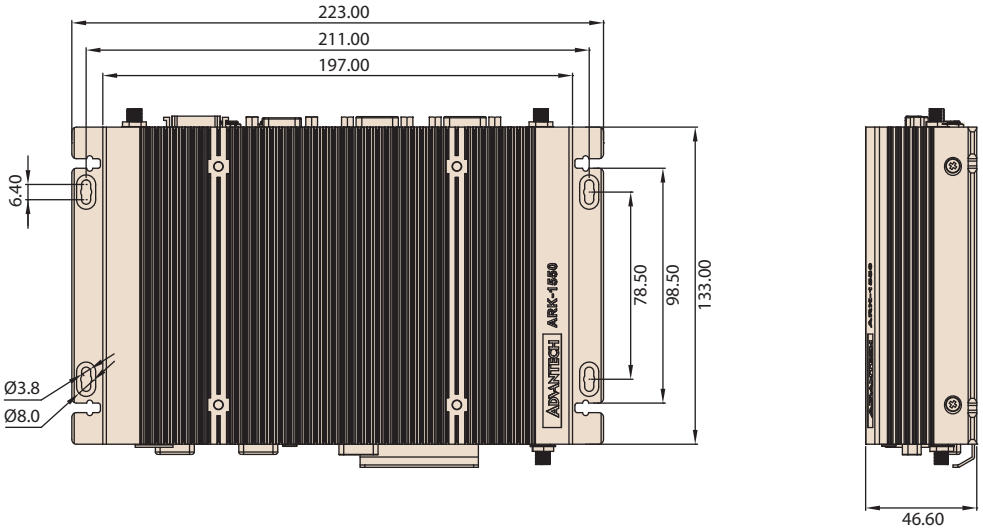
- Intel® Dual Core Celeron 2980U 1.6 GHz / Core i5 4300U 1.9 GHz SoC
- One Removable 2.5" SATA HDD Bay and mSATA slot
- Triple Independent Displays by VGA + HDMI + LVDS (LVDS option)
- Optional VESA / DIN Rail Mounting kits
- Supports 2 x Intel GbE and GPIO
- Built-in 1 x full size MiniPCIe (i.e.: 3G module) and 1 x half size MiniPCIe slot (i.e.: WIFI module)
- Lockable DC jack design
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

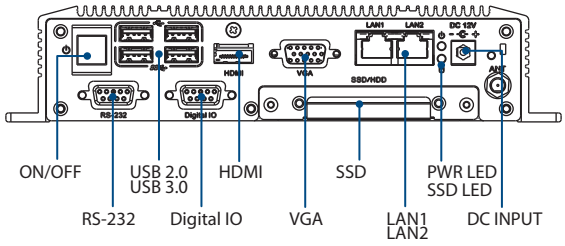
		ARK-1550-S6A1E	ARK-1550-S9A1E
Processor System	CPU	Intel Celeron 2980U Dual Core	Intel i5-4300U Dual Core
	Frequency	1.6 GHz	1.9 GHz
	L3 Cache	2 MB	3 MB
	BIOS	AMI EFI 128 Mbit	
Memory	Technology	DDR3L 1333 MHz	DDR3L 1600 MHz
	Max. Capacity	8 GB	
	Socket	1 x 204-pin SO-DIMM	
Graphics	Chipset	GT3 Graphics, Generation 7.5 graphics core architecture	
	Graphic Engine	DirectX* 11.1, OpenGL* 4.0 support. Full AVC/VC1/MPEG2 HW Decode	
	VGA	DB15, up to 1920 x 1200.	
	HDMI	Lockable HDMI connector, up to 1920 x 1200	
	LVDS (Option)	Up to 1900 x 1200	
Audio	Main System	Realtek ALC888, High Definition Audio. Line-out,Mic-in,Line-in	
Ethernet	LAN #1	10/100/1000 Mbps Intel I218 GbE, support Wake on LAN	
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN	
I/O Interface	Serial Ports	1 x RS-232 & 2 x RS-232/422/485 (BIOS selectable)	
	USB Interface	2 x USB 2.0 & 2 x USB3.0	
	GPIO	8 bit GPIO	
Other	Watchdog timer	255-level timer interval, setup by software	
Expansion	Mini PCIe #1	1 x Full-size Mini PCIe, support mSATA storage or WWAN module	
	Mini PCIe #2	1 x Half-size Mini PCIe, support WLAN module	
Storage	2.5" Drive Bay	1 x Removable 2.5" SATA drive bay (Max Height 9.5 mm)	
	mSATA	Laverage MiniPCIe #1 slot	
Software Support	Microsoft Windows	WES8, WES7, Windows 8, Windows 7	
	Linux	Support (by Project)	
Power Requirement	Power Type	ATX/AT	
	Power Input Voltage	12 V_{DC}, ± 10%	
Mechanical	Construction	Aluminum housing	
	Mounting	Desk/Wall Mounting (Standard), VESA & DIN-Rail Mounting Kit (Optional)	
	Dimensions (W x H x D)	223 x 46.6 x 133.0 mm	
Environment	Operating Temperature	With extended temperature SSD/mSATA/RAM :-20 ~ 55° C with 0.7m/s air flow With standard temperature HDD/SSD/mSATA/RAM peripherals:0 ~ 40° C with 0.7m/s air flow	
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)	
	Relative Humidity	95% @ 40° C (non-condensing)	
	Vibration During Operation	With mSATA/SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis	
	Shock During Operation	With mSATA/SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration	
Regulation	EMC	CE/FCC Class A, CCC, BSMI	
	Safety	UL, CCC, BSMI, CB	

Dimensions

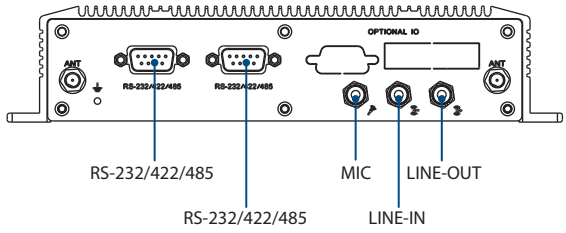
Unit: mm (inch)



Front Panel External I/O



Rear Panel External I/O



Ordering Information

Part Number	Intel CPU	RAM	VGA	HDMI	GbE	USB 2.0	USB 3.0	GPIO	RS-232	RS-232/ 422/485	Audio	MiniPCIe	2.5" HDD bay	mSATA	Operating Temperature
ARK-1550-S6A1E	Intel Celeron 2980U 1.6GHz	Up to 8GB	1	1	2	2	2	1	1	2	Line in Line out Mic in	1 Half size 1 Full size w/SIM	1	1	-20 ~ 55° C
ARK-1550-S9A1E	Intel Core i5 4300U 1.9GHz														

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-1550 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
-	1 x Power bracket

Embedded OS

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
1757003934	AC-to-DC Adapter, DC 12V/5A 60W, with DC Jack Plug, 0 ~ 40° C for Home and Office Use
1700001947	Power cable 2-pin 180 cm, USA type (For power adapter 1757003934)
1700001948	Power cable 2-pin 180 cm, Europe type (For power adapter 1757003934)
1700001949	Power cable 2-pin 180 cm, UK type (For power adapter 1757003934)
1700002141	Power cable 2-pin 180 cm, PSE type (For power adapter 1757003934)
1757004522-01	AC-to-DC Wide Temperature Adapter, DC 12V/3.33A 40W, -20° C ~ 70° C
1702002600-01	Power cable 3-pin 183 cm, USA type (For power adapter 1757004522-01)
1700018705	Power cable 3-pin 183 cm, Europe type (For power adapter 1757004522-01)
1700018704	Power cable 3-pin 183 cm, UK type (For power adapter 1757004522-01)
1700000237-01	Power cable 3-pin 183 cm, PSE type (For power adapter 1757004522-01)
AMK-V004E	VESA mounting kit
AMK-R002E	DIN-rail mounting kit
TBC	LVDS Module

ARK-2120F

Intel® Atom™ Dual Core N2600/D2550 with 3 GbE, 6 COM & Wide Range Power Fanless Box PC



Features

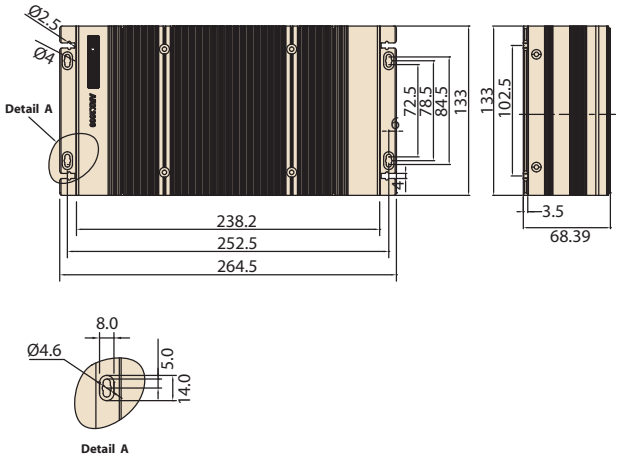
- Intel® Atom™ Dual Core N2600 1.6 GHz/D2550 1.86 GHz, DDR3 memory supports up to 4 GB
- VGA, HDMI, 48-bit LVDS, support dual independent display and DirectX 9
- Mini PCIe expansion with SIM holder for communication module, i.e. HSDPA, WLAN
- Supports up to 3 x GbE, 5 x USB 2.0 and 6 x COMs ports
- Supports external CFast socket and 1 x 2.5" SATA HDD Bay
- Supports 12 ~ 24V wide range DC input
- Lockable DC jack design
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

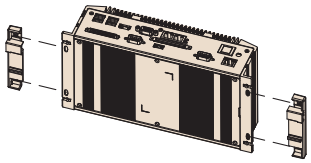
		ARK-2120F-S6A1E	ARK-2120F-S8A1E
Processor System	CPU	Intel AtomN2600	Intel Atom D2550
	Frequency	1.6 GHz (Dual Core)	1.86 GHz (Dual Core)
	L2 Cache	1 MB	1MB
	System Chipset	Intel Atom N2600/D2550 + Intel NM10	
	BIOS	AMI EFI 16Mbit	
Memory	Technology	DDR3 1066 MHz (D2550), DDR3 800 MHZ (N2600)	
	Max. Capacity	4 GB	
	Socket	1 x 204-pin SO-DIMM	
Graphics	Chipset	Intel Atom N2600/D2550	
	Graphic Engine	DirectX 9 and OpenGL3.0 support Hardware decode H/W acceleration: MPEG2 H/W Decode/Acceleration: H.264/VC1/WMV9	
	VGA	Up to 1920 x 1200	
	HDMI	Supports 1920 x 1200, Max data rate: up to 1.65 Gb/s, Supports HDMI v1.3 Up to 1080p support	
	LVDS	Supports 48-bit LVDS, up to 1600 x 1200 (N2600), 2560 x 1600 (D2550)	
	Dual Display	Yes, (VGA + HDMI, VGA + LVDS, HDMI + LVDS)	
Ethernet	LAN1	10/100/1000 Mbps Intel 82583V GbE, support Wake On Lan	
	LAN2	10/100/1000 Mbps Intel 82583V GbE, support Wake On Lan	
	LAN3	10/100/1000 Mbps Intel 82583V GbEr, support Wake On Lan	
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out,Mic-in,Line-in	
IO Interface	Serial Ports	2 x RS-232 ports, 4 x RS-232/422/485 port with auto flow control (by BIOS setting)	
	USB Interface	5 x USB ports, USB 2.0 Compliant	
Other	Digital IO	8-bit	
	Watchdog Timer	255 levels timer interval, setup by software	
Expansion	Mini PCIe	1 x full size Mini PCIe with SIM holder	
Storage	HDD	Supports one SATA 2.5" SATA HDD Bay (Compatible with 12.5mm height HDD) (Max. Data Transfer Rate 300 MB/s)	
	SSD	Supports one external CFast socket	
Software Support	Microsoft Windows	Windows 7, Windows 7 Embedded (XP Professional & XP Embedded support by project)	
	Linux	Ubuntu v12.04	
Power Requirement	Power Type	AT/ATX	
	Power Input Voltage	12 V_{DC} ~ 24 V_{DC}	
	Minimum Power Input	12 V ~ 24 V, 3.0 A ~ 1.5 A	
	Power Adapter	AC to DC, DC19 V/3.42 A, 65 W (Optional)	
Power Consumption	Typical	9.2 Watt (with Intel Atom D2550 at 1.8 GHz)	
	Max.	11.59 Watt (with Intel Atom D2550 at 1.8 GHz)	
Mechanical	Construction	Aluminum housing	
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting	
	Dimensions (W x H x D)	264.50 x 68.39 x 133.0 mm (10.41" x 2.69" x 5.24")	
	Weight	2.5 kg (5.51 lb)	
Environment	Operating Temperature	With extended temperature peripherals: -20 ~ 60° C (-4 ~ 140° F) with air flow With 2.5-inch hard disk 0 ~ 45° C (32 ~ 112° F) with air flow	
	Storage Temperature	- 40 ~ 85° C (-40 ~ 185° F)	
	Relative Humidity	95% @ 40° C (non-condensing)	
	Vibration During Operation	With SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.	
	Shock During Operation	With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration	
	EMC	CE/FCC Class A, CCC, BSMI	
	Safety Certifications	UL, CCC, BSMI	

Dimensions

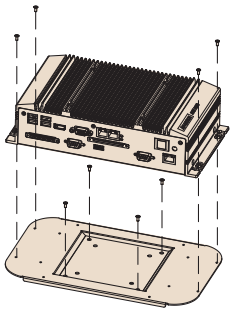
Unit: mm



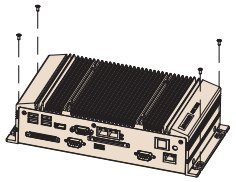
DIN Rail



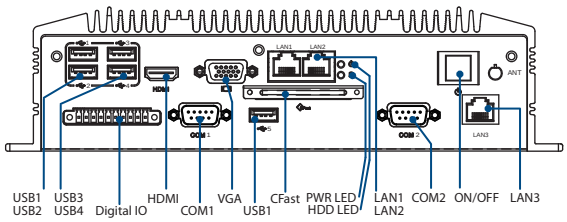
VESA mount



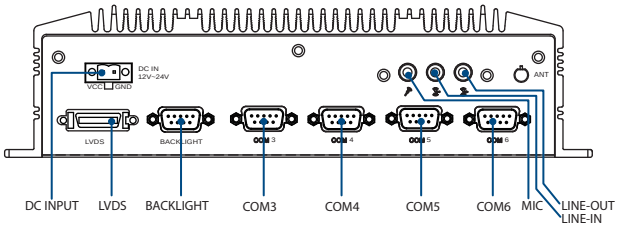
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	VGA	HDMI/ DP	LVDS	GbE	USB 2.0	RS-232	RS-232/ 422/485	DIO	Audio	Full-size MiniPCIe	SIM	CFast	2.5" SATA II HDD Bay	Power Input	Operating Temp.
ARK-2120F-S6A1E	Intel Atom N2600 1.6 GHz	Yes	Yes	48-bits	3	6	2	4	8-bits	Lin-out, Line-in, MIC	1	1	1	1	DC 12V-24V 2-pin phoenix head	-20 ~ 60° C
ARK-2120F-S8A1E	Intel Atom D2550 1.86 GHz	Yes	Yes	48-bits	3	6	2	4	8-bits	Lin-out, Line-in, MIC	1	1	1	1	DC 12V-24V 2-pin phoenix head	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-2120 Unit
-	1 x Utility CD
-	1 x User Manual (Simplified Chinese)
-	1 x China RoHS
1700009001	1 x 2-pin Phoenix to DC-Jack power cable

Embedded OS

Part Number	Description
2070011953	Image WES7E SP1 x32 ENG/GER/JPN/CT

Optional Items

Part Number	Description
1757003659	AC-to-DC Adapter, DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
TBD	AC-to-DC Adapter, DC 12V/3.33A 40W, -20 ~ +70° C
1702002600	Power cable 3-pin 180cm, USA type, for extend temperature power adapter
1702002605	Power cable 3-pin 180cm, EU type, for extend temperature power adapter
1702031801	Power cable 3-pin 180cm, UK type, for extend temperature power adapter
1700001947	Power cable 2-pin 180 cm, USA type (For adapter 1757003659)
1700001948	Power cable 2-pin 180 cm, Europe type (For adapter 1757003659)
1700001949	Power cable 2-pin 180 cm, UK type (For adapter 1757003659)
1700002141	Power cable 2-pin 180 cm, PSE type (For adapter 1757003659)
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

ARK-2150F

3rd Generation Intel® Core™ i7 with 4 x GbE, Isolated DIO & wide range power Fanless Box PC



Features

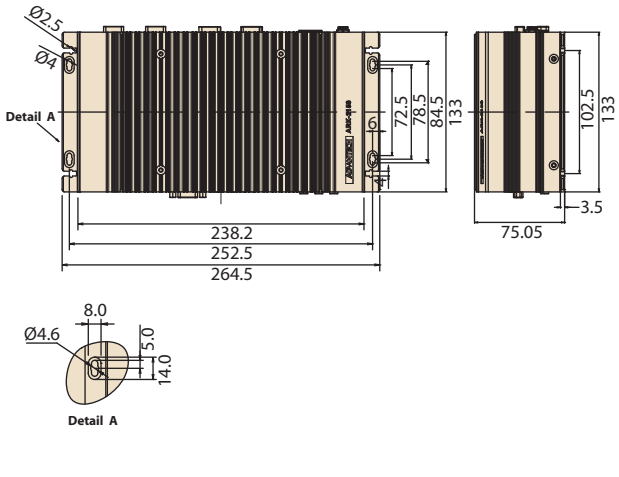
- Intel® Core™ i7 processors + Intel QM77 PCH
- 1 x DDR3/DDR3L SO-DIMM, support up to 8 GB
- DirectX11, OpenGL3.1, OpenCL1.1, triple independent display: VGA + HDMI/ DisplayPort+DVI-D
- Supports Intel AMT8.0
- Supports 4 x Intel GbE
- Support 4ch digital input and 4ch digital output with 2.5KV isolation
- Supports 2 x USB 3.0, 3 x USB 2.0, 4 COMs ports
- Supports 1 x internal mSATA socket and 1 x 2.5" SATA HDD Bay
- 12~24V wide range DC input with lockable connector
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

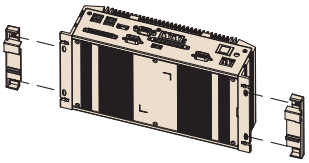
		ARK-2150F-S7A1E
Processor System	CPU	Intel ULV Core i7 3517UE
	Frequency	Dual Core 1.7 GHz (Max Turbo Frequency 2.8 GHz)
	L3 Cache	4 MB
	System Chipset	Intel QM77
	BIOS	AMI EFI 64Mbit
Memory	Technology	DDR3 1600MHz, DDR3L 1333 MHz
	Frequency	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel QM77 Integrated GFX Gen 7
	Graphic Engine	DirectX11, OpenGL 3.1, and Open CL 11 Hardware decode acceleration: AVC/H.264, M PEG-2, VC-1
	VGA	Integrated 340.4MHz RAMDAC, Max resolution up to 2048 x 1536 @ 75Hz
	HDMI/DP	Supports HDMI 1.4 for HD Video playback Max resolution up to 2560 x 1600 @ 60Hz on DisplayPort, Max resolution up to 1920 x 1200 @ 60Hz on HDMI
	DVI-D	Max resolution up to 1920 x 1200
	Dual independent display	Yes, VGA+HDMI/DisplayPort, VGA+HDMI/DVI-D, VGA+DVI-D, HDMI/DisplayPort+DVI-D
Ethernet	LAN1	10/100/1000 Mbps Intel 82579LM GbE, support Wake On Lan
	LAN2/LAN3/LAN4	10/100/1000 Mbps Intel 82583V GbE
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out,Mic-in,Line-in
I/O Interface	Serial Ports	4 x RS-232/422/485 port with auto flow control
	USB Interface	3 x USB 3.0 ports and 3 x USB 2.0 ports
Other	Digital I/O	4ch digital input and 4ch digital output with 2.5KV isolation
	Watchdog timer	255 levels timer interval, setup by software
Expansion	Mini PCIe	2 x Full-size Mini PCIe (Supports mSATA & SIM) 1 x Half-size Mini PCIe
Storage	HDD	Supports one SATA 2.5" HDD Bay (Compatible with 12.5mm height HDD) (Max. Data Transfer Rate 600 MB/s)
	SSD	Supports one internal mSATA socket
Software Support	Microsoft Windows	Windows 7, Windows 7 Embedded, XP Professional, XP Embedded
	Linux	Ubuntu 12.04
Power Requirement	Power Type	AT/ATX
	Power Input Voltage	12 ~ 24 V_{DC}
	Minimum Power Input	12 V ~ 24 V, 4.0 A ~ 2 A
	Power Adapter	AC to DC, DC 19V/3.42A 65W (Optional)
Power Consumption	Typical	10.3 Watt
	Max.	25.7 Watt
Mechanical	Construction	Aluminum housing
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting
	Dimensions (W x H x D)	264.5 x 75.1 x 133.0 mm (10.41" x 2.96" x 5.24")
	Weight	2.8kg (6.17lb)
Environment	Operating Temperature	With extended temperature peripherals: -20 ~ 60° C (-4 ~ 140° F) with 0.7m/s air flow With 2.5-inch hard disk 0 ~ 45° C (32 ~ 112° F) with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
	Shock During Operation	With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class A, CCC, BSMI
	Safety Certifications	UL, CCC, BSMI

Dimensions

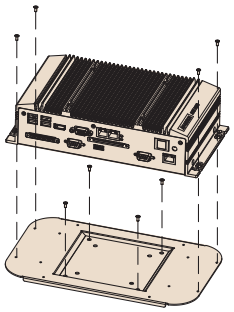
Unit: mm (inch)



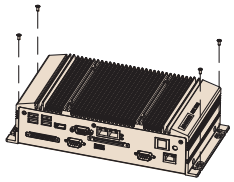
DIN Rail



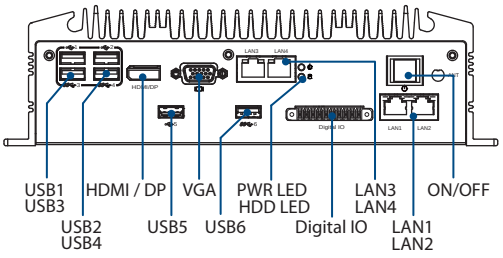
VESA mount



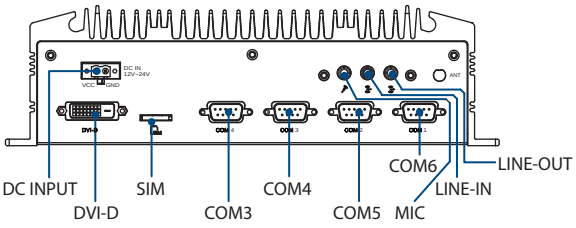
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	VGA	HDMI/ DP	DVI-D	GbE	USB 3.0	USB 2.0	RS-232/ 422/485	DIO	Audio	Half-size Mini PCIe	Full-size Mini PCIe	SIM	2.5" SATAII HDD Bay	Power Input	Operation Temp.
ARK-2150F-S7A1E	Intel Core i7 ULV 1.7GHz 3517UE	Yes	Yes	Yes	4	3	3	4	4ch DI and 4ch DO with 2.5KV isolation	Line-out, Line-in, MIC	1	2	1	1	DC 12-24V 2-pin phoenix head	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-2150 Unit
-	1 x Utility CD
-	1 x User Manual (Simplified Chinese)
-	1 x China RoHS
1700009001	1 x 2-pin Phoenix to DC-Jack power cable

Embedded OS

Part Number	Description
2070011831	Image WES7E SP1 x32 ENG/JP/TC/SC
2070011830	Image WES2009 V4.2 multi 24 language

Optional Items

Part Number	Description
1757003659	AC-to-DC Adapter, DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
TBD	AC-to-DC Adapter, DC 12V/3.33A 40W, -20 ~ +70° C
1702002600	Power cable 3-pin 180cm, USA type, for extend temperature power adapter
1702002605	Power cable 3-pin 180cm, EU type, for extend temperature power adapter
1702031801	Power cable 3-pin 180cm, UK type, for extend temperature power adapter
1700001947	Power cable 2-pin 180 cm, USA type (For adapter 1757003659)
1700001948	Power cable 2-pin 180 cm, Europe type (For adapter 1757003659)
1700001949	Power cable 2-pin 180 cm, UK type (For adapter 1757003659)
1700002141	Power cable 2-pin 180 cm, PSE type (For adapter 1757003659)
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

ARK-3360F

Intel® Atom™ N450/D510 with 3 GbE, Isolated COM & wide range power Fanless Box PC



Features

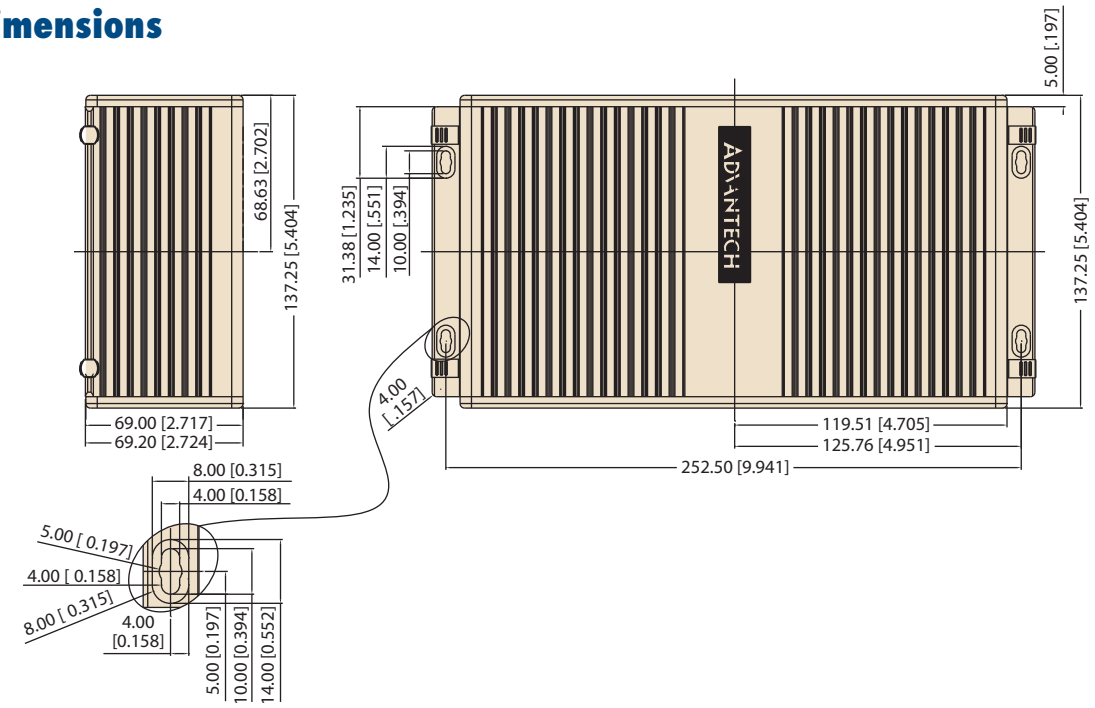
- Intel® Atom™ N450/D510 1.66 GHz Embedded Box PC
- Mini PCIe and Mini PCI expansion for communication module, i.e. HSDPA, WLAN
- Supports 12 ~ 24 V wide range DC input
- Supports up to 3 x GbE, 6 x USB 2.0 and 6 x COMs ports
- Serial ports support RS-485 auto flow control and isolation (up to 7.5Kv)
- Easy integration, easy maintenance, and wide input voltage range
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

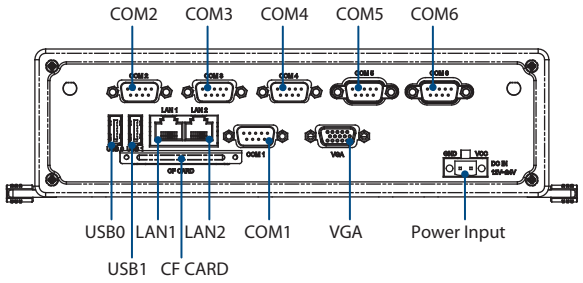
		ARK-3360F-N4A1E	ARK-3360F-D5A1E
Processor System	CPU	Intel Atom N450 (Single Core)	Intel Atom D510 (Dual Core)
	Frequency	1.66GHz	1.66GHz
	L2 Cache	512KB	1MB
	System Chipset	Intel ICH8-M	
	Front Side Bus	667 MHz	
	BIOS	AMI 16 Mbit Flash BIOS	
Memory	Technology	DDR2 667 MHz	
	Max. Capacity	2 GB	
	Socket	1 x 200-pin SO-DIMM	
Graphics	Chipset	Intel 3.5 Gen Integrated Graphic Engine	
	Interface	VGA: N450 up to 1400 x 1050, D510 up to 2048 x 1536 18-bit LVDS interface (Optional)	
Ethernet	LAN 1	10/100/1000 Mbps Intel 82567V GbE, support Wake On LAN	
	LAN 2	10/100/1000 Mbps Intel 82583V GbE, support Wake On LAN	
	LAN 3	10/100/1000 Mbps Intel 82541PI GbE, support Wake On LAN	
Audio	Amplifier	-	
	Interface	Line-in, Line-out, Mic-in	
IO interface	Serial Interface	1 x RS-232, 3 x RS-232/422/485, 2 x RS-422/485 with 7.5Kv isolation protection & auto flow control	
	USB Interface	6 x USB ports, Compliant with USB 2.0	
Other	Digital I/O	8-bits	
	Watchdog timer	255-level timer interval, setup by software	
Expansion	Mini PCI	1 x Mini PCI	
	Mini PCIe	1 x full-size Mini PCIe	
Storage	HDD	Supports 1 x SATA 2.5" HDD Bay (support 9.5 mm height only)	
	SSD	Supports CompactFlash socket for type I/II CompactFlash disk	
Software Support	Microsoft Windows	Windows 7, XP Professional, XP Embedded, WinCE 6.0	
	Linux	Ubuntu 10.04	
Power Requirement	Power Type	AT/ATX	
	Power Input Voltage	12 V_{DC} ~ 24 V_{DC}	
	Minimum Power Input	12V-24 V, 3.0A-1. 5A	
	Power Adapter	AC to DC, DC19 V/3.42 A, 65 W(Optional)	
Power Consumption	Typical	12.12 W (with Intel Atom D510 at 1.66 GHz)	
	Max.	14.96 W (with Intel Atom D510 at 1.66 GHz)	
Mechanical	Construction	Aluminum housing	
	Mounting	DIN-rail mounting, Desk/wall-mounting	
	Dimensions (W x H x D)	264.5 mm x 69.2 mm x 137.25 mm (10.41" x 2.72" x 5.4")	
	Weight	2 kg (4.4 lb)	
Environment	Operating Temperature	With extended temperature peripherals: -20 ~ 60° C (32 ~ 140° F), with 0.7m/s air flow With 2.5-inch hard disk 0 to 45° C (32 ~ 112° F), with 0.7m/s air flow	
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)	
	Relative Humidity	95% @ 40° C (non-condensing)	
	Vibration Loading During Operation	With CompactFlash disk: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis. With 2.5-inch hard disk: 1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.	
	Shock During Operation	With CompactFlash disk: 50 G, IEC 60068-2-27, half sine, 11 ms duration With hard disk: 20 G, IEC 60068-2-27, half sine, 11 ms duration	
	EMC	CE/FCC Class A, CCC, BSMI, KC	
	Safety Certifications	UL, CCC, BSMI, KC	

Dimensions

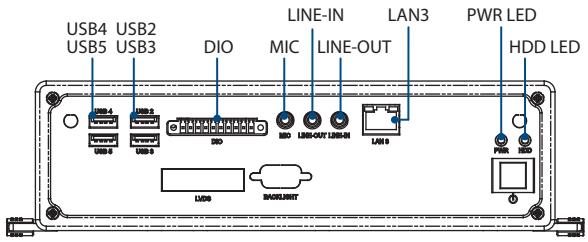
Unit: mm (inch)



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	VGA	GbE	USB 2.0	RS-232	RS-232/ 422/485	RS-422/485	DIO	Audio	Full-size MiniPCIe	CF	2.5" SATAII HDD Bay	Power Input	Operation Temp.
ARK-3360F-N4A1E	Intel Atom N450 1.66 GHz	Yes	3	6	1	3	2 (with 7.5KV isolation)	8-bits	Lin-out, Line-in, MIC	1	1	1	DC 12V Lockable DC Jack	-20 ~ 60° C
ARK-3360F-D5A1E	Intel Atom D510 1.66 GHz	Yes	3	6	1	3	2 (with 7.5KV isolation)	8-bits	Lin-out, Line-in, MIC	1	1	1	DC 12V Lockable DC Jack	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-3360 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1700009001	1 x 2-pin Phoenix DC power connector

Embedded OS

Part Number	Description
2070009030	XPE WES2009 V4.0 ENG
2070009031	XPE WES2009 V4.0 MUI24
2070009835	WES7E V5.0 ENG

Optional Items

Part Number	Description
1757003659	AC-to-DC Adapter, DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
TBD	AC-to-DC Adapter, DC 12V/3.33A 40W, -20 ~ +70° C
1702002600	Power cable 3-pin 180cm, USA type, for extend temperature power adapter
1702002605	Power cable 3-pin 180cm, EU type, for extend temperature power adapter
1702031801	Power cable 3-pin 180cm, UK type, for extend temperature power adapter
1700001947	Power cable 2-pin 180 cm, USA type (For adapter 1757003659)
1700001948	Power cable 2-pin 180 cm, Europe type (For adapter 1757003659)
1700001949	Power cable 2-pin 180 cm, UK type (For adapter 1757003659)
1700002141	Power cable 2-pin 180 cm, PSE type (For adapter 1757003659)
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

ARK-3500

3rd Gen. Intel® Core™ i3/ i5/ i7 with 2 Expansion slots and wide range power Fanless Box PC



Features

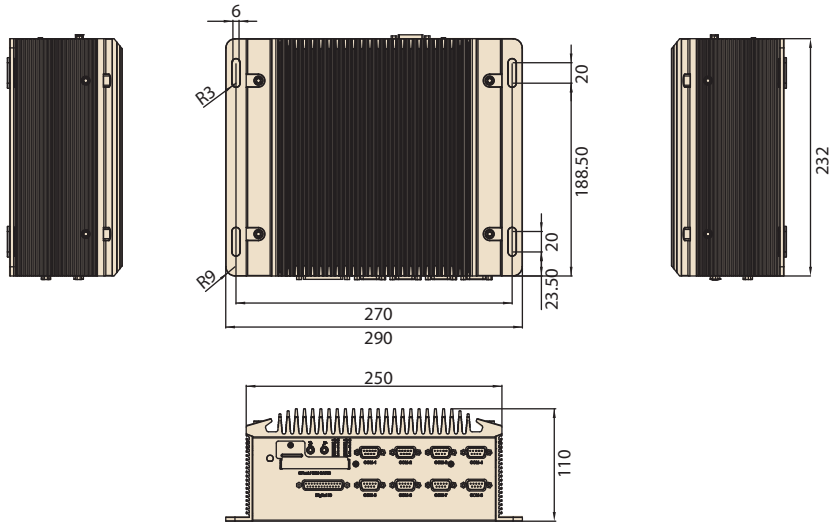
- Supports Intel® Core™ i3/i5/i7 mobile processor(rPGA) + Intel QM77 PCH
- Triple independent display with 3rd gen Core i processor : DVI + HDMI + DisplayPort
- DDR3/DDR3L SO-DIMM memory support up to 16 GB
- 2 expansion slots with vary interface: PCI, PCIe x 1 & PCIe x 4
- 2 x miniPCIe slots with SIM card holders
- 9-34V wide range lockable DC jack design
- Versatile I/Os including 4 x high speed USB 3.0 and 8 x COM ports
- Flexible Storage Support including 2x mSATA, 1x CFast and 2x 2.5" SATA HDD/ SSD bays
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

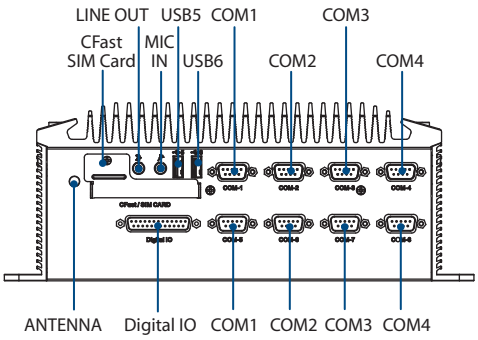
Processor System	CPU (rPGA)	Intel Core i7-3610QE	Intel Core i5-3610ME	Intel Core i3-3120ME	Celeron 1020E
	Frequency	2.3 GHz (Quad Core)	2.7 GHz (Dual Core)	2.4 GHz (Dual Core)	2.2 GHz (Dual Core)
	L3 Cache	6 MB	3 MB	3 MB	2 MB
	Watts	45W	35W	35W	35W
	System Chipset	Intel QM77			
	BIOS	AMI EFI 64Mbit			
Memory	Technology	DDR3/DDR3L 1600MHz			
	Max. Capacity	16 GB			
	Socket	2 x 204-pin SO-DIMM			
Graphics	Chipset	Intel QM77 Integrated GFX Gen 7			
	Graphic Engine	DirectX11, OpenGL 3.1, and Open CL 11; Hardware decode acceleration: AVC/H.264, MPEG-2, VC-1			
	CRT	VGA integrated in DVI-I port			
	DVI-I	1920 x 1200 @ 60 Hz			
	HDMI	Support HDMI 1.4, 1920 x 1200 @ 60 Hz			
	Display port	2560 x 1600 @ 60Hz (Video only, and only support on 3rd generation processor)			
	Dual Display	VGA+DVI, VGA+HDMI, VGA+DP, DVI+HDMI, DVI+DP, HDMI+DP			VGA+DVI, DVI+HDMI, VGA+HDMI
	Triple Display	DVI-D + HDMI + DisplayPort			N/A
Ethernet	LAN1	10/100/1000 Mbps Intel 82579LM GbE, support Wake On Lan			
	LAN2	10/100/1000 Mbps Intel I-210IT GbE, support Wake On Lan			
Audio	Interface	Realtek ALC892, High Definition Audio, Line-out, Mic-in			
I/O Interface	Serial Port	4 x RS-232 ports, 4 x RS-232/422/485 port with auto flow control			
	USB	4 x USB 3.0 ports (USB1,2,3,4); 2 x USB 2.0 ports (USB5,6)			
	DIO	16 bit DIO			
Expansions	Mini PCIe	2 x Full-size Mini PCIe with SIM holder (Supports mSATA)			
	Add-on Card Slot	ARK-3500P-00A1E : 2 x PCI ARK-3500F-00A1E : PCIe x 1 + PCIe x 4; Maximum card size: 110 mm (H) x 180 mm (L) Suggested add-on card operating temperature support: TBD			
Storage	HDD	Two 2.5" SATA HDD Bays with maximum device height 9.5mm, SATA III, Gen 3 Support (Max. Data Transfer Rate 600 MB/s), Support SATA RAID 0, 1, 5, 10			
	Solid State Disk	1 x CFast Card slot			
Software Support	Microsoft Windows	Windows 8 , Windows 7, XP Professional (32bit), XP Embedded (32bit), WinCE 6.0			
	Linux	Ubuntu 12.04			
Power Requirements	Power Type	AT/ATX			
	Power Input Voltage	9 ~ 34 V_{DC}			
	Power Adapter	AC to DC, DC19V / 6.32A, 120W (Optional)			
Power Consumption	Typical	19.2W	16.4W	14.8W	16.4W
	Max.	60W	36.5W	30W	31.8W
Mechanical	Construction	Aluminum housing			
	Mounting	Desk/wall-mounting			
	Dimensions (W x H x D)	290 x 110 x 232mm (11.4" x 4.33" x 9.13")			
	Weight	4.8 kg			
Environment	Operating Temperature	with SSD: -10 ~ 60° C with 0.7m/s air flow with HDD: 0 ~ 40° C with 0.7m/s air flow			
	Storage Temperature	-40 ~ 85° C			
	Relative Humidity	95% @ 40° C (non-condensing)			
	Vibration During Operation	With SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.			
	Shock During Operation	With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration			
	EMC	CE/FCC Class A, CCC, BSMI			
	Safety	UL, CCC, BSMI			

Dimensions

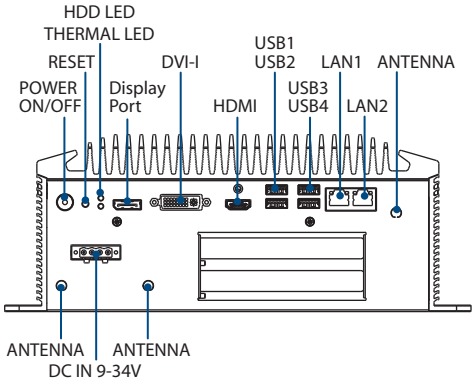
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	DDR3	DP	HDMI	DVI-I	RS-232/ 422/485	RS-232	USB 3.0	USB 2.0	MiniPCIe	SIM	DC input	Expansion
ARK-3500P-00A1E	PGA Socket Type	up to 16 GB	1	1	2	4	4	4	2	2	2	9 ~ 34 V	2 x PCI
ARK-3500F-00A1E	PGA Socket Type	up to 16 GB	1	1	2	4	4	4	2	2	2	9 ~ 34 V	1 x PCIe x 1 1 x PCIe x 4

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
1654009744	DVI-I to VGA adaptor
-	Driver CD
968EMLSAP2	SUSI CD
-	User Manual (Simplified Chinese)
-	China RoHS for ARK-3500 Electronic Pollution 1st
1652003234	4 pin DC in terminal block
1930001241	HDD screws
2190000902	CARDBOARD-WARRANTY REV. A2

Embedded OS

Part Number	Description
TBD	WES2009 32bit ENG/CHT/CHS/JPN
TBD	WES7E 64bit ENG/CHT/CHS/JPN
TBD	WES7E 32bit ENG/CHT/CHS/JPN

Optional Items

Part Number	Description
1757004523-01	AC-to-DC Adapter, DC 19V/6.32A 120W, 0–40° C for Home and Office Use
1757004529-01	AC-to-DC Adaptor, DC 19V/6.84A, 130W, -20 ~ 70° C
1702002600	Power cable 3-pin 180cm, USA type, for extend temperature power adapter
1702002605	Power cable 3-pin 180cm, EU type, for extend temperature power adapter
1702031801	Power cable 3-pin 180cm, UK type, for extend temperature power adapter
1702002600	Power cable 3-pin 180 cm, USA type
1702031801	Power cable 3-pin 180 cm, UK type
1702002605	Power cable 3-pin 180 cm, Europe type
1700000237	Power cable 3-pin 180 cm, PSE
96MPI7M-2.3-6M9T	CORE 2.3G 6M 988P 4CORE I7-3610QE(G)
96MPI5-2.7-3M9T	CORE 2.7G 3M 988P 2CORE I5-3610ME(G)
96MPI3M-2.4-3M9T	CORE 2.4G 3M 988P 2CORE I3-3120ME(G)
96MPCM-2.2-2M9T	CELERON M 2.2G 2M 988P 2CORE 1020E(G)

ARK-3510

3rd Gen. Intel® Core™ i3/ i5/ i7 with 2 x 2.5" Removable HDD Bays Fanless Box PC



Features

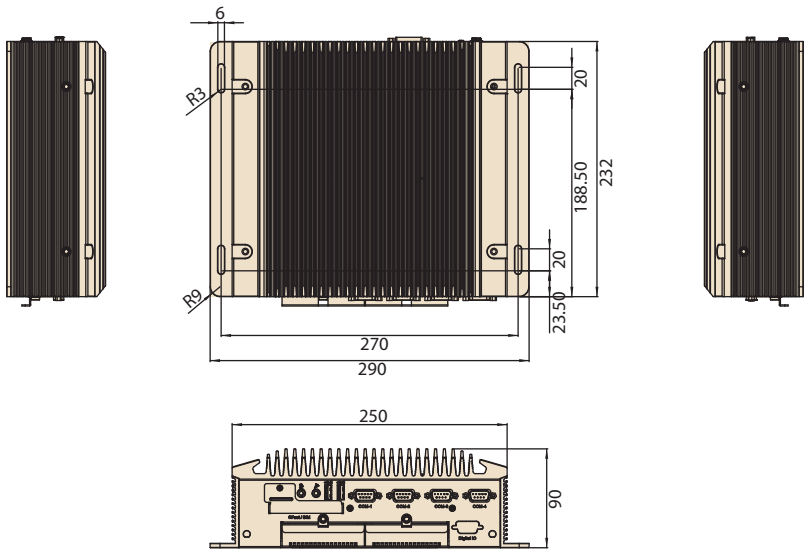
- Supports Intel® Core™ i3/i5/i7 mobile processor(rPGA) + Intel QM77 PCH
- Triple independent display with 3rd gen Core I processor : DVI + HDMI + DisplayPort
- DDR3/DDR3L SO-DIMM memory support up to 16 GB
- Supports 2 x 2.5" removable SATAIII drive bays
- 2 x miniPCIe cards with SIM card holders
- Versatile I/Os including 4 x high speed USB 3.0 and 4 x COM ports
- Lockable 12V DC jack design
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

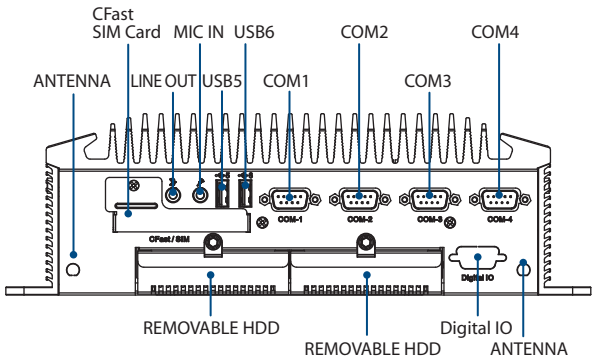
Processor System	CPU (rPGA)	Intel Core i7-3610QE	Intel Core i5-3610ME	Intel Core i3-3120ME	Celeron 1020E
	Frequency	2.3 GHz (Quad Core)	2.7 GHz (Dual Core)	2.4 GHz (Dual Core)	2.2 GHz (Dual Core)
	L3 Cache	6 MB	3 MB	3 MB	2 MB
	Watts	45W	35W	35W	35W
	System Chipset	Intel QM77			
	BIOS	AMI EFI 64Mbit			
Memory	Technology	DDR3/DDR3L 1600 MHz			
	Max. Capacity	16 GB			
	Socket	2 x 204-pin SO-DIMM			
Graphics	Chipset	Intel QM77 Integrated GFX Gen 7			
	Graphic Engine	DirectX11, OpenGL 3.1, and Open CL 11; Hardware decode acceleration: AVC/H.264, MPEG-2, VC-1			
	CRT	VGA integrated in DVI-I port			
	DVI-I	1920 x 1200 @ 60 Hz			
	HDMI	Support HDMI 1.4, 1920 x 1200 @ 60Hz			
	Display port	2560 x 1600 @ 60Hz (Video only, and only support on 3rd generation processor)			
	Dual Display	VGA+DVI, VGA+HDMI, VGA+DP, DVI+HDMI, DVI+DP, HDMI+DP			VGA+DVI, DVI+HDMI, VGA+HDMI
	Triple Display	DVI-D + HDMI + DisplayPort			N/A
Ethernet	LAN1	10/100/1000 Mbps Intel 82579LM GbE, support Wake On Lan			
	LAN2	10/100/1000 Mbps Intel I-210IT GbE, support Wake On Lan			
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out,Mic-in			
I/O Interface	Serial Port	2 x RS-232 ports, 2 x RS-232/422/485 port with auto flow control			
	USB	4 x USB 3.0 ports (USB1,2,3,4) and 2 x USB 2.0 ports (USB5,6)			
Expansion	Mini PCIe	2 x Full-size Mini PCIe with SIM holder (Supports mSATA)			
Storage	HDD	Two 2.5" SATA removable HDD Bays with maximum device height 9.5mm, SATA III, Gen 3 Support (Max. Data Transfer Rate 600 MB/s), Support SATA RAID 0, 1, 5, 10			
	Solid State Disk	1 x CFast Card			
Software Support	Microsoft Windows	Windows 8 , Windows 7, XP Professional (32bit), XP Embedded (32bit), WinCE 6.0			
	Linux	Ubuntu 12.04			
Power Requirements	Power Type	AT/ATX			
	Power Input Voltage	12 V_{DC}, ± 10% (9 ~ 34 V_{DC} support by request)			
	Power Adapter	AC to DC, DC12V / 7A, 84 W (Optional)			
Power Consumption	Typical	19.2W	16.4W	14.8W	16.4W
	Max.	60W	36.5W	30W	31.8W
Mechanical	Construction	Aluminum housing			
	Mounting	Desk/wall-mounting			
	Dimensions (W x H x D)	290 x 90 x 232 mm (11.4" x 3.54" x 9.13")			
	Weight	4.63kg			
Environment	Operating Temperature	with SSD: -10 ~ 60° C with 0.7m/s air flow with HDD: 0 ~ 40° C with 0.7m/s air flow			
	Storage temperature	-40 ~ 85° C			
	Relative Humidity	95% @ 40° C (non-condensing)			
	Vibration During Operation	With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.			
	Shock During Operation	With SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration			
	EMC	CE/FCC Class A, CCC, BSMI			
	Safety	UL, CCC, BSMI			

Dimensions

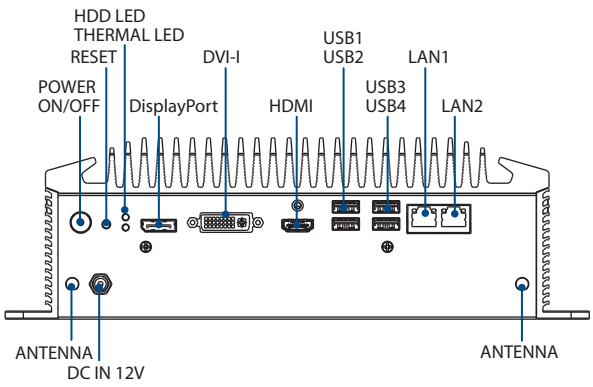
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	DDR3	DP	HDMI	DVI-I	RS-232/ 422/485	RS-232	USB 3.0	USB 2.0	MiniPCIe	SIM	DC input	Expansion
ARK-3510L-00A1E	PGA Socket Type	up to 16 GB	1	1	2	2	2	4	2	2	2	12V	MIOe

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
1654009744	DVI-I to VGA adaptor
-	Driver CD
968EMLSAP2	SUSI CD
-	User Manual (Simplified Chinese)
-	China RoHS for ARK-3510 Electronic Pollution 1st
2190000902	CARDBOARD-WARRANTY REV. A2

Embedded OS

Part Number	Description
TBD	WES2009 32bit ENG/CHT/CHS/JPN
TBD	WES7E 64bit ENG/CHT/CHS/JPN
TBD	WES7E 32bit ENG/CHT/CHS/JPN

Optional Items

Part Number	Description
1757004519-01	AC-to-DC Adapter, DC 12V/7A 84W, 0~40° C for Home and Office Use
1757004530-01	AC-to-DC Adaptor, DC 12V/8.33A, 100W, -20 ~ 70° C
1702002600	Power cable 3-pin 180cm, USA type, for extend temperature power adapter
1702002605	Power cable 3-pin 180cm, EU type, for extend temperature power adapter
1702031801	Power cable 3-pin 180cm, UK type, for extend temperature power adapter
1702002600	Power cable 3-pin 180 cm, USA type
1702031801	Power cable 3-pin 180 cm, UK type
1702002605	Power cable 3-pin 180 cm, Europe type
1700000237	Power cable 3-pin 180 cm, PSE
96MPI7M-2.3-6M9T	CORE 2.3G 6M 988P 4CORE I7-3610QE(G)
96MPI5-2.7-3M9T	CORE 2.7G 3M 988P 2CORE I5-3610ME(G)
96MPI3M-2.4-3M9T	CORE 2.4G 3M 988P 2CORE I3-3120ME(G)
96MPCM-2.2-2M9T	CELERON M 2.2G 2M 988P 2CORE 1020E(G)

ARK-6322

Intel Celeron Quad Core J1900 SoC 6 COM and 8 USB Fanless Box PC



Features

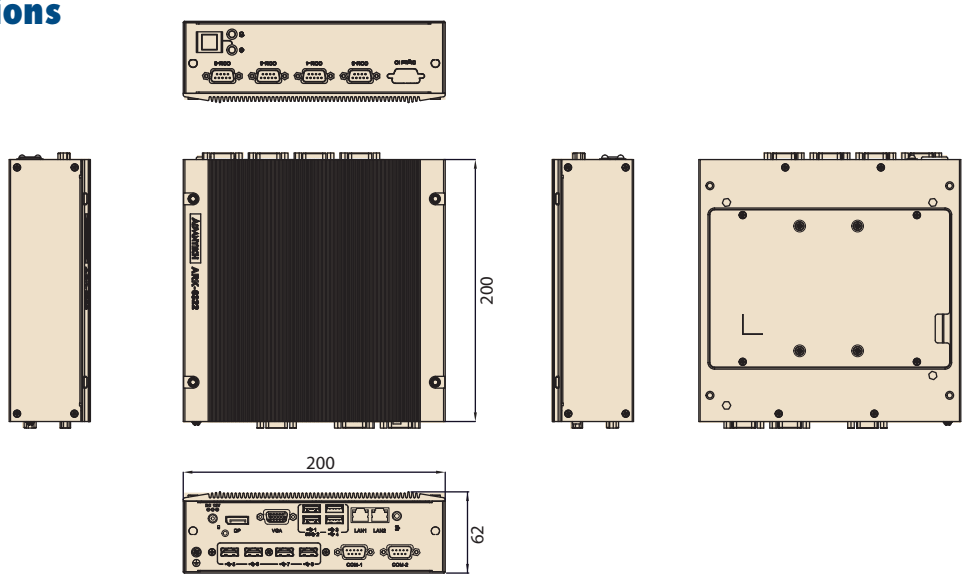
- Support Intel Celeron Quad Core J1900 2.0GHz SoC
- DDR3L SO-DIMM memory support up to 8GB
- Dual display : VGA + DisplayPort
- Support 1 x 3.5" or 2.5" SATA HDD Bay
- Multiple I/O: 1 x USB 3.0, 7 x USB 2.0, and 6 x COM
- Support 2 mini-PCIe slots and 1 SIM holder
- Lockable DC jack design
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

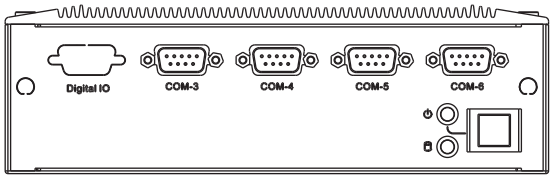
Processor System	CPU	Intel Celeron Processor J1900 Quad Core
	Max. Speed	2.0 GHz
	L2 Cache	2 MB
	BIOS	AMI 16 Mbit SPI
Memory	Technology	Dual channel DDR3L 1333MHz SDRAM
	Max. Capacity	8 GB
	Socket	2 x 204-pin SO-DIMM
Graphics	Controller	Intel Gen 7 Graphics Engines and media encode/decode engine; GPU Frequency: 750MHz
	VRAM	Shared system memory up to 224 MB SDRAM
	CRT	Support up to SXGA 1920 x 1200 @ 60 MHz
	Display port	Supports DP++1.2, resolution up to 2560 x 1600x24bpp @ 60Hz
	Dual Display	VGA+DP
Ethernet	LAN1	10/100/1000 Mbps RTL8111E GbE
	LAN2	10/100/1000 Mbps RTL8111E GbE
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out
I/O Interface	Serial Port	5 x RS-232 port, 1 x RS-232/422/485 port
	USB	1 x USB 3.0 ports and 7 x USB 2.0 ports
Expansion	Mini PCIe	1 x Full-size Mini PCIe with SIM holder (Supports mSATA), 1 x half-size Mini PCIe
Storage	HDD	1 x SATA HDD Bay for 2.5" or 3.5" device with maximum height 26mm
	Solid State Disk	1 x mSATA share with mini-PCIe slot
Software Support	Microsoft Windows	Windows 8 , Windows 7
	Linux	Ubuntu 12.04
Power Requirements	Power Type	AT/ATX
	Power Input Votage	12 V_{DC}, ± 10%
	Power Adapter	AC to DC, DC12V / 5A, 60W (Optional)
Mechanical	Construction	Aluminum housing
	Mounting	Desk/wall-mounting
	Dimensions (W x H x D)	200 x 62 x 200 mm (11.4" x 3.54" x 9.13")
	Weight	TBD
Environment	Operating Temperature	0 ~ 40° C with 0.7m/s air flow
	Storage temperature	-40 ~ 85° C
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	TBD
	Shock During Operation	TBD
	EMC	CE/FCC Class A, CCC, BSMI
	Safety	UL, CCC, BSMI

Dimensions

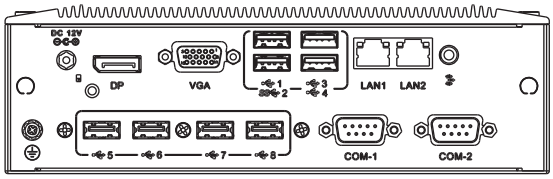
Unit: mm (inch)



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	DDR3	VGA	DP	RS-232/422/485	RS-232	USB 3.0	USB 2.0	MiniPCIe*	SIM	HDD Bay	DC input
ARK-6322-Q0A1E	Intel Celeron J1900 2.0GHz	Up to 8 GB	1	1	1	5	1	7	2	1	1 x 3.5" or 2.5"	12V

*co-lay with mSATA

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	Driver CD
-	SUSI CD
-	User Manual (Simplified Chinese)
-	China RoHS for ARK-6322 Electronic Pollution 1st
2190000902	CARDBOARD-WARRANTY REV. A2

Optional Items

Part Number	Description
1757003934	AC-to-DC adapter, DC12V/60W
1702002600	Power cable 3-pin 180 cm, USA type
1702031801	Power cable 3-pin 180 cm, UK type
1702002605	Power cable 3-pin 180 cm, Europe type
1700000237	Power cable 3-pin 180 cm, PSE

ARK-2121S

Outdoor NVR w/4 PoE Ports
Intel® Atom E3845 SoC Fanless Box PC



Features

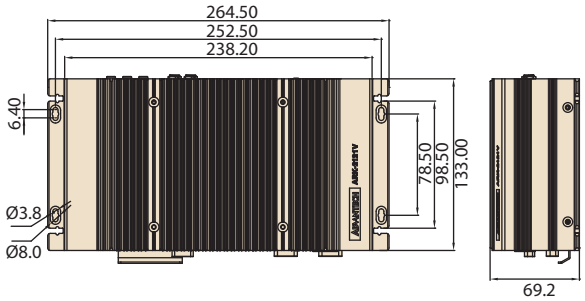
- Intel® Atom E3845 Quad Core 1.91 GHz SoC
- 4 PoE Ports to Support Mainstream IP Cameras
- 3KV isolation for 6 x Di & 2 x Do
- Diversity Communication Abilities, ex. WWAN, WLAN
- 9 ~ 36 V_{DC} Wide Power Input w/isolation
- Removable 2.5" SATA HDD Bay
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

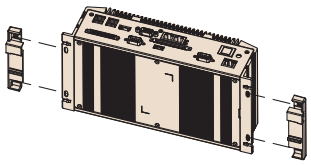
		ARK-2121S-S9A1E
Processor System	CPU	Intel Atom E3845 QC SoC
	Frequency	1.91 GHz
	L2 Cache	2 MB
	BIOS	AMI EFI 64 Mbit
Memory	Technology	DDR3L 1333 MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel Atom SoC
	Graphic Engine	Intel Gen 7 Graphics Engines, DirectX 11 graphics, OCL 1.1, OGL 3.2
	VGA	DB15, up to 1600 x 1200
	HDMI	Lockable HDMI connector, up to 1080p
Audio	Main System	Realtek ALC888S, High Definition Audio. Line-out, MIC-in, Line-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I210-IT GbE, support Wake on LAN
	LAN #2	10/100/1000 Mbps Intel I210-IT GbE, support Wake on LAN
I/O Interface	Power over Ethernet, PoE	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 (7Watt) - 2ports full-load, IEEE802.3af Class 3 (15.4Watt)
	Serial Ports	2 x RS-232/422/485 ports (support auto flow control, BIOS selectable)
	GPIO	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 V_{DC} at 25 Hz, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}
	USB	3 x USB 2.0 & 1 x USB3.0
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe #1	Full-size Mini PCIe, support mSATA
	Mini PCIe #2	Full-size Mini PCIe, support WLAN module
	Mini PCIe #3/4	2x Full-size Mini PCIe w/SIM holders, support WWAN module
Storage	2.5" HDD Bay	One removable 2.5" SATA HDD bay (Max Height 9.5mm)
	Solid-State Drive	Laverage MiniPCIe #1 slot for mSATA
Software Support	Microsoft Windows	WES8, WES7, Windows 8, Windows 7 (TBC)
	Linux	Support (TBC)
Power Requirement	Power Type	ATX/AT
	Power Input Voltage	9 ~ 36 V_{DC} w/ isolation
	Isolation	1.5KV Isolated
Mechanical	Construction	Aluminum housing, Silver
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting
	Dimensions (W x H x D)	264.5 x 69.2 x 133.0 mm
Environment	Operating Temperature	With extended temperature peripherals:-20 ~ 60° C with 0.7m/s air flow With standard temperature peripherals:0 ~ 45° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40~185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA/SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock During Operation	With mSATA/SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	CB, UL, CCC, BSMI

Dimensions

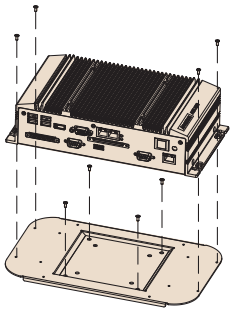
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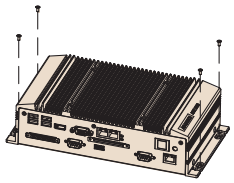
DIN Rail



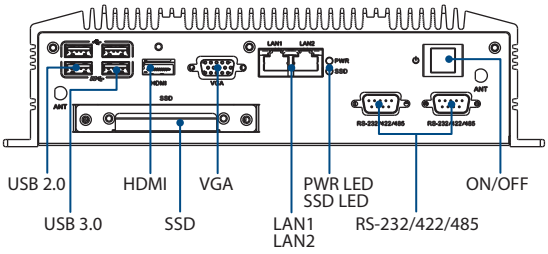
VESA mount



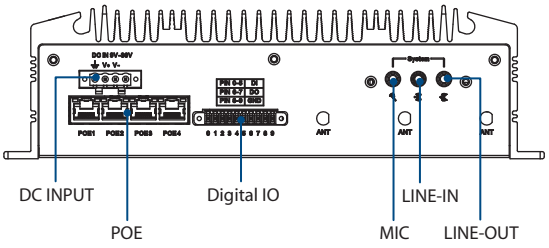
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	2.5" HDD bay	mSATA	Display	GbE	PoE	USB	DIO	RS-232/422/485	Audio	MiniPCIe	SIM Holder	Power Input	Operating Temperature
ARK-2121S-S9A1E	Intel Atom E3845 QC 1.91 GHz	Up to 8GB	1	1	1 x HDMI 1 x VGA	2	4	3 x USB2.0 1 x USB3.0	6Di 2Do	2	Line-out, Line-In, MIC	4 x Full Size	2	9 ~ 36 V_{DC}	-20 ~ 60° C

Packing List

Part Number	Description
-	1 x ARK-2121 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
TBC	4-pole Phoenix Power BLOCK 5.0mm

Optional Items

Part Number	Description
TBC	AC-to-DC Adapter with Phoenix Power Plug
1700001947	Power cable 2-pin 180 cm, USA type
1700001948	Power cable 2-pin 180 cm, Europe type
1700001949	Power cable 2-pin 180 cm, UK type
1700002141	Power cable 2-pin 180 cm, PSE type
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

Embedded OS

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

ARK-2151S

Outdoor Full HD NVR w/4 PoE Ports 4th Gen. Intel Core i5 4300U SoC Fanless Box PC



Features

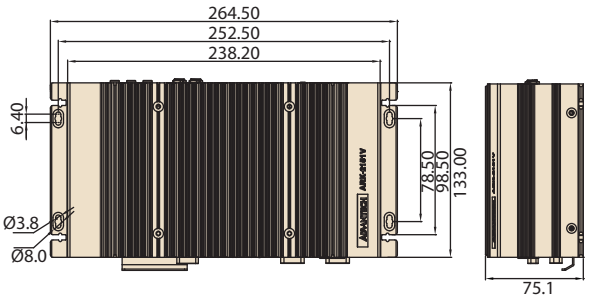
- Intel® Core i5-4300U Dual Core 1.9 GHz SoC
- 4 PoE Ports to Support Mainstream IP Cameras
- Diversity Communication Abilities, ex. WWAN, WLAN
- 3KV isolation for 6 x Di & 2 x Do
- 9 ~ 36 V_{DC} Wide Power Input w/isolation
- Removable 2.5" SATA HDD Bay
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

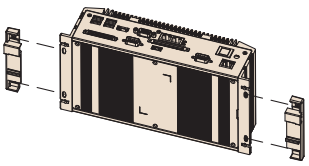
		ARK-2151S-S9A1E
Processor System	CPU	Intel i5-4300U
	Frequency	1.9 GHz
	L3 Cache	3 MB
	BIOS	AMI EFI 128 Mbit
Memory	Technology	DDR3L 1600 MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	GT3 Graphics, Generation 7.5 graphics core architecture
	Graphic Engine	DirectX* 11.1, OpenGL* 4.0 support. Full AVC/VC1/MPEG2 HW Decode
	VGA	DB15, up to 1920 x 1200
	HDMI	Lockable HDMI connector, up to 1920 x 1200
Audio	Main System	Realtek ALC892, High Definition Audio. Line-out,Mic-in,Line-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I218 GbE, support Wake on LAN
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN
I/O Interface	Power over Ethernet, PoE	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 (7Watt) - 2ports full-load, IEEE802.3af Class 3 (15.4Watt)
	Serial Ports	2 x RS-232/422/485 ports (BIOS selectable)
	USB Interface	2 x USB 2.0 & 2 x USB3.0
	GPIO	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 V_{DC} at 25 Hz, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe #1	Full-size Mini PCIe, support mSATA
	Mini PCIe #2	Half-size Mini PCIe, support WLAN module
	Mini PCIe #3/4	2x Full-size Mini PCIe w/SIM holders, support WWAN module
Storage	2.5" HDD Bay	One removable 2.5" SATA HDD bay (Max Height 9.5mm)
	Solid-State Drive	Laverage MiniPCIe #1 slot for mSATA
Software Support	Microsoft Windows	WES8, WES7, Windows 8, Windows 7, WES2009 (TBC)
	Linux	Support (TBC)
Power Requirement	Power Type	ATX/AT
	Power Input Voltage	9 ~ 36 V_{DC} w/ isolation
	Isolation	1.5 KV Isolated
Mechanical	Construction	Aluminum housing, Silver
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting
	Dimensions (W x H x D)	264.5 x 75.1 x 133.0 mm (10.41" x 2.96" x 5.24")
Environment	Operating Temperature	With extended temperature peripherals:-20 ~ 60° C with 0.7m/s air flow With standard temperature peripherals:0 ~ 45° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40~185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA/SSD: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock During Operation	With mSATA/SSD: 50 G, IEC 60068-2-27, half sine, 11 ms duration
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	CB, UL, CCC, BSMI

Dimensions

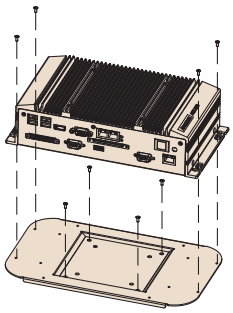
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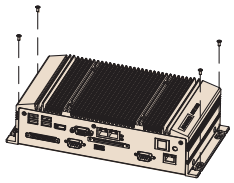
DIN Rail



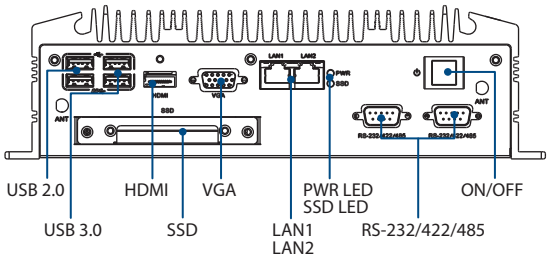
VESA mount



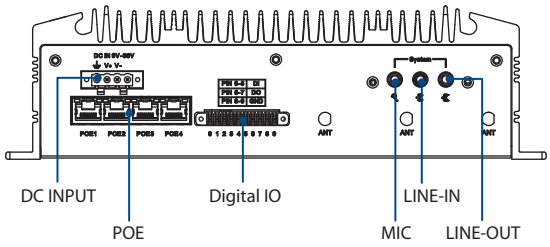
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	2.5" drive bay	mSATA	Display	GbE	PoE	USB	DIO	RS-232/422/485	Audio	MiniPCIe	SIM Holder	Power Input	Operating Temperature
ARK-2151S-S9A1E	Intel i5-4300U DC 1.9 GHz	Up to 8G	1	1	1 x HDMI 1 x VGA	2	4	2 x USB2.0 2 x USB3.0	6Di 2Do	2	Line-out, Line-In, MIC	3 x Full Size 1 x Half Size	2	9 ~ 36 V_{DC}	-20 ~ 60° C

Packing List

Part Number	Description
-	1 x ARK-2151 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
TBC	4-pole Phoenix Power BLOCK 5.0mm

Embedded OS

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
TBC	AC-to-DC Adapter with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1700001947	Power cable 2-pin 180 cm, USA type
1700001948	Power cable 2-pin 180 cm, Europe type
1700001949	Power cable 2-pin 180 cm, UK type
1700002141	Power cable 2-pin 180 cm, PSE type
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

ARK-2121V

In-Vehicle NVR w/4 PoE Ports Intel® Atom E3825 / Atom E3845 SoC Fanless Box PC



Features

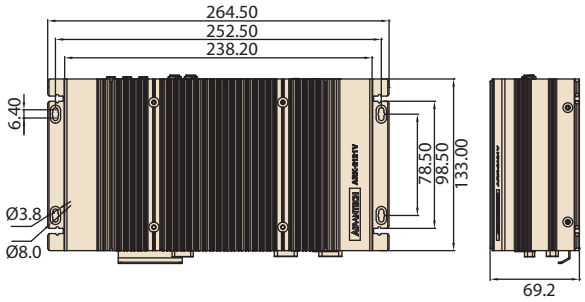
- Intel® Atom E3825 Dual Core 1.33 GHz & E3845 Quad Core 1.91 GHz SoC
- 4 PoE Ports to Support Mainstream IP Cameras
- Isolated COM ports and DIO
- Diversity Communication Abilities, ex. WWAN, WLAN
- Built-in GPS and G-Sensor for GIS application
- Intelligent Vehicle Power Ignition
- 9 ~ 36 V_{DC} Wide Power Input w/isolation
- Removable 2.5" SATA HDD Bay
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

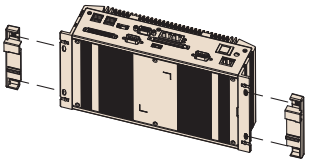
		ARK-2121V-S9A1E	ARK-2121V-S3A1E
Processor System	CPU	Intel Atom E3845 QC SoC	Intel Atom E3825 DC SoC
	Frequency	1.91 GHz	1.33 GHz
	L2 Cache	2 MB	1 MB
	BIOS	AMI EFI 64 Mbit	
Memory	Technology	DDR3L 1333 MHz	DDR3L 1066 MHz
	Max. Capacity	8 GB	
	Socket	1 x 204-pin SO-DIMM	
Graphics	Chipset	Intel Atom SoC	
	Graphic Engine	Intel Gen 7 Graphics Engines, DirectX 11 graphics, OCL 1.1, OGL 3.2	
	VGA	DB15, up to 1600 x 1200	
	HDMI	Lockable HDMI connector, up to 1080p	
Audio	Main System	Realtek ALC888S, High Definition Audio. Line-out, MIC-in, Line-in	
	Celular Voice	Support WWAN voice function, Line-out, Mic-in	
Ethernet	LAN #1	10/100/1000 Mbps Intel I210-IT GbE, support Wake on LAN	
	LAN #2	10/100/1000 Mbps Intel I210-IT GbE, support Wake on LAN	
I/O Interface	Power over Ethernet, PoE	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 (7Watt) - 2ports full-load, IEEE802.3af Class 3 (15.4Watt)	N/A
	Serial Ports	2 x RS-232/422/485 ports (support auto flow control, BIOS selectable)	2 x RS-232 or 2 x RS-422/485 ports w/ 3KV isolation (support auto flow control)
	Optional COM or CANBus	N/A	2 x RS-232 (Standard) or 2 x CANBus 2.0 A/B (T-P/N)
	GPIO	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 VDC at 25 Hz, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 VDC at 25 Hz, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}
	USB	3 x USB 2.0 & 1 x USB3.0	
Other	GPS	On board high sensitivity GPS	
	G-Sensor	On board G-Sensor	
	Watchdog timer	255-level timer interval, setup by software	
Expansion	Mini PCIe #1	Full-size Mini PCIe, support mSATA	
	Mini PCIe #2	Full-size Mini PCIe, support WLAN module	
	Mini PCIe #3/4	2x Full-size Mini PCIe w/SIM holders, support WWAN module	
Storage	2.5" HDD Bay	One removable 2.5" SATA HDD bay (Max Height 9.5mm)	
	Solid-State Drive	Laverage MiniPCIe #1 slot for mSATA	
Software Support	Microsoft Windows	WES8, WES7, Windows 8, Windows 7, WES2009 (TBC)	
	Linux	Support (TBC)	
Power Requirement	Power Type	ATX/AT	
	Power Input Voltage	PC Mode: 9 ~ 36 V_{DC} VH Mode: 12 V battery (11 ~ 16 V_{DC}), 24V battery (22 ~ 32 V_{DC})	
	Vehicle Power Ignition	Selectable boot-up & shut-down voltage, on/off delay time	
	Isolation	1.5KV Isolated	
Mechanical	Construction	Aluminum housing, Silver	
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting	
	Dimensions (W x H x D)	264.5 x 69.2 x 133.0 mm	
Environment	Operating Temperature	With extended temperature peripherals:-20 ~ 60° C with 0.7m/s air flow With standard temperature peripherals:0 ~ 45° C with 0.7m/s air flow	
	Storage Temperature	-40 ~ 85° C (-40~185° F)	
	Relative Humidity	95% @ 40° C (non-condensing)	
	Vibration/Shock	With mSATA/SSD: IEC 60721-3-5 Class 5M3	
Regulation	EMC	CE/FCC Class A, CCC, BSMI	
	Safety	UL, CCC, BSMI, E13	

Dimensions

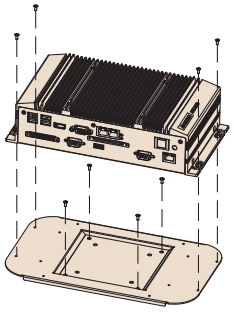
Unit: mm



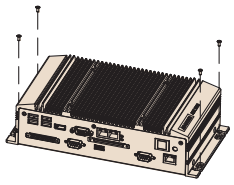
DIN Rail



VESA mount

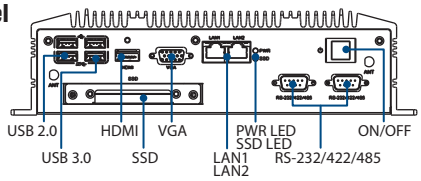


Wall mount

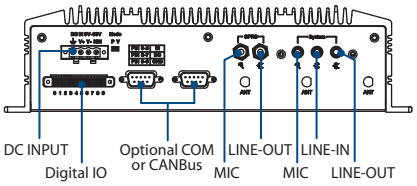


ARK-2121V-S6A1E External I/O Mechanical Layout/Drawing

Front Panel

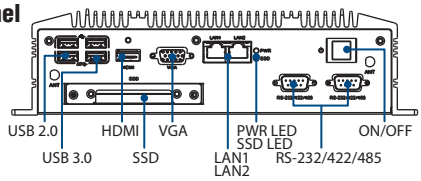


Rear Panel

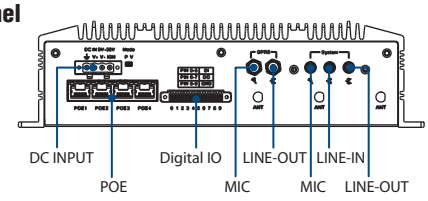


ARK-2121V-S9A1E External I/O Mechanical Layout/Drawing

Front Panel



Rear Panel



Ordering Information

Part Number	Intel CPU	RAM	2.5" HDD bay	mSATA	Display	GbE	PoE	USB	DIO	Optional COM or CANBus	RS-232/422/485	Audio	MiniPCIe	SIM Holder	Power Input	Operating Temperature
ARK-2121V-S3A1E	Intel Atom E3825 DC 1.33 GHz	Up to 8GB	1	1	1 x HDMI 1 x VGA	2	N/A	3 x USB2.0 1 x USB3.0	6Di 2Do	2 x RS-232 or 2 x CANBus 2.0A/B	2	System: Line-out, Line-In, MIC Cellular Voice: Line-out, MIC	4 x Full Size	2	9 ~ 36 V_{DC}	-20 ~ 60° C
ARK-2121V-S9A1E	Intel Atom E3845 QC 1.91 GHz						4			N/A						

Packing List

Part Number	Description
-	1 x ARK-2121 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
TBC	4-pole Phoenix Power BLOCK 5.0mm
1750001782	1 x GPS antenna Active with 5M SMA cable

Embedded OS

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
TBC	AC-to-DC Adapter with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1700001947	Power cable 2-pin 180 cm, USA type
1700001948	Power cable 2-pin 180 cm, Europe type
1700001949	Power cable 2-pin 180 cm, UK type
1700002141	Power cable 2-pin 180 cm, PSE type
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

ARK-2151V

In-Vehicle Full HD NVR w/4 PoE Ports 4th Gen. Intel® Core i5 4300U / Celeron 2980U SoC Fanless Box PC



Features

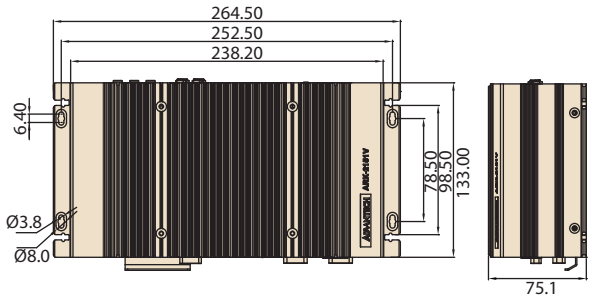
- Intel® Celeron 2980U 1.6GHz / Core i5-4300U 1.9 GHz SoC
- 4 PoE Ports to Support Mainstream IP Cameras
- Diversity Communication Abilities, ex. WWAN, WLAN
- Built-in GPS and G-Sensor for GIS application
- Intelligent Vehicle Power Ignition
- 9 ~ 36 V_{DC} Wide Power Input w/isolation
- Removable 2.5" SATA HDD Bay
- IP40 sealed design
- Supports iManager, SUSIAccess and Embedded Software APIs

Specifications

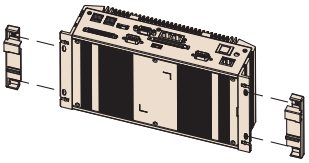
		ARK-2151V-S6A1E	ARK-2151V-S9A1E
Processor System	CPU	Intel Celeron 2980U Dual Core	Intel i5-4300U Dual Core
	Frequency	1.6 GHz	1.9 GHz
	L3 Cache	2 MB	3 MB
	BIOS	AMI EFI 128 Mbit	
Memory	Technology	DDR3L 1333 MHz	DDR3L 1600 MHz
	Max. Capacity	8 GB	
	Socket	1 x 204-pin SO-DIMM	
Graphics	Chipset	GT3 Graphics, Generation 7.5 graphics core architecture	
	Graphic Engine	DirectX* 11.1, OpenGL* 4.0 support. Full AVC/VC1/MPEG2 HW Decode	
	VGA	DB15, up to 1920 x 1200	
	HDMI	Lockable HDMI connector, up to 1920 x 1200	
Audio	Main System	Realtek ALC892, High Definition Audio. Line-out,Mic-in,Line-in	
	Celular Voice	Support WWAN voice function, Line-out,Mic-in	
Ethernet	LAN #1	10/100/1000 Mbps Intel I218 GbE, support Wake on LAN	
	LAN #2	10/100/1000 Mbps Intel I210 GbE, support Wake on LAN	
I/O Interface	Power over Ethernet, PoE	N/A	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 (7Watt) - 2ports full-load, IEEE802.3af Class 3 (15.4Watt)
	Serial Ports	2 x RS-232 or 2 x RS-422/485 ports w/ 3KV isolation (support auto flow control)	2 x RS-232/422/485 ports (BIOS selectable)
	Optional COM or CANBus	2 x RS-232 (Standard) or 2 x CANBus 2.0 A/B (T-P/N)	N/A
	USB Interface	2 x USB 2.0 & 2 x USB3.0	
	GPIO	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 VDC at 25 Hz, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 V_{DC} at 25 Hz, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}
Other	GPS	On board high sensitivity GPS	
	G-Sensor	On board G-Sensor	
	Watchdog timer	255-level timer interval, setup by software	
Expansion	Mini PCIe #1	Full-size Mini PCIe, support mSATA	
	Mini PCIe #2	Half-size Mini PCIe, support WLAN module	
	Mini PCIe #3/4	2x Full-size Mini PCIe w/SIM holders, support WWAN module	
Storage	2.5" HDD Bay	One removable 2.5" SATA HDD bay (Max Height 9.5mm)	
	Solid-State Drive	Laverage MiniPCIe #1 slot for mSATA	
Software Support	Microsoft Windows	WES8, WES7, Windows 8, Windows 7, WES2009 (TBC)	
	Linux	Support (TBC)	
Power Requirement	Power Type	ATX/AT	
	Power Input Voltage	PC Mode: 9 ~ 36 V_{DC} VH Mode: 12 V battery (11 ~ 16 V_{DC}), 24 V battery (22 ~ 32 V_{DC})	
	Vehicle Power Ignition	Selectable boot-up & shut-down voltage, on/off delay time	
	Isolation	1.5 KV Isolated	
Mechanical	Construction	Aluminum housing, Silver	
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting	
	Dimensions (W x H x D)	264.5 x 75.1 x 133.0 mm (10.41" x 2.96" x 5.24")	
Environment	Operating Temperature	With extended temperature peripherals:-20 ~ 60° C with 0.7m/s air flow With standard temperature peripherals:0 ~ 45° C with 0.7m/s air flow	
	Storage Temperature	-40 ~ 85° C (-40~185° F)	
	Relative Humidity	95% @ 40° C (non-condensing)	
	Vibration/Shock	With mSATA/SSD: IEC 60721-3-5 Class 5M3	
Regulation	EMC	CE/FCC Class A, CCC, BSMI	
	Safety	UL, CCC, BSMI, E13	

Dimensions

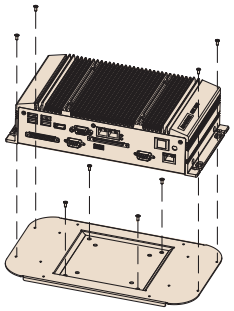
Unit: mm



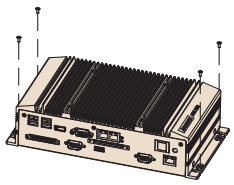
DIN Rail



VESA mount

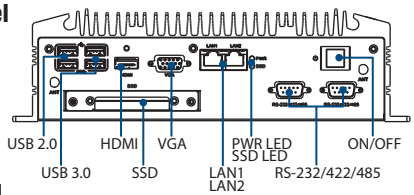


Wall mount

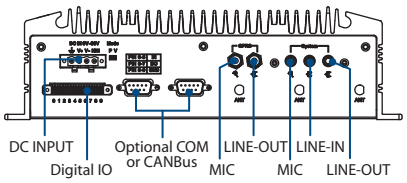


ARK-2151V-S6A1E External I/O Mechanical Layout/Drawing

Front Panel

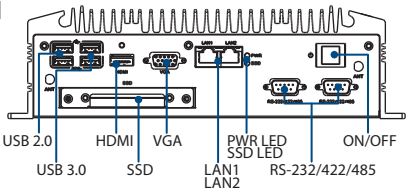


Rear Panel

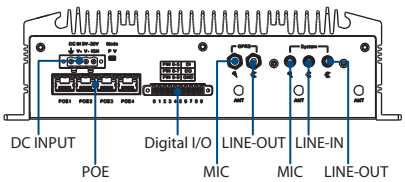


ARK-2151V-S9A1E External I/O Mechanical Layout/Drawing

Front Panel



Rear Panel



Ordering Information

Part Number	Intel CPU	RAM	2.5" HDD bay	mSATA	Display	GbE	PoE	USB	DIO	Optional COM or CANBus	RS-232/422/485	Audio	MiniPCIe	SIM Holder	Power Input	Operating Temperature
ARK-2151V-S6A1E	Intel Celeron 2980U 1.6 GHz	Up to 8GB	1	1	1 x HDMI 1 x VGA	2	N/A	2 x USB2.0 2 x USB3.0	6Di 2Do	2 x RS-232 or 2 x CANBus 2.0A/B	2	System: Line-out, Line-In, MIC Cellular Voice: Line-out, MIC	3 x Full Size 1 x Half Size	2	9 ~ 36 V_{DC}	-20 ~ 60° C
ARK-2151V-S9A1E	Intel i5-4300U 1.9 GHz						4			N/A						

Packing List

Part Number	Description
-	1 x ARK-2151 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
TBC	4-pole Phoenix Power BLOCK 5.0mm
1750001782	1 x GPS antenna Active with 5M SMA cable

Embedded OS

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

Optional Items

Part Number	Description
TBC	AC-to-DC Adapter with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1700001947	Power cable 2-pin 180 cm, USA type
1700001948	Power cable 2-pin 180 cm, Europe type
1700001949	Power cable 2-pin 180 cm, UK type
1700002141	Power cable 2-pin 180 cm, PSE type
1960025333N011	VESA mounting bracket
9666K10000E	DIN-rail mounting kit

ARK-VH200

Intel® Atom™ Dual Core D510 In-Vehicle DVR with 4 BNC Fanless Box PC



Features

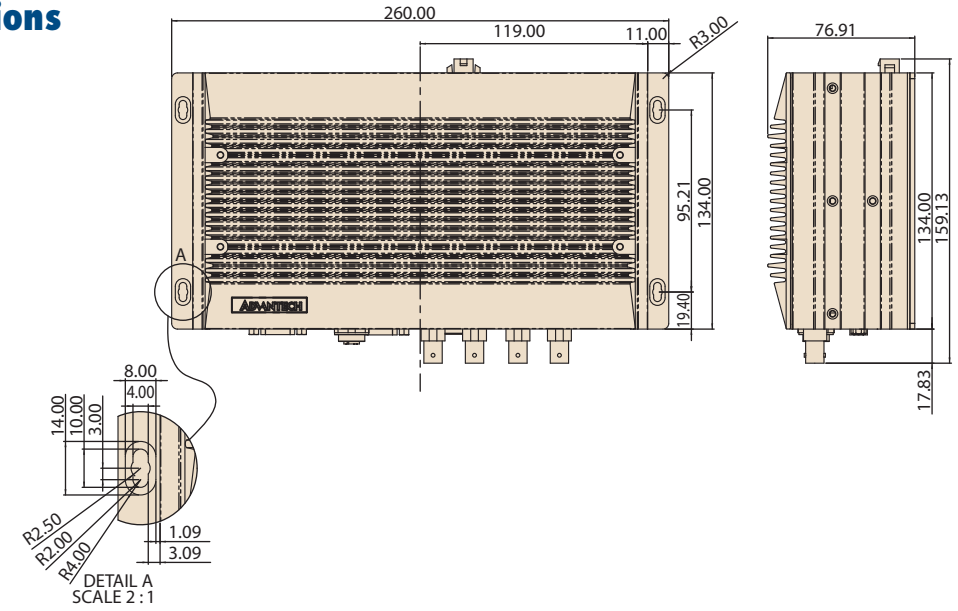
- Intel® Atom™ D510 processor at 1.66 GHz
- 120/100 FPS D1 resolution video recorders
- Optional add-on Mini PCIe card for wireless applications, e.g. WLAN or 3.5G module
- eSATA for large capacity external HDD
- In-vehicle power design and IGN support, compliant with ISO-7637-2
- 4 x USB 2.0 ports (2 x USB ports are lockable for secure connection)
- Compliant with EN50155 for rail transportation applications
- IP40 sealed design
- Supports SUSIAccess and Embedded Software APIs

Specifications

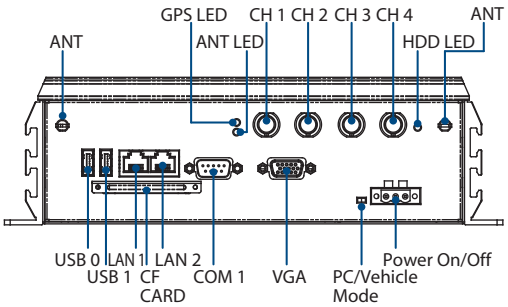
Processor System	CPU	Intel Atom Dual Core D510
	Frequency	1.66 GHz
	L2 Cache	1 MB
	BIOS	AMI 16 Mbit Flash BIOS
Memory	Technology	DDR2 667 MHz
	Max. Capacity	2 GB
	Socket	1 x 200-pin SO-DIMM
Graphics	Chipset	Embedded Gen 3.5G+GFX Core, Intel Gen 3.5 DX9, MPEG2 Decode in HW
	Interface	CRT Interface 18-bit LVDS interface
Ethernet	LAN 1	10/100/1000 Mbps Intel 82567V GbE, support Wake On LAN
	LAN 2	10/100/1000 Mbps Intel 82583V GbE, support Wake On LAN
Audio	Interface	Line-out, Mic-in
IO interface	Serial Interface	2 x RS-232 port, 1 x RS-232/422/485 (Optional)
	USB Interface	4 x USB ports, Compliant with USB 2.0 (2 x USB ports are lockable)
Other	Digital I/O	Supports up to 4-bit DIO
	GPS	On-board GPS
	eSATA	1 x eSATA
	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe	2 x Mini PCIe
	SIM Socket	1 x SIM Socket
Video Recording	Video Compression	H/W H.264
	Video Input	4 x Ch Video Inputs, BNC
	Audio Input	4 x Ch Audio Inputs (Optional)
	Video Format	CIF, 2CIF, D1 (720 x 480)
	Video Frame	Total 120/100 FPS (NTSC/PAL) @ D1 resolution
	SDK Support	VC++, .NET/BCB/VB
Storage	HDD	Supports 1 x SATA 2.5" HDD Bay (9.5 mm height only)
	SSD	Supports CompactFlash socket for type I/II CompactFlash disk
Software Support	Microsoft Windows	WES2009, WES7
	Linux	Fedora v10.04.1
Power Requirement	Power Type	AT/ATX
	Power Input Voltage	PC Mode: 9 V_{DC} ~ 32 V_{DC} VH Mode: 12 V battery (11 V_{DC} ~ 16 V_{DC}), 24V battery (22 V_{DC} ~ 32 V_{DC})
	Ignition	Supports ignition function
	PIC Firmware	Battery status check, and Off-delay support
	Minimum Power Inputs	36W
	Power Adapter	AC to DC, DC19V/3.42A, 65W (Optional)
Power Consumption	Typical	19 W
	Max.	22 W
Mechanical	Construction	Aluminum housing
	Mounting	Desk/wall-mounting
	Dimensions (W x H x D)	260 mm x 77 mm x 134 mm
	Weight	3 kg (6.6 lb)
Environment	Operating Temperature	With extend temperature peripherals CompactFlash disk: -20 ~ 60° C (-4 ~ 140° F) With extend temperature peripherals 2.5-inch hard disk 0 to 45° C (32 ~ 113° F) , with air flow
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration Loading During Operation	With CompactFlash disk: 5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis. With 2.5-inch hard disk: 1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.
	Shock During Operation	With CompactFlash disk: 50 G, IEC 60068-2-27, half sine, 11 ms duration With hard disk: 20 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class A
	Safety Certifications	CE/FCC, CCC, UL/cUL
	In-Vehicle Certification	EN50155, E-Mark E13

Dimensions

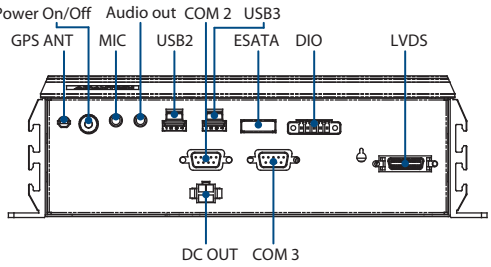
Unit: mm (inch)



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	Display	Audio	GbE	Storage	USB 2.0	COM	On board GPS	4-bit GPIO	MiniPCIe	eSATA	Video	Operating Temp.
ARK-VH200A-D5A1E	Intel Atom D510 1.6GHz	Up to 2 GB	VGA LVDS	Line-out Mic-in	2	1x 2.5" HDD bay & 1 x CF Card	4	2 x RS-232 & 1 x RS-232/422/485 (Optional)	1	1	2 (1 w/ SIM)	1	4 Ch Video Inputs (BNC) & 4 Ch Audio Inputs (Optional)	-20 ~ 60° C

Note: Memory, storage and operating system bundled by request.

Packing List

Part Number	Description
-	1 x ARK-VH200 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1652004519	1 x 3-pole Phoenix Power BLOCK 5.0mm
1750001782	1 x GPS antenna Active with 5M SMA cable

Embedded OS

Part Number	Description
2070009844	XPE WES 2009 V4.0 ENG
2070009845	XPE WES 2009 V 4.0 MUI 24
2070011655	WES7E V5.1.4 ENG/SPN

Optional Items

Part Number	Description
1757003659	AC-to-DC Adapter DC19 V/3.42 A 65 W, 0 ~ 40°C for Home and Office Use
1700001947	Power cable 2-pin 180 cm, USA type
1700001948	Power cable 2-pin 180 cm, Europe type
1700001949	Power cable 2-pin 180 cm, UK type
AMK-C001E	In-vehicle Cradle, SAE J1445 Standard

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Ultra Small



ARK-1122
- Intel® Atom™ N2600/N2800
- -20~60°C Wide Temperature
- HDMI/ 4 COM/ 2 GbE/ 2 Mini PCIe + SIM

Multiple I/O



ARK-2150
- 3rd Generation Intel® Core™ i3/ i7
- VGA/ HDMI/ DP/ DVI
- 4 GbE/ 3 USB3.0 / Isolated DIO/ 4 COM/3 Mini PCIe + SIM

Multiple Expansion



ARK-3500
- 3rd Generation Intel® Core™ i3/i5/i7 rPGA
- PCI/ PCIe/ PCIe x 4/ Mini PCIe
- 9~34V Wide Range DC Power

High Performance



ARK-3510
- 3rd Generation Intel® Core™ i3/i5/i7 rPGA
- Supports MIOe I/O Module
- 2 Removable HDD/ SSD

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2 Digital Signage Platforms

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Ultra Slim Series		
DS-060 Series	3rd Generation Intel® Core™ i7/Celeron®/Atom™ Ultra Slim Digital Signage Platform	*2-4*
OPS Series		
ARK-DS262	3rd Generation Intel® Core™ i7 OPS Digital Signage Platform	*2-6*
Value Series		
ARK-DS306	AMD G-Series Fanless Digital Signage Platform	*2-8*
Main Steam Series		
DS-570	Intel® Celeron® N2920 Quad-Core™ SoC with Advanced NVIDIA Graphics Digital Signage Platform	*2-10*
Multi-Display Series		
ARK-DS762	3rd Generation Intel® Core™ i7/i5/i3 with 3 HDMI Independent Displays Digital Signage Platform	*2-12*
DS-862	3rd Generation Intel® Core™ i7 with 4 DP Independent Displays Digital Signage Platform	*2-14*

To view all of Digital Signage Platforms, please visit www.advantech.com/products.



Digital Signage Platforms

Selection Guide



Model Name		DS-060	DS-061	DS-062	DS-063	DS-065
Processor System	CPU	Intel Core i7-3615QE	Intel Core i7-3517UE	Intel Celeron B810E	Intel Atom D2550	Intel Atom N2600
	BIOS	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit	AMI uEFI 16 Mbit	AMI uEFI 16 Mbit
	Chipset	Intel QM77	Intel QM77	Intel QM77	Intel NM10	Intel NM10
Memory	Technology	DDR3 1333/1600MHz	DDR3 1333/1600MHz	DDR3 1066/1333 MHz	DDR3 800/1066 MHz	DDR3 800/1066 MHz
	Max. Capacity	8 GB	8 GB	8 GB	4 GB	2 GB
	Socket	1 x 204-pin SODIMM	1 x 204-pin SODIMM	1 x 204-pin SODIMM	1 x 204-pin SODIMM	1 x 204-pin SODIMM
Display	Controller	CPU Integrated	CPU Integrated	CPU Integrated	CPU Integrated	CPU Integrated
	Graphic Engine	Intel Integrated HD 4000	Intel Integrated HD 4000	Intel HD Graphics	Intel GMA 3650	Intel GMA 3650
	Video Format	Full AVC, VC1, MPEG2 H/W decode	Full AVC, VC1, MPEG2 H/W decode	Full AVC, VC1, MPEG2 H/W decode	MPEG2, MPEG4, H.264, VC1, DivX v3.11	MPEG2, MPEG4, H.264, VC1, DivX v3.11
	Graphic Memory	Shared with system memory up to 1 GB	Shared with system memory up to 1 GB	Shared with system memory up to 1 GB	Shared with system memory up to 512 MB	Shared with system memory up to 512 MB
	Multiple Display	Dual	Dual	Dual	Dual	Dual
	Interface	DisplayPort x 1, VGA x 1	DisplayPort x 1, VGA x 1	DisplayPort x 1, VGA x 1	HDMI x 1, VGA x 1	HDMI x 1, VGA x 1
Expansion Interface	Mini PCIe	1	1	1	1	1
Ethernet	Speed	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Connector	RJ-45 x 1	RJ-45 x 1	RJ-45 x 1	RJ-45 x 1	RJ-45 x 1
Audio	Audio Interface	HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
	Connector	2 (Line-out, Mic-in)	2 (Line-out, Mic-in)	2 (Line-out, Mic-in)	2 (Line-out, Mic-in)	2 (Line-out, Mic-in)
WatchDog Timer		Yes	Yes	Yes	Yes	Yes
Storage	SATA	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA II HDD
	mSATA	-	-	-	-	-
	CFast	-	-	-	-	-
I/O	USB3.0	2	2	2	-	-
	USB2.0	2	2	2	4	4
	COM Port	1 (RS-232)	1 (RS-232)	1 (RS-232)	1 (RS-232)	1 (RS-232)
	Power Button	1	1	1	1	1
	Smart Fan	Yes	Yes	Yes	Yes	-
Power	Power Type	ATX, AT	ATX, AT	ATX, AT	ATX, AT	ATX, AT
	Power Supply Voltage	DC 19V input	DC 19V input	DC 19V input	DC 19V input	DC 19V input
	Power Consumption (Idle)	8.1W (w/o expansion)	6.6W (w/o expansion)	10.0W (w/o expansion)	11.3W (w/o expansion)	8.3W (w/o expansion)
	Power Consumption (Full Load)	26.0W (w/o expansion)	22.4W (w/o expansion)	19.9W (w/o expansion)	16.5W (w/o expansion)	11.3W (w/o expansion)
	Power Adaptor	Input 100-240V_{AC}, Output 19V_{DC}, 65W	Input 100-240V_{AC}, Output 19V_{DC}, 65W	Input 100-240V_{AC}, Output 19V_{DC}, 65W	Input 100-240V_{AC}, Output 19V_{DC}, 65W	Input 100-240V_{AC}, Output 19V_{DC}, 65W
Environment	Operational Temperature	0 ~ 40° C (32 ~ 104° F) (w / HDD)	0 ~ 40° C (32 ~ 104° F) (w / HDD)	0 ~ 40° C (32 ~ 104° F) (w / HDD)	0 ~ 40° C (32 ~ 104° F) (w / HDD)	0 ~ 40° C (32 ~ 104° F) (w / HDD)
	Operational Humidity	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing
Physical Characteristics	Dimensions (L x W x H)	180 x 190 x 19 mm	180 x 190 x 19 mm	180 x 190 x 19 mm	180 x 190 x 19 mm	180 x 190 x 19 mm
	Weight	0.87 kg (1.92 lb)	0.87 kg (1.92 lb)	0.87 kg (1.92 lb)	0.87 kg (1.92 lb)	0.87 kg (1.92 lb)
	Mounting	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting
Operating System	Microsoft Windows	Yes	Yes	Yes	Yes	Yes
	Linux	Yes, Fedora 14	Yes, Fedora 14	Yes, Fedora 14	Yes, Fedora 16	Yes, Fedora 16
APIs	SUSIAccess	Yes	Yes	Yes	Yes	Yes
	iManager	Yes	Yes	Yes	Yes	Yes
	Others	Yes, McAfee, Acronis	Yes, McAfee, Acronis	Yes, McAfee, Acronis	Yes, McAfee, Acronis	Yes, McAfee, Acronis
Certifications	EMC	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI
	Safety Certifications	UL, CCC, BSMI	UL, CCC, BSMI	UL, CCC, BSMI	UL, CCC, BSMI	UL, CCC, BSMI
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NEW

NEW







ARK-DS262	ARK-DS306	DS-570	ARK-DS762	DS-862
Intel Core i3-3217UE/ Intel Core i7-3555LE/ Intel Celeron 1020E	AMD G-Series T40N	Intel Celeron N2910	Socket rPGA 988B/ Intel Core i7-3610QE/ Core i5-3610ME/ Core i3-3120ME/ Celeron M 1020E	Intel Core i7-3555LE/Intel Core i3-3217UE/Intel Celeron 1020E
AMI uEFI 64 Mbit	AMI EFI 16 Mbit	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit
Intel QM77	AMD A50M FCH	Integrated in CPU	Intel QM77	Intel QM77
DDR3-1066/1333/1600MHz	DDR3 800MHz	DDR3L 1333MHz	DDR3-1066/1333/1600MHz	DDR3-1066/1333/1600MHz
16 GB (8 GB per SODIMM)	4 GB	8 GB (4 GB per SODIMM)	16 GB (8 GB per SODIMM	16 GB (8 GB per SODIMM)
2 x 204-pin SODIMM	1 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM
CPU Integrated	CPU Integrated	nVidia N14M-GS	CPU Integrated	AMD Radeon E6460
Intel Integrated HD 4000	AMD Radeon HD 6290		Intel Integrated HD 4000	
Full AVC, VC1, MPEG2 H/W decode	H.264,VC1, MPEG2, DivX version 3.11 and later, MPEG4 Part 2 SP & ASP	H.264, VC1, MPEG2 1080p video decoder	Full AVC, VC1, MPEG2 H/W decode	H.264, VC1, MPEG2 1080p video decoder
1 GB	Shared system memory	1 GB (On board memory)	1 GB	512 MB
Dual	Dual	Four	Triple	Four
JAE TX25 80-pin x 1, HDMI x 1	HDMI x 1, VGA x 1	HDMI x 2, DP^{++} x 1, VGA x 1	HDMI x 3	DP x 4
1	1	2	1	1
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
RJ-45 x 1	RJ-45 x 2	RJ-45 x 2	RJ-45 x 1	RJ-45 x 1
HD Audio	HD Audio	HD Audio	HD Audio	HD Audio
1 (Line-out), supports Jack Sense	3 (Line-in, Line-out, Mic-in)	1 (SPDIF/Line-out), supports Jack Sense	1 (Line-out) supports Jack Sense	1 (Line-out) supports Jack Sense
Yes	Yes	Yes	Yes	Yes
1 x 2.5-inch SATA III HDD	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA II HDD	1 x 2.5-inch SATA III HDD
-	-	Yes	Yes	-
-	1	-	1	-
2	-	1	1	4
-	2	3	2	-
1 (RS-232)	2 (RS-232)	2 (RS-232)	1 (RS-232)	1 (RS-232)
1	1	1	1	1
Yes	-	Yes	Yes	Yes
ATX	ATX, AT	ATX, AT	ATX, AT	ATX, AT
DC 12V-24V input (via OPS connector)	DC 12V input	DC 19V input	DC 19V input	DC 19V input
15.25W (w/o expansion)	9 W (w/o expansion)	TBD	17.4W (Core i7 45W CPU, w/o expansion)	TBD
28.61W (w/o expansion)	13W (w/o expansion)	TBD	43.8W (Core i7 45W CPU, w/o expansion)	TBD
-	Input 90-264 V_{AC}, Output 12 V_{DC}, 36W	Input 100-240 V_{AC}, Output 19 V_{DC}, 65W	Input 100-240 V_{AC}, Output 19 V_{DC}, 90W	Input 100-240 V_{AC}, Output 19 V_{DC}, 90W
0 ~ 40° C (32 ~ 104° F) (w/ HDD)	0 ~ 40° C (32 ~ 104° F) (w / HDD)	0 ~ 40° C (32 ~ 104° F) (w/ HDD)	0 ~ 40° C (32 ~ 104° F) (w/ HDD)	0 ~ 40° C (32 ~ 104° F) (w/ HDD)
40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing	40° C @ 95% RH Non-Condensing
200 x 119 x 30 mm	204 x 44.2 x 118.2 mm	220 x 150 x 44.2 mm	249.6 x 190 x 35 mm	249.6 x 190 x 35 mm
1.5 kg (3.3 lb)	1.1 kg (2.42 lb)	1.7 kg (3.74 lb)	2.0 kg (4.41 lb)	2.0 kg (4.41 lb)
-	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting	VESA/Desk/Wall mounting
Yes	Yes	Yes	Yes	Yes
Yes, Fedora 14	Yes, Fedora 14	TBD	Yes, Fedora 14	Yes, Fedora 14
Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
Yes, McAfee, Acronis	Yes, McAfee, Acronis	Yes, McAfee, Acronis	Yes, McAfee, Acronis	Yes, McAfee, Acronis
CE, FCC Class B, CCC, C-Tick, BSMI	CE, FCC Class A, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI	CE, FCC Class B, CCC, BSMI
UL, CCC	UL, CCC, BSMI	UL, CCC, BSMI	UL, CCC, BSMI	UL, CCC, BSMI
2-6	2-8	2-10	2-12	2-14

DS-060 Series

Ultra-slim 3rd Generation Intel® Core™ i7/Celeron®/Atom™ Digital Signage Platform



Features

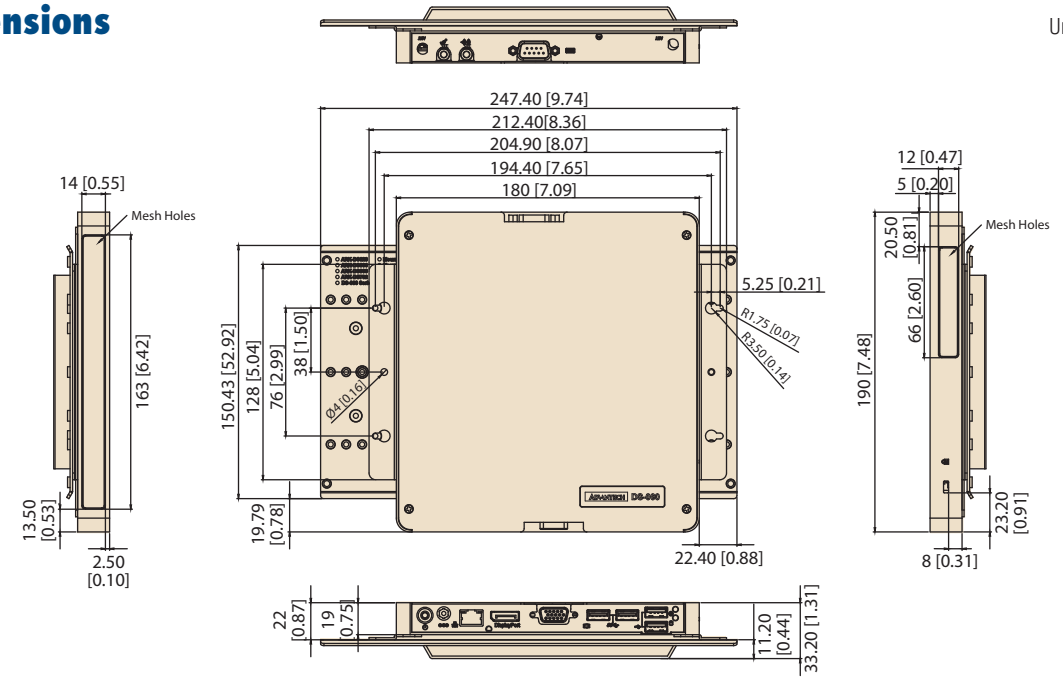
- Unified 19 mm-thin chassis powered by Intel® multiple platforms (TDP up to 45W)
- Dual 1080P displays by on-board VGA & DisplayPort (HDMI)
- DC input 19V
- Compact in size allows installation in limited space
- Highly expandable via internal Mini-PCIe interface (e.g. WLAN, 3G or TV tuner)
- Supports iManager, SUSIAccess and Embedded Software APIs
- Design compliant with Energy Star 5.2

Specifications

		DS-060	DS-061	DS-062	DS-063	DS-065
Features		3rd Generation Intel Core i7 Platform	3rd Generation Intel Core i7 Platform	Intel Celeron Mobile Platform	Intel Atom Platform	Intel Atom Platform
Processor system	Processor	Core i7-3615QE	Core i7-3517UE	Celeron B810E	Atom D2550	Atom N2600
	PCH chipset	Intel QM77 Express	Intel QM77 Express	Intel QM77 Express	Intel NM10	Intel NM10
	BIOS	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit	AMI uEFI 64 Mbit	AMI uEFI 16 Mbit	AMI uEFI 16 Mbit
Memory	Technology	DDR3 1333/1600MHz	DDR3 1333/1600MHz	DDR3 1066/1333MHz	DDR3 800/1066MHz	DDR3 800/1066MHz
	Max. Capacity	8 GB	8 GB	8 GB	4 GB	2 GB
Thermal Solution		FAN	FAN	FAN	FAN	FANLESS
Display	Chipset	Embedded in Processor				
	Output	VGA x 1; DP x 1	VGA x 1; DP x 1	VGA x 1; DP x 1	VGA x 1; HDMI x 1	VGA x 1; HDMI x 1
	Resolution	1920 x 1080P				
Ethernet	Interface	Gigabit LAN Controller				
	Controller	Intel 82579LM	Intel 82579LM	Intel 82579LM	Intel 82583V	Intel 82583V
	Connector	1 x RJ-45				
I/O Interfaces	Audio	Line-Out, Mic-In				
	Ethernet	1 x RJ-45 (GigaLAN)				
	Wireless LAN	via optional WLAN module				
	USB 2.0	2	2	2	4	4
	USB 3.0	2	2	2	-	-
	Serial Port	1 x RS-232				
	Expansion	1 x Mini PCIe (internal)				
	PSW	1 x Power on/off button				
	LED Indicators	1 x Power, 1 x HDD Access				
Storage		1 x 2.5-inch SATA II HDD/ SSD (only support 7 mm height)				
Power Requirement	Power Management	ACPI 3.0				
	Input Voltage	19 V DC-in (ATX/AT mode)				
Watchdog Timer	Output	Interrupt, system reset				
	Interval	255-level timer interval, setup by software				
Physical Characteristics	Mounting	Easy mounting kits for LCD or Plasma				
	Dimensions (W x D x H)	180 x 190 x 19 mm				
	Weight	0.87 kg (1.92 lb)				
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / SSD)				
	Relative Humidity	95% @ 40°C (non-condensing), operating				
Software Development Kit	Operating System	Supports Microsoft Windows 8, Windows 7, Android 4.0				
	Linux	Linux Fedora 14			Linux Fedora 16	Linux Fedora 16
Certifications	EMC	CE/FCC Class B, CCC, BSMI				
	Safety	UL, CCC, BSMI				

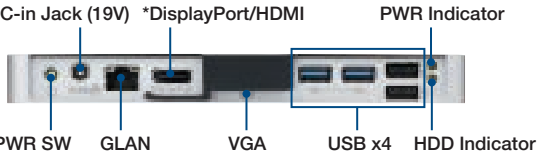
Dimensions

Unit: mm [inch]

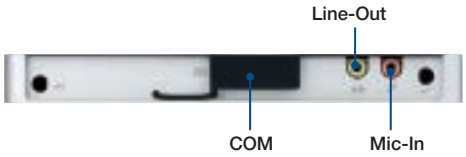


DS-060 External I/O

Front



Back



Note: DS-063/DS-065 is with on-board HDMI.

Packing List

Part Number	Description
-	1 x DS-06X Unit
-	1 x 19V Power adapter
-	1 x Driver/Utility DVD
-	1 x China RoHS
-	1 x Simplified Chinese Manual
-	1 x Mounting bracket kit (supports VESA/Wall mount)

Ordering Information

Part Number	Description
DS-060GB-U3A1E	DS-060, Intel Core i7-3615QE, Barebone
DS-061GB-S7A1E	DS-061, Intel Core i7-3517UE, Barebone
DS-062GB-S6A1E	DS-062, Intel Celeron B810E, Barebone
DS-063GB-S8A1E	DS-063, Intel Atom D2550, Barebone
DS-065GB-S6A1E	DS-065, Intel Atom N2600, Barebone
DS-060GF-U3A1E	DS-060, Intel Core i7-3615QE, 4G RAM, 250G HDD
DS-061GF-S7A1E	DS-061, Intel Core i7-3517UE, 4G RAM, 250G HDD
DS-062GF-S6A1E	DS-062, Intel Celeron B810E, 2G RAM, 250G HDD
DS-063GF-S8A1E	DS-063, Intel Atom D2550, 2G RAM, 250G HDD
DS-065GF-S6A1E	DS-065, Intel Atom N2600, 2G RAM, 250G HDD

Power Cord & Specific Power Adaptor

Part Number	Description
1700001524	3-pin power cord (US)
1700018705	3-pin power cord (EU)
1702031801	3-pin power cord (UK)
1702031836	3-pin power cord (AU)
1700000237	3-pin power cord (JP)

Embedded OS

Part Number	Description
2070012198	Image WES7E 64-bit, DS-060/DS-061/DS-062, ENG/JP/TC/SC
2070012197	Image WES7E 32-bit, DS-060/DS-061/DS-062, ENG/JP/TC/SC
2070012165	Image WES7E 32-bit, DS-063/DS-065, ENG/JP/TC/SC

Optional Items

Part Number	Description
AMO-WIFI06E	Wi-Fi 802.11 b/g/n Mini-PCIe Module (including Antenna & Cable)
AMO-HSDPA02E	3.75G HSPA Full-size Mini-PCIe Module (including Antenna & Cable)
AMK-S001E	Table Stand for DS-060 series
AMK-V006E	Power Adapter Supporter for VESA Mounting

ARK-DS262

3rd Generation Intel® Core™ i7 OPS Digital Signage Platform



Windows Embedded Windows 7 Windows XP Professional Windows 8

Features

- 3rd generation Intel® Core™ i7 processor-based platform
- Design compliant with OPS (Open Pluggable Standardization)
- Supports HDMI, eDP, UART, USB3.0/2.0 via JAE 80-pin connector
- Supports PCIe x 4, USB3.0/2.0, SATA, LPC & SMB optional 2nd JAE 60-pin connector
- Slot-in integration, easy maintenance
- Design compliant with Energy Star 5.0
- Supports iManager, SUSIAccess and Embedded Software APIs

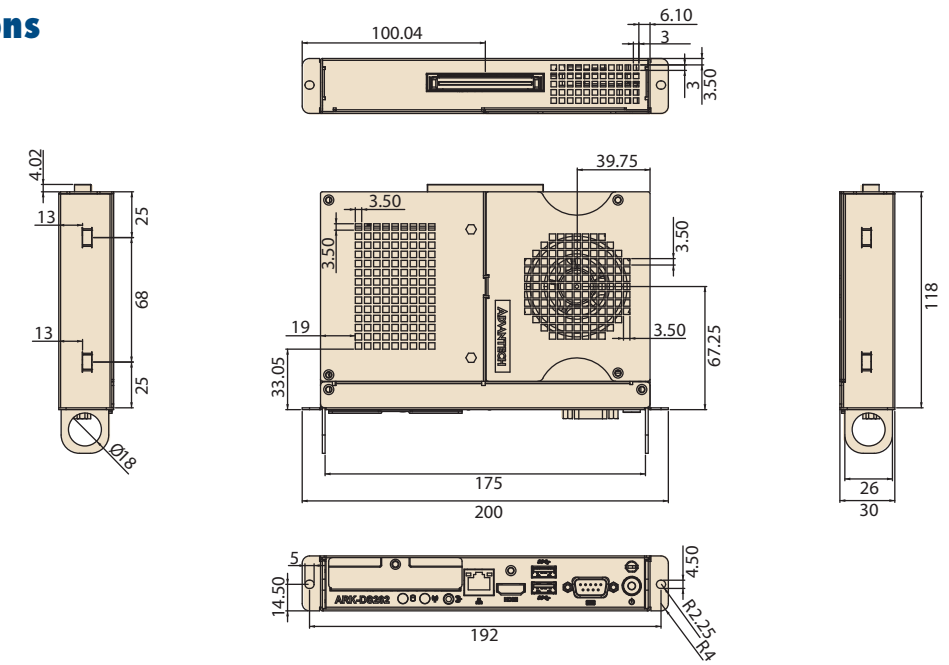
Acronis McAfee SUSIAccess Remote Device Management iManager

Specifications

Processor System	CPU	3rd generation Intel Core i7-3555LE 2.5 GHz	3rd generation Intel Core i3-3217UE 1.6 GHZ	Intel Celeron 1020E 2.2 GHz
	System Chipset	Intel QM77		
	BIOS	AMI uEFI 64 Mbit		
Memory	Technology	2 x DDR3 204-pin SODIMM		
	Max. Capacity	Max. up to 16 GB (8 GB per SODIMM)		
Display	Chipset	Embedded in Processor		
	Resolution (Chipset support)	HDMI/eDP: up to 1920 x 1080 (via OPS interconnection)		
	Output	HDMI x 1		
Storage	SATA Interface	1 x 2.5-inch SATA III HDD/SSD (support max 9.5 mm height)		
Ethernet	Interface	Gigabit LAN Controller		
	Controller	Intel 82579LM		
	Connector	1 x RJ-45		
I/O Interface	*JAE Connector	1 (JAE TX25 80-pin)/ 2 (JAE TX25 80-pin + JAE TX25 60-pin optional)		
	HDMI	1		
	LAN	1 (RJ-45)		
	USB	2 (USB 3.0 compliant)		
	Audio	1 x Line-out (supports Jack Sense via OS setting)		
	Serial Port	1 x COM (RS-232)		
	Mini-PCIe (Internal)	1		
Power Requirement	Management	ACPI 3.0		
	Power Consumption	Average 19 W		
	Input Voltage	12 V-24 V DC-in (via OPS interconnection)		
Watchdog Timer	Output	Interrupt, system reset		
	Interval	255-level timer interval, setup by software		
Physical Characteristics	Dimensions (W x H x D)	200 x 30 x 119 mm (OPS compliant)		
	Weight	1.5 kg (3.3 lb)		
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / SSD)		
	Relative Humidity	95% @ 40° C (non-condensing), operating		
	Vibration Resistance	0.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 Oct./min, 1 hr/axis.		
Software Development Kit	Operating System	Supports Microsoft Windows 8, Windows 7, WES7E, XP Embedded		
	Linux	Fedora 14		
Certification	Electromagnetic	CE/FCC Class B, CCC, BSMI, C-Tick		
	Safety	UL, CCC		

Dimensions

Unit: mm [inch]



JAE TX25 Signal Allocation

Signal via JAE TX25 80-pin	Signal via JAE TX25 60-pin (optional)
HDMI (supports HDMI-CEC)	PCIe x 4
eDP	USB 2.0/3.0
UART	SATA
USB 2.0	LPC
Audio	SMBus

Packing List

Part Number	Description
-	1 x ARK-DS262 Unit
-	1 x Driver/Utility DVD
-	1 x Simplified Chinese User Manual
-	1 x China RoHS
-	1 x OPS Sticker
-	SUSIAccess DVD

Ordering Information

Part Number	Description
ARK-DS262GF-U5A1E	ARK-DS262, i7-3555LE, 250G HDD, 2G RAM
ARK-DS262GF-S6A1E	ARK-DS262, i3-3217UE, 250G HDD, 2G RAM
ARK-DS262GF-U2A1E	ARK-DS262, Celeron 1020E, 250G HDD, 2G RAM
ARK-DS262GB-U5A1E	ARK-DS262, i7-3555LE, Barebone unit
ARK-DS262GB-S6A1E	ARK-DS262, i3-3217UE, Barebone unit
ARK-DS262GB-U2A1E	ARK-DS262, Celeron 1020E, Barebone unit
ARK-DS262GQ-U5A1E	ARK-DS262, i7-3555LE, 250G HDD, 2G RAM, WES7E, SUSIAccess, McAfee, Acronis
ARK-DS262GQ-S6A1E	ARK-DS262, i3-3217UE, 250G HDD, 2G RAM, WES7E, SUSIAccess, McAfee, Acronis
ARK-DS262GQ-U2A1E	ARK-DS262, Celeron 1020E, 250G HDD, 2G RAM, WES7E, SUSIAccess, McAfee, Acronis

Embedded OS

Part Number	Description
2070011432	WES7E ARK-DS262 ENG/JPN/CHT/CHS w/Kinect SDK, SUSIAccessPro, iManager 2.0
2070011538	WES7P 64-bit ARK-DS262 w/Kinect SDK, SUSIAccessPro, iManager 2.0
2070011436	XPE WES2009 ARK-DS262 24MUI w/SUSIAccess Pro
2070011560	WIN7-Pro ARK-DS262 Eng
2070012365	WE8S 32-bit ARK-DS262 24MUI

Optional Items

Part Number	Description
AMO-I005E	Docking Board, OPS JAE TX24/DC-in Jack/HDMI/DP/COM/USB
AMO-WIFI06E	Wi-Fi 802.11 b/g/n Mini-PCIe module (including Antenna & Cable)
AMO-HSDPA02E	HSDPA Mini-PCIe module (including antenna & cable)

ARK-DS306

AMD G-Series Digital Signage platform



Features

- AMD G-series T40N (DC 1.0 GHz) + A50M FCH, 1 x DDR3 SODIMM, supports up to 4 GB
- DirectX® 11, 2D/3D acceleration, dual display: HDMI, VGA
- Built-in Mini-PCIe slot for easy expansion
- Supports 2 Gigabit LAN connectors, HD audio, 2 x COM, 2 x USB I/O interfaces
- Storage: 1 x 2.5" SATA HDD drive bay, 1 x CFast slot
- Supports VESA mounting (Optional)
- Supports iManager, SUSIAccess and Embedded Software APIs

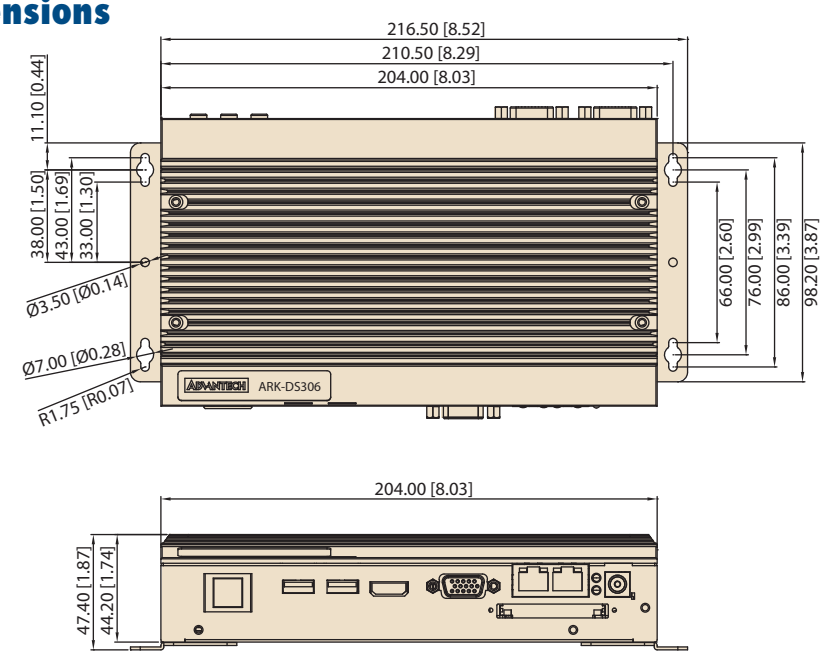
Specifications

Processor System	CPU	AMD G-Series, T40N 1.0GHz dual core
	System Chipset	AMD G-Series + A50M FCH
	BIOS	AMI EFI 16 Mbit
Memory	Technology	1 x DDR3 204-pin SODIMM
	Max. Capacity	Max. up to 4 GB
Display	Chipset	AMD G-Series
	Graphic Engine	DirectX 11 graphics with UVD 3.0 2D Acceleration, 3D Acceleration, Motion Video Acceleration, Supports DVD, Blu-ray*
	Output	HDMI x 1, VGA x 1
	Resolution	VGA: 1920 x 1080 at 60 Hz HDMI: Supports 1920 x 1080p at 60 Hz, 36 bpp, Supports HDMI v1.3, using TMDS data encoding
	Dual display	Yes
Storage	SATA	1 x 2.5-inch SATA II HDD/SSD (support 9.5 mm / 7 mm height)
	Cfast (socket)	1
Ethernet	Interface	2 Gigabit LAN Controller Realtek RTL8111E-VB-GR 10/100/1000Mbps
	Connector	2 x RJ-45
Audio	Chipset	Realtek ALC892, High Definition Audio (HD)
I/O Interface	HDMI	1
	VGA	1 (D-sub 15-pin)
	LAN	2 (RJ-45)
	USB	2 (USB 2.0 compliant)
	Audio	3 audio phone jacks for Line-in, Line-out, Mic-in
	Serial	2 x COM (RS-232)
	Mini-PCIe (Internal)	1 (for optional expansion modules)
	Power input	1 (DC-in Jack)
Power Requirement	Management	ACPI 2.0
	Power Consumption	Typical: 9 W (w/o expansion) Max.: 13W (w/o expansion)
	Input Voltage	12V DC-in (ATX/AT mode, default ATX)
	Others	Supports boot on power back and schedule boot up function
Watchdog Timer	Output	Interrupt, system reset
	Interval	255 levels timer interval, programmable by software
Physical Characteristics	Mounting	Easy mounting kits for LCD or Plasma
	Dimensions (W x H x D)	204 x 44.2 x 118.2 mm
	Weight	1.1 kg
Environment	Operating Temperature	Operating: 0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / CFast Card)
	Relative Humidity	95% @ 40° C (non-condensing), Operating
Software Development Kit	Operating System	Supports Microsoft Windows 8, Windows 7, XP with SP3, XP Embedded
	EWF & WDT SDK	EWF and WDT libraries for signage stability design in XPE
	Linux	Linux Fedora 14
Certifications	Electromagnetic	CE/FCC Class A, CCC, BSMI
	Safety	UL, CCC, BSMI

* Playback is supported by software not provided by Advantech.

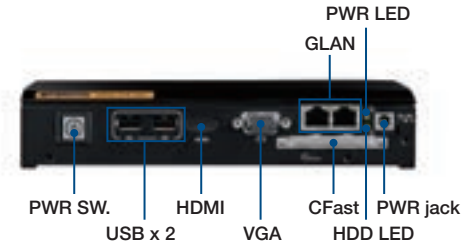
Dimensions

Unit: mm [inch]



ARK-DS306 External I/O

Front



Back



Packing List

Part Number	Description
-	1 x ARK-DS306 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
-	1 x Power adapter AC 90-264V, 36W
-	1 x China RoHS
-	1 x Mounting plate set

Ordering Information

Part Number	Description
ARK-DS306B-D0A1E	ARK-DS306 Barebone, AMD T40N w/o RAM, HDD
ARK-DS306F-D0A1E	ARK-DS306 Barebone, AMD T40N w/1G RAM, 250G HDD

Power Cord & Specific Power Adaptor

Part Number	Description
1700001524	3-pin power cord (US)
170203183C	3-pin power cord (EU)
170203180A	3-pin power cord (UK)
1700008921	3-pin power cord with PSE (Japan)
1700019146	3-pin power cord (CCC)

Embedded OS

Part Number	Description
2070010844	XPE WES2009 V4.0 Multi-24
2070010845	WES7E V5.1 ENG w/Acronics

Accessories

Part Number	Description
AMO-WIFI06E	Wi-Fi 802.11 b/g/n Mini-PCIe module (w/ antenna)
AMO-HSDPA02E	3.75G HSDPA Mini-PCIe module
AMK-V001E	VESA mount kit
AMK-V002E	VESA mount kit for ARM
AMK-V005E	VESA mount kit (Generic for ARK-DS/DS products)

DS-570

Intel® Celeron® N2920 Quad-Core™ SoC with Advanced (nVidia N14M) Graphics Digital Signage Platform



Windows Embedded Windows 7 Windows 8

Features

- Embedded Intel® Celeron® N2920 low power Quad-Core™ SoC platform (fanless)
- Integrated NVIDIA N14M graphic module for Full HD playback
- Supports simultaneous multi-display output (any 2,3 or 4 outputs)
- Compact size mechanical design for easy installation in application field
- Highly expandable via internal Mini-PCIe interface (e.g. WLAN, 3G or TV tuner)
- Two COM (RS-232) ports for system integration and application
- Consumer Electronic Control (CEC*) implemented on HDMI x 2 ports
- Supports SUSIAccess and Embedded Software APIs

Acronis McAfee SUSIAccess Remote Device Management iManager

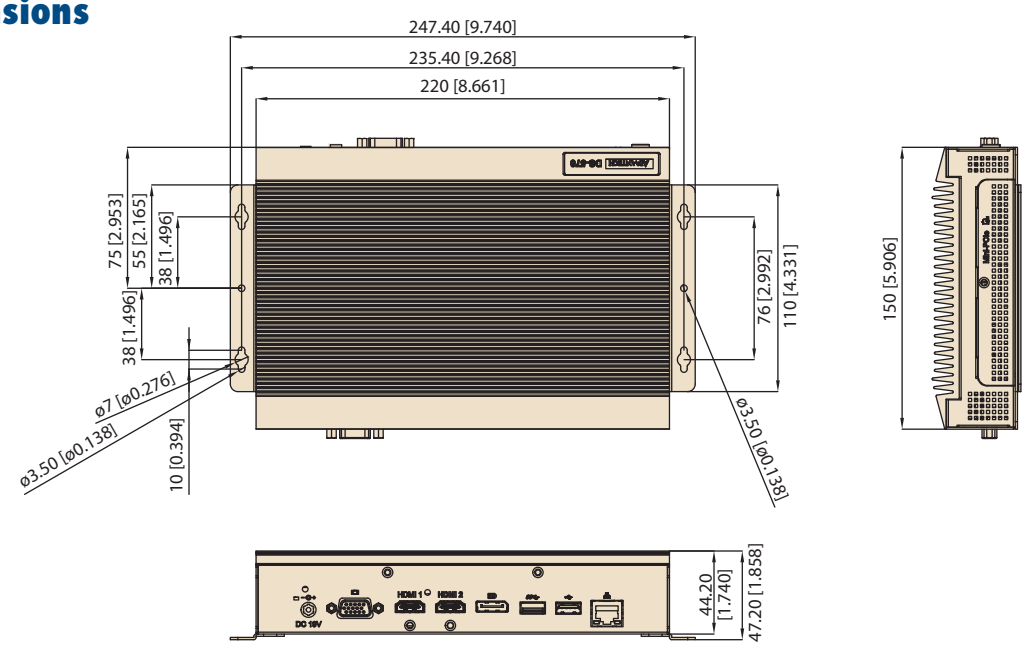
Specifications

Processor System	CPU	Intel Celeron N2920 Quad Core 1.86 GHz
	System Chipset	Integrated in CPU
	L2 Cache	2 MB
	BIOS	AMI uEFI 64 Mbit
Memory	Technology	2 x DDR3L 204-pin DIMM
	Max. Capacity	8GB (up to 4 GB per each SODIMM)
Display	Chipset	nVidia N14M-GS
	Memory Size	Independent display memory 1024 MB
	Resolution	VGA: up to 2048 x 1536 @ 60Hz HDMI: up to 1920 x 1080p DP++: up to 3840 x 2160
	Output	HDMI x 2, DP++ x 1, VGA x 1
	Multi display	Any 2, 3 or 4 outputs
	Video format	H.264, VC1, MPEG2 1080p video decoder
Storage	SATA	1 x 2.5-inch SATA II HDD/SSD (only support 7 mm height)
Ethernet	Interface	Gigabit LAN Controller
	Controller	Intel I211 x 2
	Connector	2 x RJ-45
I/O Interface	HDMI	2 (Support CEC)
	DP++	1
	VGA	1 (D-sub 15-pin)
	LAN	2 (RJ-45)
	USB 2.0	3
	USB 3.0	1
	Audio	1 x audio phone jack for Line-Out, 1 x SPDIF, supports jack sense via OS setting
	Serial	2 x COM (RS-232)
	Mini-PCIe (Internal)	2 (full-size for optional expansion modules)
	Power input	1 (DC-in jack)
Power Requirement	Management	ACPI
	Power Consumption Input Voltage	TBD
	Input Voltage	19V DC-in (ATX/AT mode, default ATX)
	Others	Supports boot on power back and schedule boot up function
Watchdog Timer	Output	Interrupt, system reset
	Interval	Programmable by SUSIAccess
Physical Characteristics	Mounting	Easy mounting kits for LCD or Plasma
	Dimensions (W x H x D)	220 x 44.2 x 150 mm
	Weight	1.7 kg
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / SSD)
	Relative Humidity	95% @ 40° C (non-condensing),Operating
	Vibration Resistance	TBD
Software Development Kit	Operating System	Supports Microsoft Windows 8, Windows 7
	Linux	TBD
Certification	Electromagnetic	CE/FCC Class B, CCC, BSMI
	Safety	UL, CCC, BSMI

*1 CEC pin definition reserved in HDMI, needs software to enable it

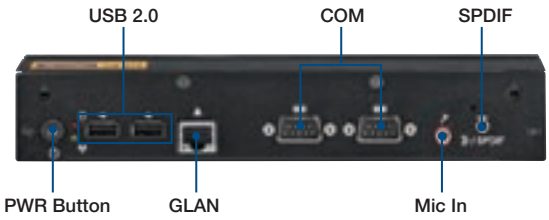
Dimensions

Unit: mm [inch]

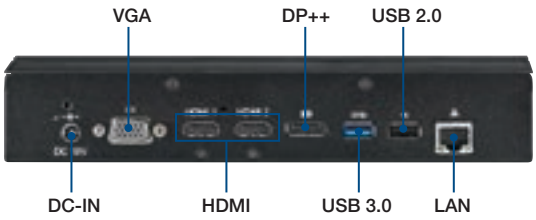


DS-570 External I/O

Front



Back



ARK-DS762

3rd Generation Intel® Core™ i7/i5/i3 Digital Signage Platform with 3 x HDMI Independent Display



Windows Embedded Windows 7 Windows XP Professional Windows 8

Features

- 3rd generation Intel® Core™ i7/i5/i3 processor, up to 45W
- Supports Direct X11, and OCL 1.1
- 3 independent displays; 3 x HDMI
- Flexibility for expansion and storage options (HDD/Cfast/Mini PCIe/USB2.0 & 3.0)
- 19 VDC power input , supports DC power hot plug
- Operating temperature: 0 ~ 40° C (0 ~ 50° C is an option)
- Supports iManager, SUSIAccess and Embedded Software APIs

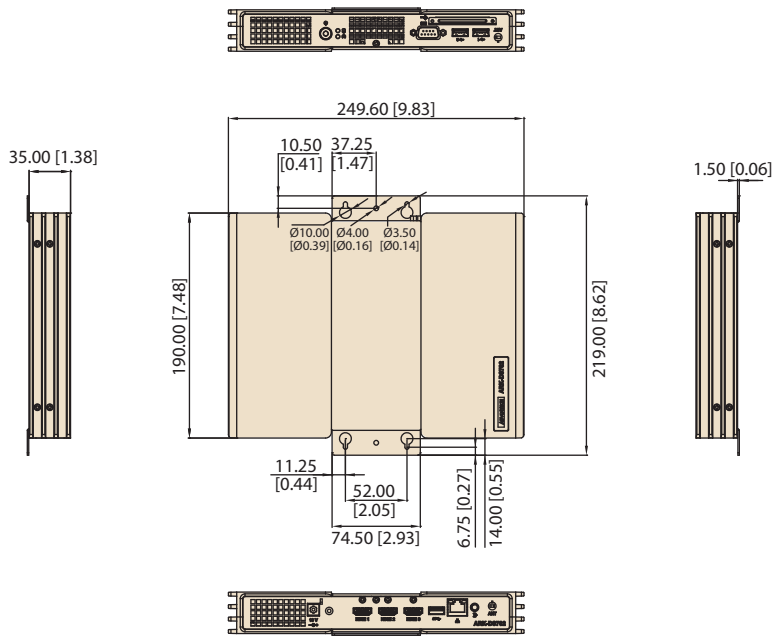
Acronis McAfee SUSIAccess Remote Device Management iManager

Specifications

Processor System	CPU	3rd Gen. Intel Core i7/i5/i3 CPU, (uPGA 988B socket, up to 45W)
	System Chipset	QM77
	BIOS	AMI uEFI 64 Mbit
Memory	Technology	2 x DDR3 204-pin SODIMM
	Max. Capacity	16 GB (up to 8 GB per each SODIMM)
Display	Chipset	Embedded in Processor
	Processor Graphics	Intel HD Graphics 4000
	Output	3 x HDMI
	Resolution	HDMI: Supports 1920 x 1080p at 60 Hz, 36 bpp, Supports HDMI v1.3
Storage	SATA	1 x 2.5-inch SATA II HDD/SSD (support 9.5 mm / 7 mm height)
	Cfast (socket)	1
Ethernet	Interface	Gigabit LAN Controller
	Controller	Intel 82579LM
	Connector	1 x RJ-45
Audio	Chipset	Realtek ALC892, High Definition Audio(HD)
I/O Interface	HDMI	3 (Support CEC)
	LAN	1 (RJ-45)
	USB 2.0	2
	USB 3.0	1
	Audio	1 audio phone jack for Line-Out, Jack sensor support via OS setting
	Serial	1 x COM (RS-232)
	Mini-PCIe (Internal)	1 (for optional expansion modules)
	Power input	1 (DC-in Jack)
Power Requirement	Management	ACPI 3.0
	Power Consumption	17.4W (idle) 43.8W (full load)
	Input Voltage	19 V DC-in (ATX/AT mode, default ATX)
	Others	Supports boot on power back and schedule boot up function
Watchdog Timer	Output	Interrupt, system reset
	Interval	Programmable by SUSIAccess
Physical Characteristics	Mounting	Easy mounting kits for LCD or Plasma
	Dimensions (W x D x H)	249.6 x 190.0 x 35 mm
	Weight	2.0 kg (4.41 lb)
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / SSD)
	Relative Humidity	95% @ 40° C (non-condensing),Operating
	Vibration Resistance	0.2 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
Software Development Kit	Operating System	Supports Microsoft Windows 8, Windows 7, XP Embedded
	EWF & WDT SDK	EWF and WDT library for signage stability design in Windows OS
	Linux	Linux CentOS, Fedora 14
Certifications	Electromagnetic	CE/FCC Class B, CCC, BSMI
	Safety	UL, CCC, BSMI

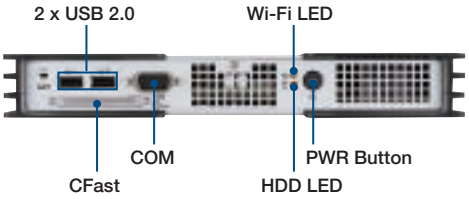
Dimensions

Unit: mm [inch]

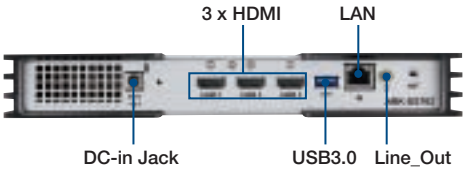


ARK-DS762 External I/O

Front



Rear



Packing List

Part Number	Description
-	1 x ARK-DS762 Unit
-	1 x Driver/Utility DVD/Manual
-	1 x User Manual (Simplified Chinese)
-	1 x Power adapter AC-DC 100-240V, 90W
-	1 x China RoHS
-	1 x Mounting bracket kit

Ordering Information

Part Number	Description
ARK-DS762GQ-U3A1E	Intel 3rd Gen. Core i7-3610QE, 4G RAM, 250G HD, WES7P w/ SUSIAccess Pro
ARK-DS762GQ-U2A1E	Intel 3rd Gen. Celeron 1020E, 4G RAM, 250GB HD, WES7P w/ SUSIAccess Pro
ARK-DS762GB-00A1E	Intel 3rd Gen. Core i7/5/3 Digital Signage computer box (barebone)
96MPI7M-2.3-6M9T	Intel 3rd Gen. Core i7-3610QE Quad Core CPU 2.3GHz
96MPI5-2.7-3M9T	Intel 3rd Gen. Core i5-3610ME Dual Core CPU 2.7GHz
96MPI3M-2.4-3M9T	Intel 3rd Gen. Core i3-3120ME Dual Core CPU 2.4GHz
96MPCM-2.2-2M9T	Intel Celeron 1020E Dual core CPU 2.2GHz

Embedded OS

Part Number	Description
2070011542	IMG WES7P (32-bit) ARK-DS762 V5.1.2 ENG/TC/SC/JP w/ SA Pro
2070011223	IMG WES7E (32-bit) ARK-DS762 V5.1.3 ENG/TC/SC/JP w/ SA Pro
2070011553	IMG XPE WES09 ARK-DS762 V4.1 24 muti w/ SA Pro
2070011686	IMG WES7E (64-bit) ARK-DS762 V5.6.4 ENG w/ SA Pro
2070011749	IMG WES7P (64-bit) ARK-DS762 V5.6.3 ENG w/ SA Pro

Power cord

Part Number	Description
1700001524	3-pin power cord (US)
170203183C	3-pin power cord (EU)
170203180A	3-pin power cord (UK)
1700008921	3-pin power cord with PSE (Japan)
1700019146	3-pin power cord (CCC)

Accessories

Part Number	Description
AMO-WIFI06E	Wi-Fi 802.11 b/g/n Mini-PCIe module (w/ antenna)
AMO-HSDPA02E	3.75G HSDPA Mini-PCIe module
AMK-V005E	VESA mount kit

DS-862

3rd Generation Intel® Core™ i Digital Signage Platform with 4 independent displays



Features

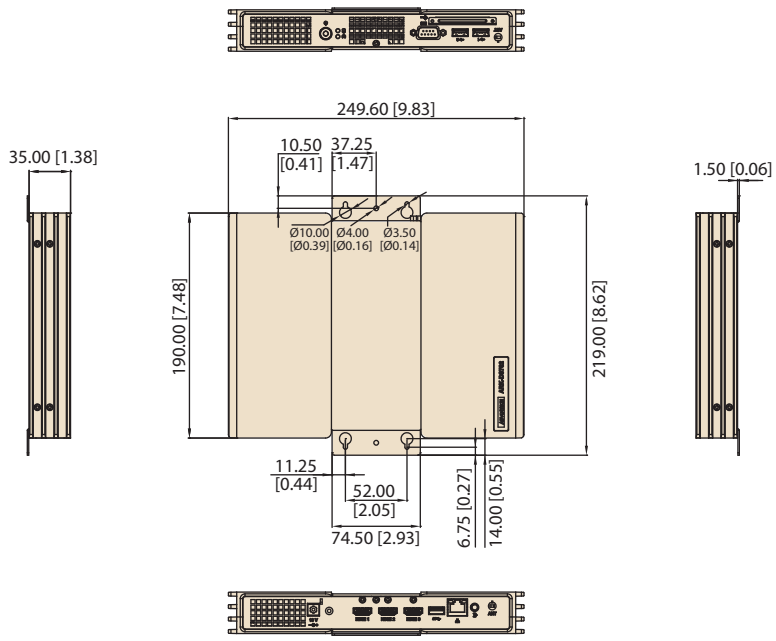
- 3rd Generation Intel® Core™ i7/i3 and Celeron® 1020E
- AMD Radeon E6460 GPU
- 4 independent displays: 4 x DisplayPort
- Slim and compact design
- Supports iManager, SUSIAccess and Embedded Software APIs
- Digital signage software for 2 x 2 or 1 x 4 video wall applications

Specifications

Processor System	CPU	3rd Generation Intel Core i7-3555LE/ i3-3217UE / Celeron 1020E
	System Chipset	Intel QM77
	BIOS	AMI uEFI 64 Mbit
Memory	Technology	2 x DDR3 204-pin SODIMM
	Max. Capacity	Max. up to 16 GB (8 GB per SODIMM)
Display	Chipset	AMD Radeon E6460
	Output	4 x DisplayPort
	Resolution	Supports 1920 x 1080p at 60 Hz, 36 bpp
Storage	SATA	1 x 2.5-inch SATA III HDD/SSD (only support 7mm height)
Ethernet	Interface	Gigabit LAN Controller
	Controller	Intel 82579LM
	Connector	1 x RJ-45
Audio	Chipset	Realtek ALC892, High Definition Audio (HD)
I/O Interface	DisplayPort	4
	LAN	1 (RJ-45)
	USB	4 (USB 3.0 compliant)
	Audio	1 audio phone jack for Line-Out, Support jack sense via OS setting
	Serial	1 x COM (RS-232)
	Mini-PCIe (Internal)	1 (for optional expansion modules)
	Power input	1 (DC-in Jack)
Power Requirement	Management	ACPI 3.0
	Power Consumption	TBD
	Input Voltage	19 V DC-in (ATX/AT mode, default ATX)
Watchdog Timer	Output	Interrupt, system reset
	Interval	Programmable 1~255sec.
Physical Characteristics	Mounting	Easy mounting kits for LCD or Plasma
	Dimensions (W x D x H)	249.6 x 190.0 x 35 mm
	Weight	2.0 kg (4.41 lb)
Environment	Operating Temperature	0 ~ 40° C (32 ~ 104° F) (w / HDD); 0 ~ 50° C (32 ~ 122° F) (w / SSD)
	Relative Humidity	95% @ 40° C (non-condensing),Operating
	Vibration Resistance	TBD
Software Development Kit	Operating System	Supports Microsoft Windows 8, Window 7
	EWF & WDT SDK	EWF and WDT library for signage stability design in Windows OS
	Linux	Fedora 14
Certifications	Electromagnetic	CE/FCC Class B, CCC, BSMI
	Safety	UL, CCC, BSMI

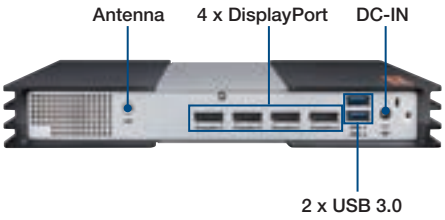
Dimensions

Unit: mm [inch]

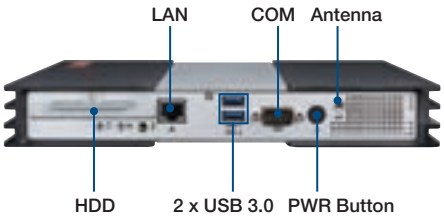


DS-862 External I/O

Front



Back



Turnkey Signage Solutions

the Key to Success



ADVANTECH

Enabling an Intelligent Planet

The Key to Accelerating Signage Deployment

Advantech has powered thousands of digital signage applications across every industry and market, and has now developed these turnkey signage solution offerings. They make it easy to create signage solutions, knowing that reliability, security and manageability are assured. All Advantech digital media players come pre-loaded with an embedded OS, along with SUSIAccess remote device management software, Acronis data protection software, and system security software by McAfee. With turnkey signage solutions, System Integrators save important development time and focus on their own applications. Results: better apps, quicker time-to-market.

Remote Management
- Remote Monitoring
- Remote ON/OFF
- Remote KVM

System Security
- White List Protection
- HDD Data Secured
- Unauthorized Activity Warning

Data Protection
- Full/Hot/Scheduled Backup
- One-click Recovery

Windows® Embedded Ready
- Multi-language: ENG, JPN, CHT, CHS
- Multi-Touch Support
- Motion Sensor Technology Support

Ultra Slim



DS-060
3rd Generation Intel® Core™ i7 with on-board VGA & DisplayPort Digital Signage Platform

Value



DS-570
Intel® Celeron® N2910 Quad-Core™ SoC with Advanced NVIDIA Graphic Digital Signage Platform

OPS



ARK-DS262
3rd Generation Intel® Core™ i7 OPS Digital Signage Platform

Tri-view



ARK-DS762
3rd Generation Intel® Core™ i7/i5/i3 with 3 HDMI Independent Displays Digital Signage Platform

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3

Intelligent Transportation Systems

ITA-1610	Intel® Atom™ D525 Compact System with Dual GigaLAN and Dual Display	*3-2*
ITA-1710	Intel® Atom™ D525 AFC System with Dual GigaLAN, 10 COM ports and Dual Display	*3-4*
ITA-1910	Intel® Atom™ D525 AFC System with Dual GigaLAN, 16 COM ports and Expansion Slots	*3-6*
ITA-2000	Intel® Atom N270 2U Fanless System 4 x LAN, 18 x COM, PC104+	*3-8*
ITA-3630	Intel® 3rd Generation Core™ i Processor Fanless System for Road Surveillance	*3-10*

To all of Advantech's Intelligent Transportation Systems, please visit advantech.com/products.



ITA-1610

Intel® Atom™ D525 Compact System with Dual GigaLAN and Dual Display



Features

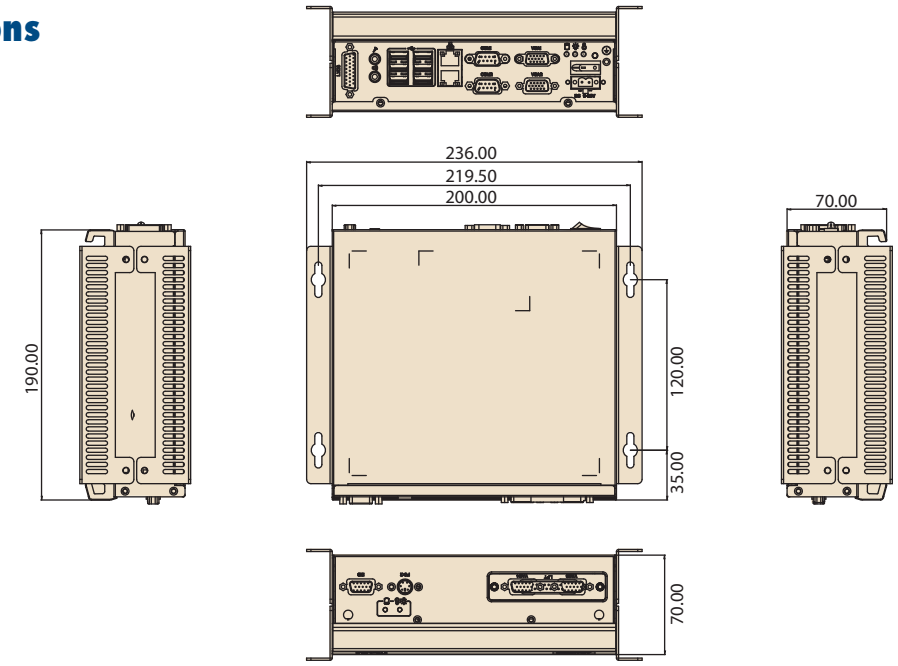
- Fanless, Intel® Atom™ D525, 1.8 GHz Dual Core Compact System
- Supports 9 ~ 36 V wide range DC input
- Supports up to 2 x GbE, 6 x USB 2.0, 6 x COM ports
- Serial ports support RS-232/422/485 with automatic flow control
- Dual display
- Supports 8 channel Digital I/O
- Onboard DDR3 memory up to 2 GB and optional NVRAM
- Supports 1x 2.5" HDD

Specifications

Processor System	CPU	Intel Atom D525		
	Max Speed	1.8 GHz		
	L2 Cache	1 MB		
	Chipset	Intel ICH8-M		
	BIOS	AMI SPI 16Mb		
Memory	Technology	Single channel DDR3 800		
	Capacity	Onboard 1 GB or 2 GB		
Graphics	Chipset	Embedded Gen3.5+GFX Core, Frenquency 400 MHz		
	VRAM	Shared system memory up to 256 MB SDRAM		
	Dual Display	2 x VGA or VGA + LVDS Single channel max: 2048 x 1536 @ 60Hz Dual channel max: 1366 x 768 @ 60Hz		
	LVDS	Support 18bit /24bit single channel up to 1366 x 768 @ 60Hz		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	2 x Intel 82583V		
	Connector	2 x RJ-45		
Storage	NVRAM	1 Mb FRAM(Optional)		
	CF	1 x CompactFlash socket for Type I/II CompactFlash disk		
	HDD	Support 1 x 2.5" HDD		
I/O Interface	VGA	2		
	LVDS	1		
	LAN	2		
	USB	6		
	COM	2 x RS 232/422/485 ports with automatic flow control (Up to 6 ports with additional 4 optional RS-232 Serial ports)		
	Digital I/O	1 x 8-ch GPIO		
	Audio	1 x Speaker out with 2x4w amplifier, 1x Mic in		
	PS/2	1		
	Reserved area	1 (default 1 x LPT port, optional 2 x VGA with PCA-5650)		
Expansion Slots	Mini PCIe	1		
Power	Power Input Voltage	DC 9 V ~ 36 V input		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1~255 sec/min		
Environment		Operating (W/O HDD)	Operating (With HDD)	Non-Operating
	Temperature	-25 ~ 60° C	0 ~ 40° C	-40 ~ 85° C
Physical Characteristics	Dimensions (W x H x D)	220 x 70 x 190 mm		

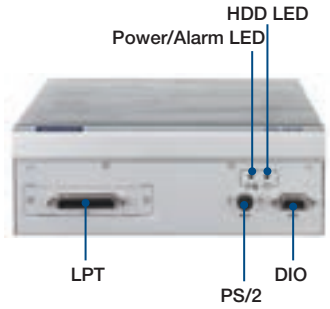
Dimensions

Unit: mm

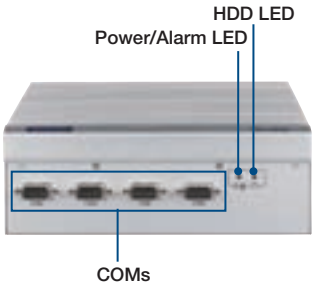


Front View

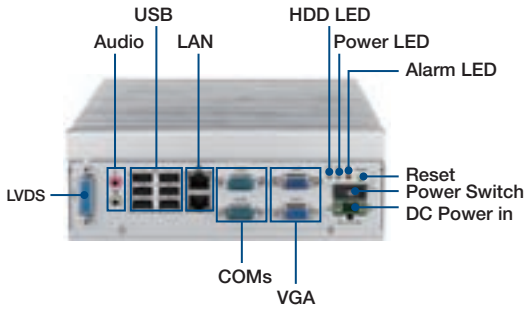
ITA-1610-00A1E



ITA-1610-S0A1E



Rear I/O View



Ordering Information

Part No.	CPU	Onboard Memory	VGA	COM	GbE LAN	USB	DIO	LPT	PS2
ITA-1610-00A1E	D525 1.8GHz	2GB DDR3	2	2	2	6	1	1	1
ITA-1610-S0A1E	D525 1.8GHz	2GB DDR3	2	6	2	6	0	0	0

Packing List

Part No.	Description	Quantity
2002161000	Startup Manual	1
2062161000	Utility CD	1
1960057417N001	HDD Bracket Part 1	1
1960054855N001	HDD Bracket Part 2	1
1700009409	HDD Cable 7P 15cm	1
1700017839	HDD Power Cable 15P 15cm	1
1990021567N000	HDD Thermal Pad	2
1960052263N001	Mounting Bracket	2
1652002205	Plug-in Block 2P	1
1960057418N001	VGA Bracket	1
	HDD accessories bag	1

Optional Accessories

Part No.	Description
PCA-5650-00A1E	Mini PCIe VGA card
1757003659	ADAPTER 100-240V 65W 19V 3.42A W/PFC 9NA0651348
1700008972	Power Cable 2-pin 180cm,USA type (CCC)
1700001948	Power Cord 2P Europe 2.5A 250V 1.8M
1700001949	Power Cord 2P UK 2.5A/3A 250V 1.8M

ITA-1710

Intel® Atom™ D525 AFC System with Dual GigaLAN, 10 COM ports and Dual Display



Features

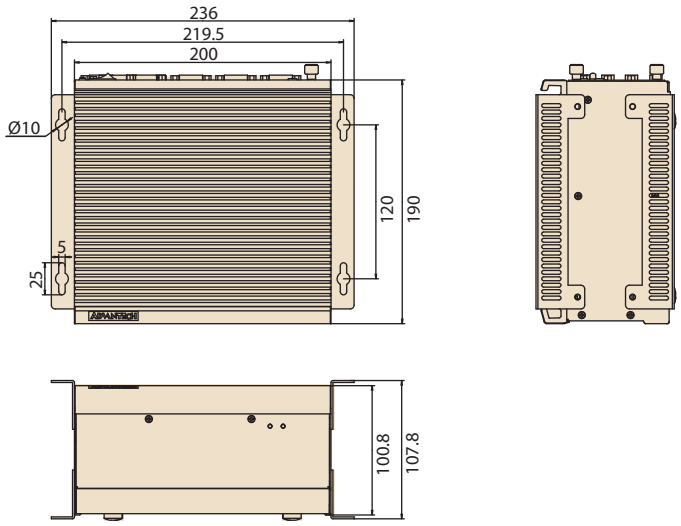
- Fanless, Intel® Atom™ D525, 1.8 GHz Dual Core Compact System
- Supports 9 ~ 36 V wide range DC input
- Supports up to 2 x GbE, 6 x USB 2.0, 10 x COM ports
- Serial ports support RS-232/422/485 with automatic flow control
- Wide temperature -25 ~ 60° C
- Supports up to 24 Channel 24/48 bits Digital I/O
- Onboard DDR3 memory up to 2 GB and optional NVRAM
- Easy-accessible CF/DOM Module

Specifications

Processor System	CPU	Intel Atom D525		
	Max Speed	1.8 GHz		
	L2 Cache	1 MB		
	Chipset	Intel ICH8-M		
	BIOS	AMI SPI 16 Mb		
Memory	Technology	Single channel DDR3 800		
	Max. Capacity	Onboard 1 GB (max up to 2 GB)		
Graphics	Chipset	Embedded Gen3.5+ GFX Core, Frequency 400 MHz		
	VRAM	Shared system memory up to 256 MB SDRAM		
	Dual display	2 x VGA or VGA + LVDS (Optional) Single Channel Max: 2048 x 1536 @ 60Hz Dual Channel Max: 1366 x 768 @ 60Hz		
	LVDS	Support 18-bit single channel up to 1366 x 768 @ 60 Hz (Optional)		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	2 x Intel 82583V		
	Connector	2 x RJ-45		
Storage	NVRAM	1Mb FRAM (Optional)		
	CF	1 x CompactFlash socket for Type I/II CompactFlash disk 1 x Easy Swap CompactFlash Module		
	HDD	Support 2.5" HDD (Optional)		
I/O Interface	VGA	2		
	LAN	2		
	USB	6		
	Serial	10 x RS-232/422/485 Serial ports with automatic flow control (Up to 14 ports with additional 4 optional RS-232 Serial ports)		
	Digital I/O	12-CH GPI, 12-CH GPO (Optional aditional 12-ch GPI, 12-ch GPO)		
	Audio	1 x Speaker out with 2x4w amplifier, 1x Mic in		
Expansion Slots	Mini PCIe	1		
Power	Input Voltage	DC 9 V ~ 36 V		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1~255 sec/min		
Environment		Operating (W/O HDD)	Operating (With HDD)	Non-Operating
	Temperature	-25 ~ 60° C	0 ~ 40° C	-40 ~ 85° C
Physical Characteristics	Dimensions (W x H x D)	200 x 190 x 100 mm		

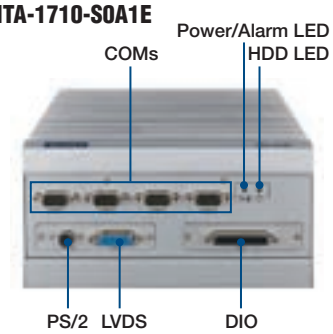
Dimensions

Unit: mm (inch)

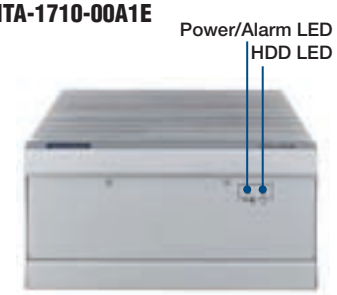


Front View

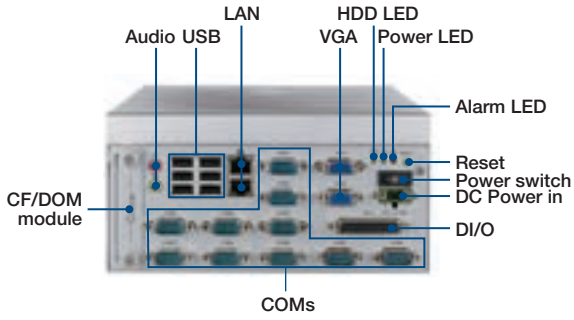
ITA-1710-S0A1E



ITA-1710-00A1E



Rear I/O View



Ordering Information

Part number	CPU	Onboard Memory	VGA	COM	D/O	GbE LAN	PS/2	LPT	LVDS	USB	CF Tray	F-ram
ITA-1710-00A1E	D525	1GB DDR3	2	10	24bit	2	No	No	No	6	Yes	No
ITA-1710-01A1E	D525	2GB DDR3	2	10	24bit	2	No	No	No	6	Yes	No
ITA-1710-S0A1E	D525	2GB DDR3	2	14	48bit	2	1	1 (optional)	1	6	Yes	No

Packing List

Part No.	Description	Quantity
2002171000	Startup manual	1
2062171000	Utility CD	1
1700019531	CF Cable 15cm	1
1960052263N001	Mounting Bracket	2
1960055919N001	DOM Bracket	1
1652002205	Plug-in Block 2P	1
1990006571S000	Rubber Pad	4
9662171000E	Accessory Box Of HDD Bracket	1

Optional Accessories

Part No.	Description
PCA-5650-00A1E	Mini PCIe VGA card
1757003659	ADAPTER 100-240V 65W 19V 3.42A W/PFC 9NA0651348
1700008972	Power Cable 2-pin 180cm,USA type (CCC)
1700001948	Power Cord 2P Europe 2.5A 250V 1.8M
1700001949	Power Cord 2P UK 2.5A/3A 250V 1.8M



ITA-1910

Intel® Atom™ D525 AFC System with Dual GigaLAN, 16 COM ports and Expansion Slots



Features

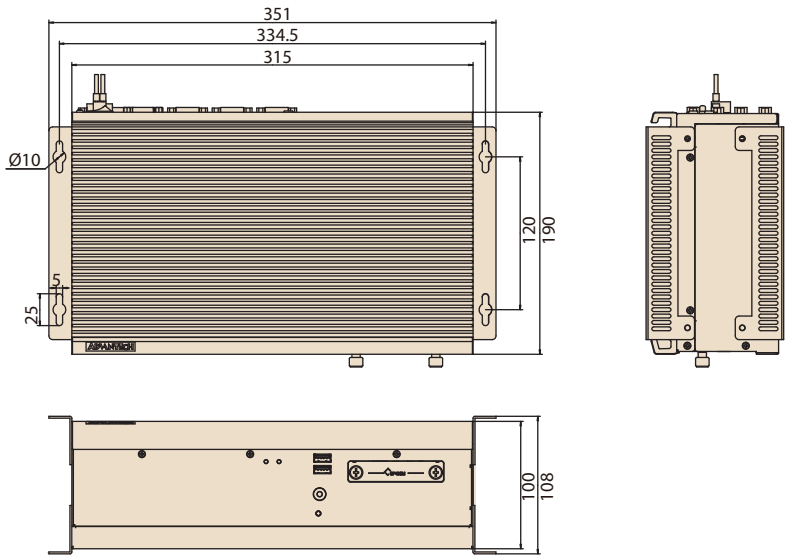
- Fanless, Intel® Atom™ D525, 1.8 GHz Dual Core Compact System
- Supports 9 ~ 36 V wide range DC input
- Supports up to 2 x GbE, 8 x USB 2.0, 16 x COM ports
- Serial ports support RS-232/422/485 with automatic flow control
- PCI/PCIe expansion slots
- Supports up to 24 Channel 24/48 bits Digital I/O
- Onboard DDR3 memory up to 2GB and optional NVRAM
- Front-accessible Easy Swap CF/DOM Module

Specifications

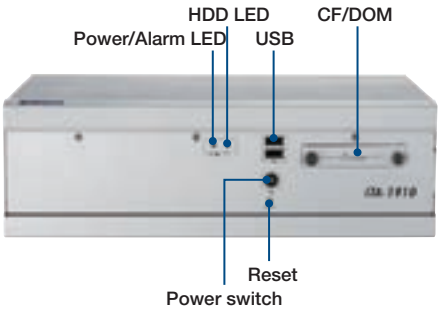
Processor System	CPU	Intel Atom Dual Core D525		
	Max Speed	1.8 GHz		
	L2 Cache	1 MB		
	Chipset	Intel ICH8-M		
	BIOS	AMI SPI 16 Mb		
Memory	Technology	Single channel DDR3 800		
	Max. Capacity	Onboard 1 GB (max up to 2 GB)		
Graphics	Chipset	Embedded Gen3.5+ GFX Core, Frequency 400 MHz		
	VRAM	Shared system memory up to 256 MB SDRAM		
	Multi display	2 x VGA or VGA + LVDS (Optional) Single Channel Max: 2048 x 1536 @ 60Hz Dual Channel Max: 1366 x 768 @ 60Hz		
	LVDS	Support 18-bit single channel up to 1366 x 768 @ 60Hz (Optional)		
Extension Graphics (Optional)	Chipset	SMI SM750 GPU		
	VRAM	On chip 16MB		
	Multi display	2 x VGA		
	Max Resolution	Up to 1920 x 1440 @ 60Hz		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	2 x Intel 82583V		
	Connector	2 x RJ-45		
Storage	NVRAM	1 Mb FRAM (Optional)		
	CF	1 x CompactFlash socket for Type I/II CompactFlash disk 1 x Easy Swap SATA DOM CompactFlash Module		
	HDD	Support 2.5" HDD (Optional)		
I/O Interface	VGA	2		
	LAN	2		
	USB	8		
	Serial	16 x RS-232/422/485 Serial ports with automatic flow control		
	Digital I/O	12-ch GPI, 12-ch GPO (Option another 12-ch GPI, 12-ch GPO)		
	Audio	1 x Speaker out with 2x4w amplifier, 1x Mic in		
Expansion Slots	PCI 32-bit	1		
	PCIe x 1	2 (w/o 6 COM I/O Card)		
	Mini PCIe	1		
Power	Input Voltage	DC 9V ~ 36V		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1~255 sec/min		
Environment		Operating (Without HDD)	Operating (With HDD)	Non-Operating
	Temperature	-25 ~ 60° C	0 ~ 40° C	-40 ~ 85° C
Physical Characteristics	Dimensions (W x H x D)	315 x 190 x 100 mm		

Dimensions

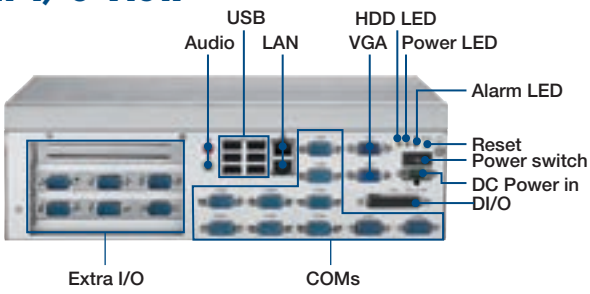
Unit: mm



Front View



Rear I/O View



Ordering Information

Part No.	CPU	On Board Memory (DDR3 800 MHz)	COM (RS-232/422/485)	DI/O
ITA-1910-00A1E	D525 1.8 GHz	1G	16	24-bit
ITA-1910-01A1E	D525 1.8 GHz	2G	16	24-bit

Packing List

Part No.	Description	Quantity
2002191000	Startup manual	1
2062171000	Utility CD	1
1700019558	CF Cable 35cm	1
1960052263N001	Mounting Bracket	2
1960055919N001	DOM Bracket	1
1652002205	Plug-in Block 2P	1
1990006571S000	Rubber Pad	4
9662191000E	Accessory Box Of HDD Bracket	1

Optional Accessories

Part No.	Description
PCA-5650-00A1E	2 VGA output Mini PCI Express Graphic card
1757003659	ADAPTER AC to DC 100-240V/19V 65W 3.42A
1700001947	Power Cable 2P 7A 125V 1.8M(USA)
1700001948	Power Cable 2P 2.5A 250V 1.8M(Europe)
1700001949	Power Cable 2P 2.5A/3A 250V 1.8M(UK)
1700019591	COM Cable 10cm
1700019592	DIO Cable 15cm
1700002223	Parallel Cable 32cm

ITA-2000

Intel® Atom N270 2U Fanless System
4 x LAN, 18 x COM, PC104+



Features

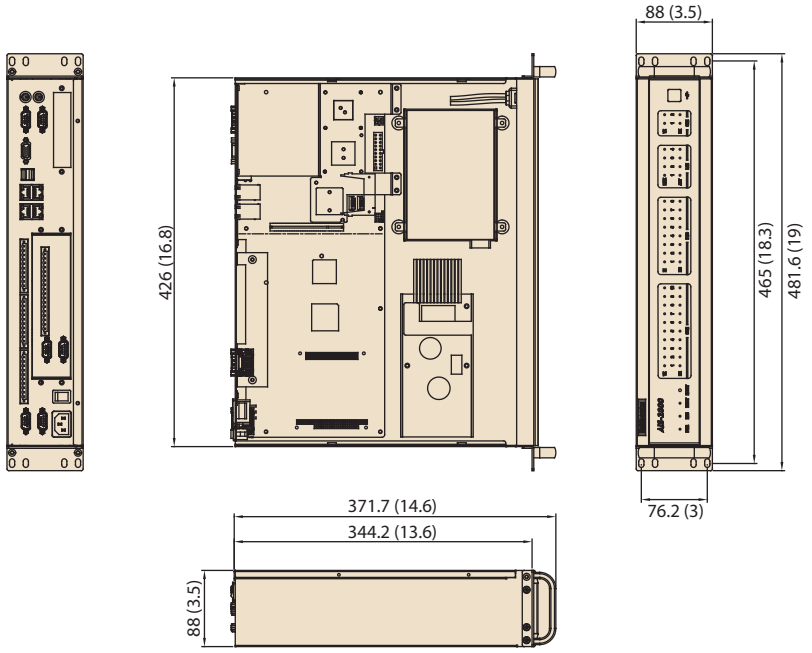
- Intel® AtomN270,1.6GHz CPU
- 2U Fanless System
- 2 x RS232 and up to 16 x RS232/422/485 COM port
- Supports auto flow control and 128byte FIFO
- Up to 8 x 10/100/1000 Base-T Ethernet
- 4 x USB2.0 and 1 x PC104+
- Supports CF card and 2.5" or 3.5" SATA HDD

Specifications

Process	CPU	Intel Atom N270
	Max Speed	1.6GHz
	Chipset	Intel 945GSE/ICH7-M
	BIOS	Award 4-Mbit Flash BIOS
	Memory	On board 1G DDR2 533/667 DRAM
Graphic	Chipset	Intel GMA 950
	Interface	CRT
Ethernet	Controller	Intel 82574L
	Interface	10/100/1000M Base-T
	Connector	4 x RJ45 (Optional another 4 x RJ45)
COM ports	Controller	Oxford OX16PCI954
	Ports	Max to 18
	Connector	2ports RS232 with DB9(COM1~2) 8 ports RS232/422/485 with Terminal Block (COM3~10 w/2KV$_{DC}$ isolation) 8 ports RS232/422/485 with Terminal Block (COM11~18 w/2KV$_{DC}$ isolation, Optional)
	Speed	50~115.2kbps
Others	Watch Dog	255 levels set by software
	PS/2	1 x Keyboard/Mouse
	USB2.0	4 x USB ports (Front x 2, Rear x 2)
	PC104+	1
	CAN(Optional)	CAN 2.0B (Controller: SJA-1000)
	DIO(Optional)	16bit DI/O
Storage	HDD	1 x Bracket for 2.5" or 3.5" HDD
	CF	1 x CF socket for Type I/II CF
PSU	Input Voltage	AC100 ~ 240V, DC 110 ~ 220V
	Output Power	120 W
Environment	Operating Temp	0 ~ 45° C
	Operating Humidity	95% @ 40° C
	Vibration	With CF: 5Grms, IEC 60068-2-64,5~500Hz, 1Oct./min,1hr/axis
	Shock	With CF: 50Grms, IEC 60068-2-27, half-sine, 11ms
Mechanical	Dimension	482 x 88 x 350 mm(19" x 3.46" x 12.8")
	Weight	9.2 kg (20.24 lb)

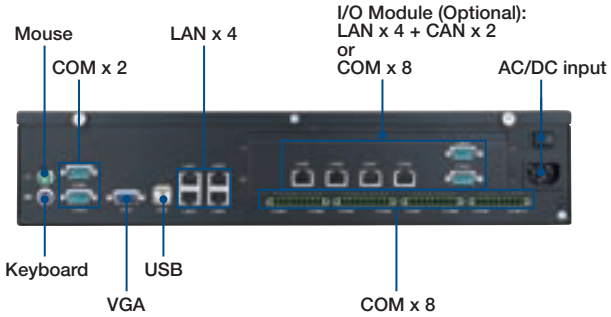
Dimensions

Unit: mm (inch)



Internal structure





Order Information

Part Number	Description
ITA-2000-00A2E	Intel Atom N270 processer 1.6GHz,1GB DDR2 SDRAM, 10 x Series port,4 x LAN
ITA-2000-01A2E	Intel Atom N270 processer 1.6GHz,1GB DDR2 SDRAM, 18 x Series port,4 x LAN,2 x CAN

Package List

Part Number	Description	Quantity
2062200001	Driver CD	1
1700014518	SATA cable (7pin, 180D w/lock)	1
1652005141	TERMINAL BLOCK 10P 3.81mm Female	4/8 (optional)

ITA-3630

Intel® 3rd Generation Core™ i Processor Fanless System for Road Surveillance



Features

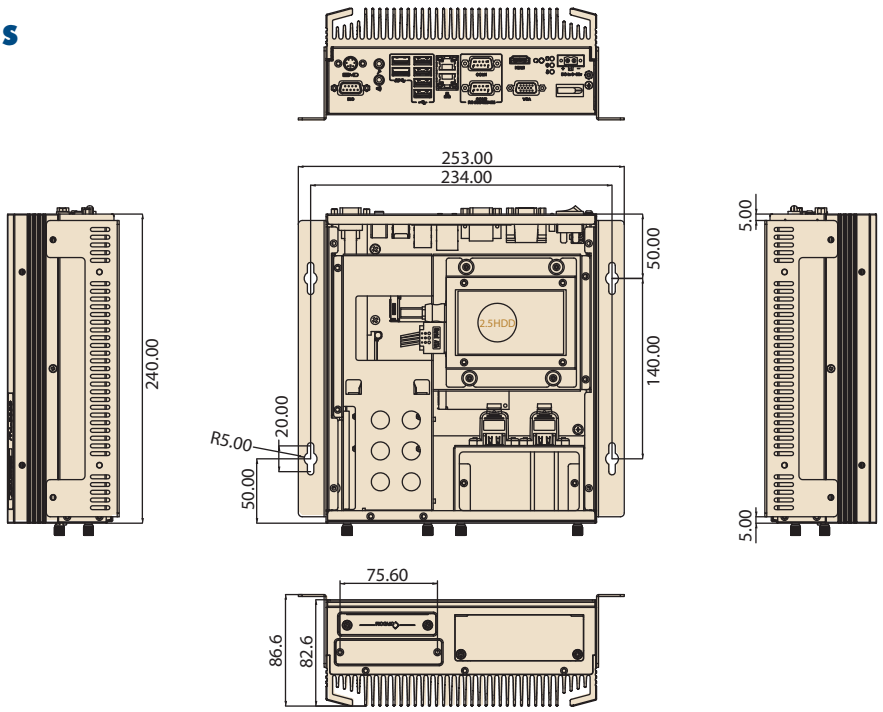
- Supports Intel® 3rd Generation Core™ i7/i5/i3 BGA type CPU
- Intel® HM76 PCH
- Support wide temperature -25° C ~ 60° C
- Supports three independent displays
- 2 x 2.5" HDD or 1 x 2.5" HDD+1 x Easy-swap CF/DOM
- Built-in fixed bracket with 2 x USB2.0 port for Dongle
- Supports 9 ~ 36V wide range DC input

Specifications

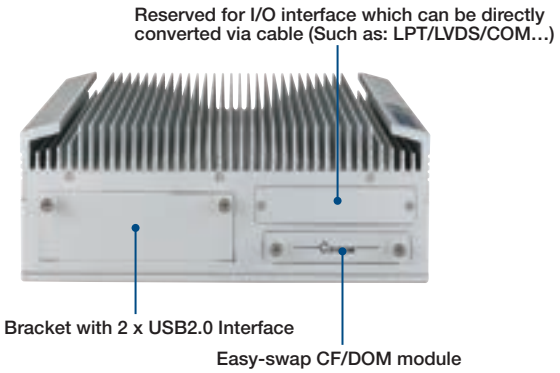
System Chipset	CPU	Intel i5-3610ME Processor	Intel i7-3555LE Processor	Intel i3-3217UE Processor
	Max Speed	2.7 GHz	2.5 GHz	1.6 GHz
	L3 Cache	4 MB	6 MB	3 MB
	Chipset	Intel HM76		
	BIOS	AMI SPI 16 Mb		
Memory	Technology	DDR3 1333/1600		
	Max. Capacity	4G on board memory		
Display	Chipset	Intel Integrated Graphics HD4000, support Direct x11		
	VGA	1 x DB15, max resolution up to 2048 x 1536		
	HDMI	1 x HDMI, support HDMI1.4 standard, max to 1920 x 1200 @ 60Hz		
	LVDS	Built-in interface, support 48-bit dual channel Convert to real I/O via cable (Front panel, Option)		
	eDP	Box Header on board Can be converted to DP/HDMI(video only)/DVI via converter board (optional)		
	Display Option	Support three independent display		
Ethernet	Controller	Intel I210-AT,10/100/1000 Mbps		
	Interface	2 x RJ-45		
Storage	HDD	Support 2 x 2.5" HDD or 2.5" HDD+CF module		
	SSD	1 x internal mSATA		
I/O	USB	2 x USB3.0 & 4 x USB2.0		
	Serial Port	2 x DB9, RS232/422/485 with automatic flow control		
	DIO	1 x DB9, 8-bit		
	Audio	2 (1 x Line-Out, 1 x Mic-in)		
	PS2	1 x PS2		
	LPT	1 x DB26 (Front panel, option)		
Expansion Slot	Mini PCIe	1 x internal Mini PCIe (Full-Size)		
LED & Button	LED	Power x 1/Storage x 1/Fault x 1		
	Button	Power on/off Switch x 1 Reset button x 1		
Power	Input Voltage	DC wide range 9V ~ 36V input		
	Interface	2-pin terminal block		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1~255 sec/min		
Environment	Temperature	Operating with Industrial SSD/mSATA/CF with 0.7m/s air flow	Operating (with HDD)	Non-Operating
		-25 ~ 60° C	0 ~ 40° C	-40 ~ 85° C
Mechanical	Dimension (W x H x D)	253 x 86.6 x 240 mm		
	Install	Desktop/Wall-mounting		
Certifications	EMC	CE/FCC Class A, CCC, BSMI		
	Safety	UL,CCC,BSMI		

Dimensions

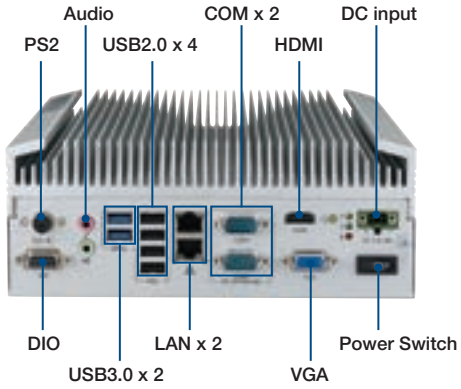
Unit: mm



I/O Front View



I/O Rear View



Ordering Information

Part Number	Description
ITA-3630-00A1E	Intel Core i5-3610ME 2.7GHz,w/dual HDD bracket
ITA-3630-01A1E	Intel Core i5-3610ME 2.7GHz,w/CF bracket

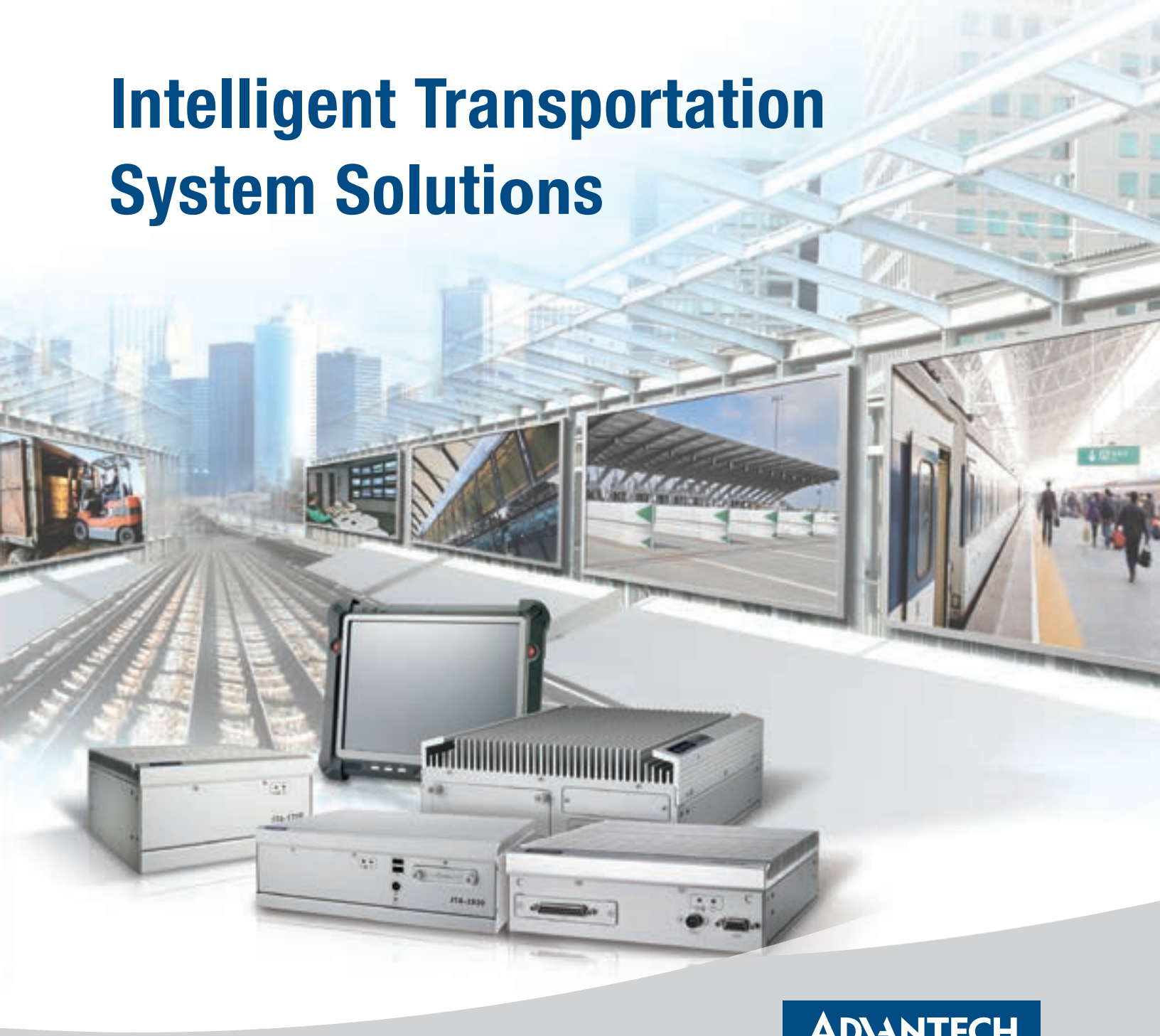
Packing List

Part No.	Description
-	1 x ITA-3630
2062363000	1 x Driver CD
200K363000	1 x Startup manual
1960059401N001	2 x Supporting-angels
1652002205	1 x 2-pin Terminal Block

Optional Accessory

Part No.	Description
1757003659	ADAPTER 100-240V 65W 19V 3.42A
1700001947	Power Cord 2P USA 7A 125V 1.8M
1700001948	Power Cord 2P Europe 2.5A 250V 1.8M
1700001949	Power Cord 2P UK 2.5A/3A 250V 1.8M
1757003705	ADAPTER 100-240V 84W 12V 7A
1700001524	Power Cord 3P UL 10A 125V 180cm
170203183C	Power Cord 3P Europe (WS-010+WS-083)183cm
170203180A	Power Cord 3P UK 2.5A/3A 250V 1.83M
1700008921	Power Cord 3P/3P POWER SUPPLY 1.8M ARK-5280 PSE
1700019592	Parallel cable/D-SUB 25P(F)/IDE#2 26P-2.0 15cm
1700020692-01	LVDS cable/D-SUB 26P(F)/2*20P-1.25 15cm

Intelligent Transportation System Solutions



ADVANTECH

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Advantech Intelligent Platforms with Industry-Proven Success

Advantech is committed to providing long-term cooperation and reliable platform solutions that enable intelligent transportation in cities all over the world. With a decade of successful experience, especially in China, Advantech is there to assist customers in building transportation solutions that are SAFE: with Smart development & management, Accurate sensor data for real-time control, Fast forecasting to avoid traffic congestion, and Environmental protection, with reduced traffic & carbon emissions. Besides, Advantech is adopting innovative product strategies and is collaborating with partners to optimize fulfillment of customer needs and to achieve Win-Win relationships.

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4

Advantech Intelligent Micro Computers

AiMC-2100	Micro Computer, Intel® Core™ i7/i5/i3 CPU, 1 Expansion, 250W 80Plus PSU	*4-2*
AiMC-3200	Micro Computer, Intel® Core™ i7/i5/i3 CPU, 2 Expansion, 250W 80Plus PSU	*4-4*
AiMC-3420	Micro Computer, Intel® Core™ i7/i5/i3 CPU, 3 Expansion, 300W 80Plus PSU	*4-6*

To view all of Advantech Intelligent Micro Computers, please visit www.advantech.com/products.



AiMC-2100

Micro Computer, Intel® Core™ i7/i5/i3 CPU, 1 Expansion, 250W 80Plus PSU



CE FCC

Features

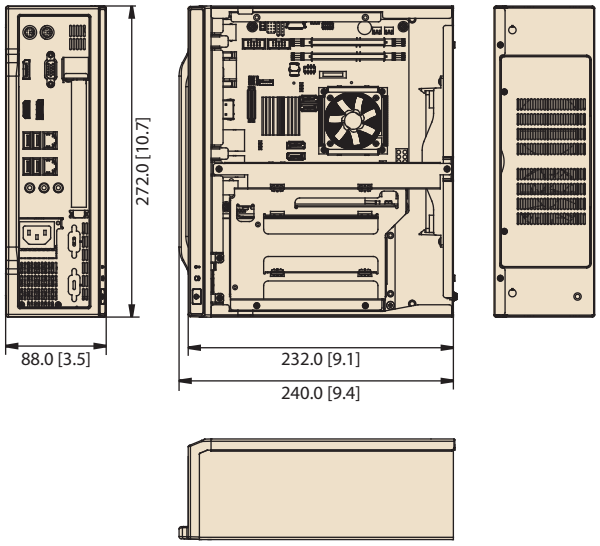
- Intel® QM77 Platform
  - Intel® 3rd/2nd gen Core™ i7/i5/i3 mobile CPU (PGA)
  - One PCIe x16 Expansion Slot
- Compact, well-thought-out design
  - Two internal, shock-resistant, 2.5" SATA HDD bays
  - Front accessible I/O: VGA+HDMI+Display port, 2 GbE LAN, 4 USB3.0, 2 COM
  - Ruggedized handle for convenient maintenance
  - Easy-to-maintain system fan and reusable filter
- Energy Savings
  - 250W 80Plus PSU

Specifications

Processor System	CPU	Core i7-3610QE	Core i5-3610ME	Core i3-3120ME	Celeron B810
	Core	4	2	2	2
	Base Frequency	2.3 GHz	2.7 GHz	2.4 GHz	1.6 GHz
	L3 Cache	6 MB	3 MB	3 MB	2 MB
	Chipset	QM77			
	BIOS	AMI 64Mb SPI Flash			
Memory	Technology	Dual Channel DDR3 1066/1333 MHz (Non ECC)			
	Max. Capacity	16 GB (8 GB per DIMM)			
	Socket	204-pin SO-DIMM x 2			
Graphics	Controller	Integrated Gfx Gen 7, supports DirectX11, OpenGL 3.1 and OpenCL 1.1			
Expansion slot	PCI Express x16	1			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	LAN1: Intel 82579LM, LAN2: Intel 82583V			
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)/ 300 MB/s (SATA 2.0)			
	HDD Bay	2 internal 2.5"			
I/O Interface	Display	1 VGA + 1 HDMI + 2 Display Port (Max triple display, except i7-2710QE, i5-2510E, i3-2330E & B810 CPU)			
	USB	4 USB3.0			
	Serial	2 (RS-232, COM2 with 5 V/12 V)			
	Mini PCI-E	1 internal			
	Cfast	1 internal			
	Audio	3 (Mic-in, Line-out, Line-in)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
Power Supply	Output Rating	AC 250W, ATX			
	Input Voltage	100 V_{AC} ~ 240 V_{AC}			
Cooling	System Fan	2 (6cm / 27.7 CFM)			
	Air Filter	Yes			
Miscellaneous	LED Indicators	Power, HDD, temperature			
	Control	Power on/off switch			
Environment		Operating		Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)		-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing		10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis		2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration			
Physical Characteristics	Dimension (W x H x D)	272 x 88 x 232 mm			
	Weight	3.5 kg			

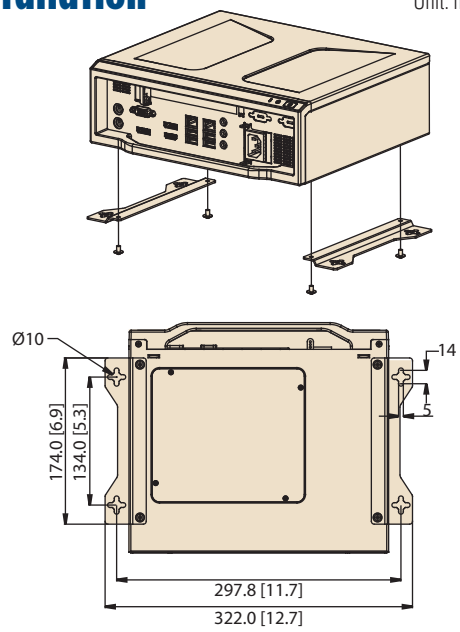
Dimensions

Unit: mm [inch]

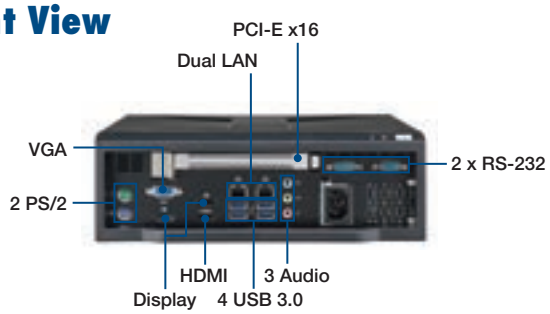


Installation

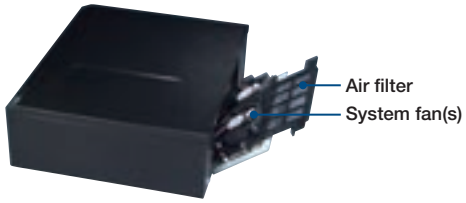
Unit: mm [inch]



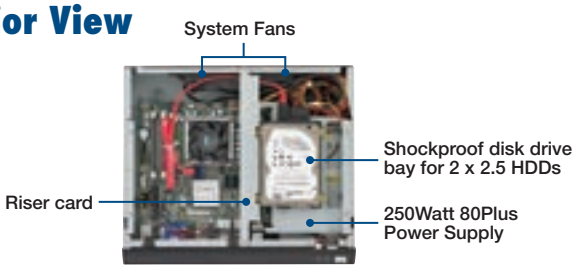
Front View



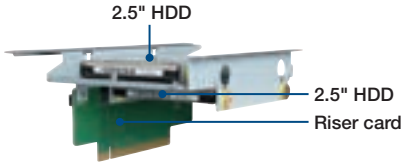
Rear Cover for Replacing Fans



Interior View



2.5" HDDs and Riser Card Bracket



Ordering Information

Part Number	Description
AIMC-2100-00A1E	Micro Computer, Intel Core i7/i5/i3 CPU, 1 Expansion, 250W 80Plus PSU

Optional Accessories

Part Number	Description
98R2662001E	VESA mounting kit

Packing List

Items	Part Number	Quantity
AIMC-2100 Bare System	AIMC-2100-00A1E	1
CPU Cooler	1960051292N001	1
Driver CD for Mainboard	2066027300	1
SATA Power Cable	1700003194	2
SATA HDD Cable	1703150102	2
Mounting Brackets	1960014487T00C	2
Rubber Foot	1990005896S000	4

AiMC-3200

Micro Computer, Intel® Core™ i7/i5/i3 CPU, 2 Expansion, 250W 80Plus PSU



CE FCC

Features

- Intel® H61 Platform
  - Intel® 3rd/2nd gen Core™ i7/i5/i3 CPU (LGA1155)
  - One PCIe x16 & one PCIe x4 Expansion Slots*
- Compact, well-thought-out design
  - Two internal, shock-resistant, 2.5" SATA HDD bays
  - Front accessible I/O: VGA+DVI-D, 2 GbE LAN, 3 USB2.0, 2 COM
  - Easy-to-maintain system fan and reusable filter
  - Alert to chassis intrusion
- Energy Savings
  - 250W 80Plus PSU

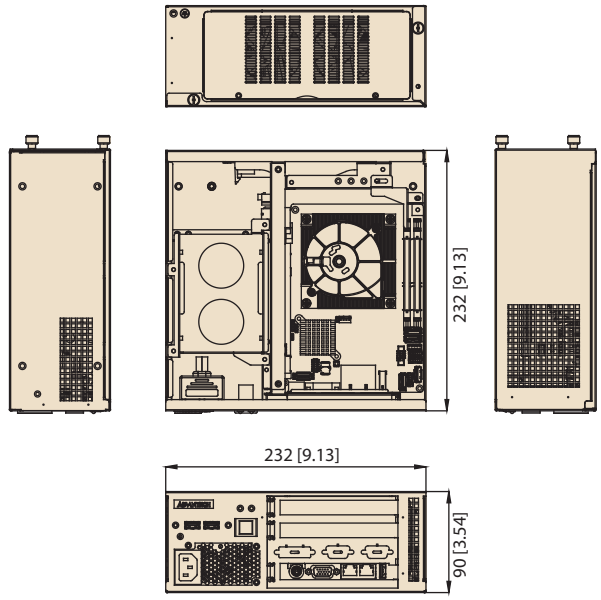
* Subject to Cooler solution, it will occupy PCIe x16 slot

Specifications

Processor System	CPU	Core i7-2600	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	H61		
	BIOS	AMI 64Mb SPI Flash		
Memory	Technology	Dual Channel DDR3 1066/1333 MHz (Non ECC)		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	204-pin SO-DIMM x 2		
Graphics	Chipset Integrated	Integrated Intel HD Graphics		
Expansion slot	PCI Express x16	1 (Lower-layer slot)		
	PCI Express x4	1 (Upper-layer slot)		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN1: Intel 82579V, LAN2: Intel 82583V		
SATA	Max Data Transfer Rate	300 MB/s (SATA 2.0)		
	HDD Bay	2 internal 2.5"		
I/O Interface	Display	VGA+DVI-D		
	USB	4 USB2.0 (3 in front, 1 internal type-A for software key)		
	Serial	2 RS-232		
	PS/2	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 250W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	2 (6cm / 27.7 CFM)		
	Air Filter	Yes		
Miscellaneous	Chassis intrusion alert	Yes		
	LED Indicators	Power, HDD, temperature		
	Control	Power on/off switch		
Environment		Operating		Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)		-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing		10 ~ 95% @ 40° C, non-condensing
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis		2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	232 x 90 x 232 mm		
	Weight	4.5 kg		

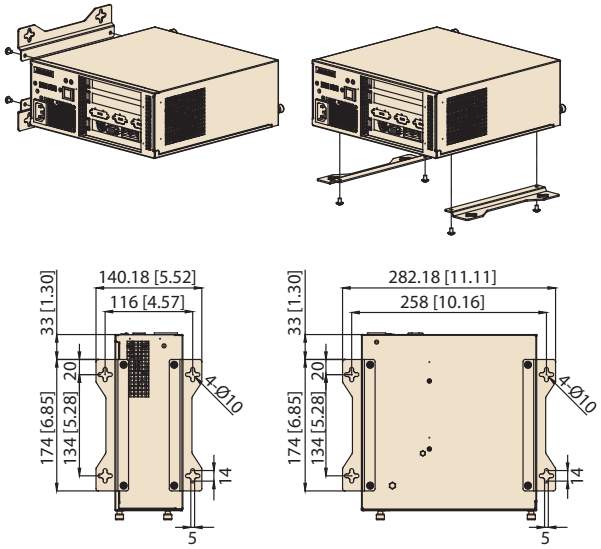
Dimensions

Unit: mm [inch]

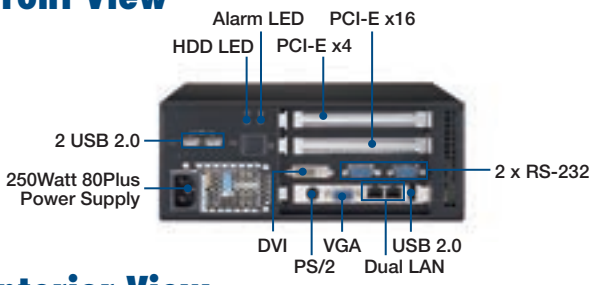


Installation

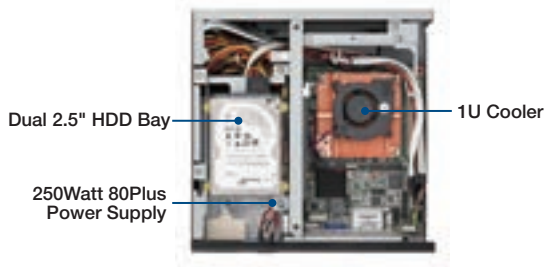
Unit: mm [inch]



Front View

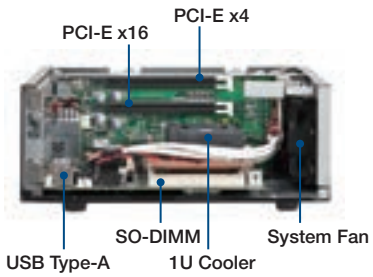


Interior View



Rear Cover for Replacing Fans





Ordering Information

Part Number	Description
AIMC-3200-00A1E	Micro Computer, Intel Core i7/i5/i3 CPU, 2 Expansion, 250W 80Plus PSU

Optional Accessories

Part Number	Description
1960053207N001	1.5U Cooler for i7/i5/i3 CPU
1960053065N001	1U Cooler for i3 CPU
PCIE-1674PC-AE	4-port PCI express GbE PoE card
PCIE-1672PC-AE	2-port PCI express GbE PoE card
PCA-COM485-00A1E	4-port RS-485/422 Module by LPC

Note: Purchasing proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible.

Packing List

Items	Part Number	Quantity
AIMC-3200 Bare System	AIMC-3200-00A1E	1
Driver CD	2066302600	1
SATA HDD Data Cable	1700003194	2
SATA HDD Power Cable	1703150102	2
Four-port USB Cable	1700014398	1
LPT Cable	1700002223	1
Mounting Brackets	1960014487T00C	2
Rubber Foot	1990012452S000	4

AiMC-3420

Micro Computer, Intel® Core™ i7/i5/i3 CPU, 3 Expansion, 300W 80Plus PSU



CE FCC

Features

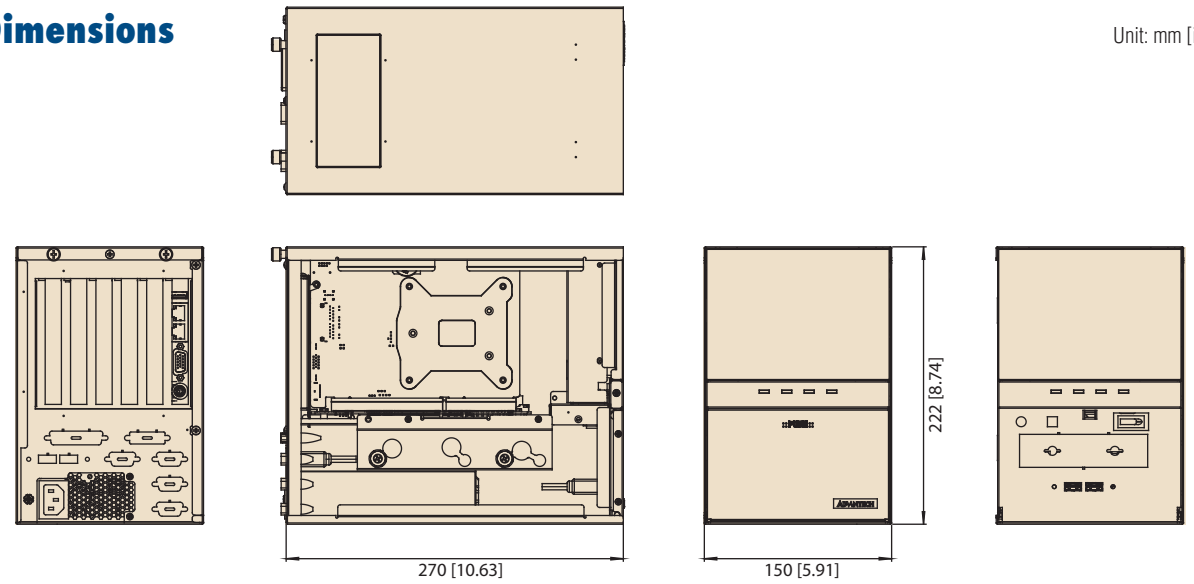
- Intel® H61 Platform
  - Intel® 3rd/2nd gen Core™ i7/i5/i3 CPU (LGA1155)
  - One PCIe x16 & two PCIe x1 Expansion Slots
- Compact & Rich I/O Configuration
  - One internal 3.5" SATA HDD bays with shock-resistant
  - Optional front removable 2.5" HDD bay
  - VGA, 2 GbE LAN, 8 USB2.0, 2 COM
  - Easy-to-maintain system fan and reusable filter
- Energy Savings
  - 300W 80Plus PSU

Specifications

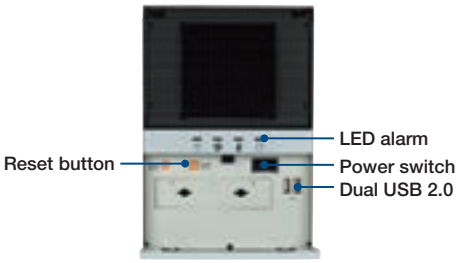
Processor System	CPU	Core i7-2600	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	H61		
	BIOS	AMI 64Mb SPI Flash		
Memory	Technology	Dual Channel DDR3 1066/1333 MHz (Non ECC)		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	204-pin SO-DIMM x 2		
Graphics	Chipset Integrated	Integrated Intel HD Graphics		
Expansion slot	PCI Express x16	1		
	PCI Express x1	2		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN1: Intel 82579V, LAN2: Intel 82583V		
SATA	Max Data Transfer Rate	300 MB/s (SATA 2.0)		
	HDD Bay	1 internal 3.5"		
I/O Interface	Display	VGA		
	USB	8 (USB 2.0 compliant, 2 in front, 5 in rear, 1 internal type-A for software key)		
	Serial	2 RS-232		
	PS/2	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	1 (9cm / 53 CFM)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	Power, HDD, Temp, Fan		
	Control	Power on/off switch, Reset button		
Environment		Operating	Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (WxHxD)	150 x 222 x 270 mm		
	Weight	5 kg		

Dimensions

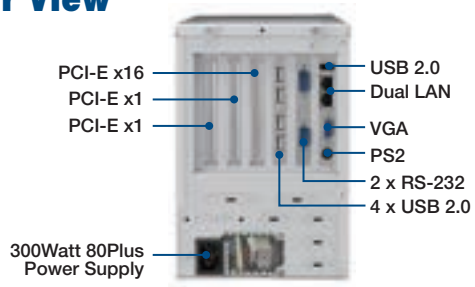
Unit: mm [inch]



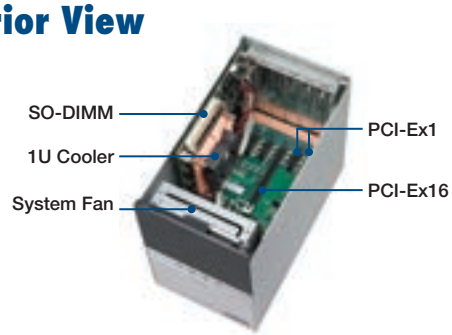
Front View



Rear View



Interior View



IDT-3120E



Optional mobile rack for dual 2.5" SATA HDDs with a 3.5" drive bay occupancy

Ordering Information

Model name	Power Supply
AIMC-3420-00A1E	Micro Computer, Intel Core i7/i5/i3 CPU, 3 Expansion, 300W 80Plus PSU

Optional Accessories

Part Number	Description
1960053207N001	1.5U Cooler for i7/i5/i3 CPU
1960053065N001	1U Cooler for i3 CPU
PCIE-1674PC-AE	4-port PCI express GbE PoE card
PCIE-1672PC-AE	2-port PCI express GbE PoE card
1700008822	DVI Cable
IDT-3120E	Removable dual 2.5"HDD tray
PCA-COM485-00A1E	4-port RS-485/422 Module by LPC

Note: Purchasing proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible.

Packing List

Items	Part Number	Quantity
AIMC-3420 Bare System	AIMC-3420-00A1E	1
Driver CD	2066302600	1
SATA HDD Data Cable	1700003194	1
SATA HDD Power Cable	1703150102	1
LPT Cable	1700002223	1
MOUNTING BRACKET	1960048518N001	1
Rubber Foot	1990012452S000	4

Advantech Intelligent Micro Computer

Compact, Lightning-fast Solution for Machine Automation



ADVANTECH

Enabling an Intelligent Planet

Advantech Intelligent Micro Computer

What makes these micro computers different is their compact turnkey design which not only saves space but means they can be quickly and easily deployed without prohibitive integration costs. AIMC series micro computers are typically 50% more space saving compared to traditional wallmount systems. Until now, most production manufacturers had adopted full-size IPC solutions for their machine automation applications. But increasingly, fewer add-on cards are becoming the norm in machine automation, for example a single motion, I/O or artificial vision card can fulfill most applications.

AiMC Series



AiMC-2100
Micro Computer, Intel® Core™ i7/i5/i3 CPU, 1 Expansion, 250W 80Plus PSU



AiMC-3200
Micro Computer, Intel® Core™ i7/i5/i3 CPU, 2 Expansion, 250W 80Plus PSU



AiMC-3420
Micro Computer, Intel® Core™ i7/i5/i3 CPU, 3 Expansion, 300W 80Plus PSU

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Neihu District, Taipei 114, Taiwan, R. O. C.
Tel: 886-2-27927818
Email: BoxIPC@advantech.com

5

Advantech Intelligent Inspection Systems

AIIS-1240 PoE Control Box, Supports Intel® Core™ i7/i5/i3 CPU, 4-CH GbE PoE *5-2*

To view all of Advantech Intelligent Inspection Systems, please visit www.advantech.com/products.



AIIS-1240

PoE Control Box, Supports Intel® Core™ i7/i5/i3 CPU, 4-CH GbE PoE



Features

- Intel® 3rd/2nd Core™ i7/i5/i3 CPU (LGA1155)
- 4-CH GbE PoE (Power over Ethernet), IEEE 802.3af compliant
  - Powered device auto detection and classification
  - Supports IEEE 1588 & GigE Vision device
- Compact & thoughtful design
  - Volume less than 3 Liter
  - Easier fan filter maintenance
  - Internal USB Type-A with lock design (Max. 49mm length)
  - Wall or DIN rail mounting kit (optional)
  - Build in G-sensor for vibration detection

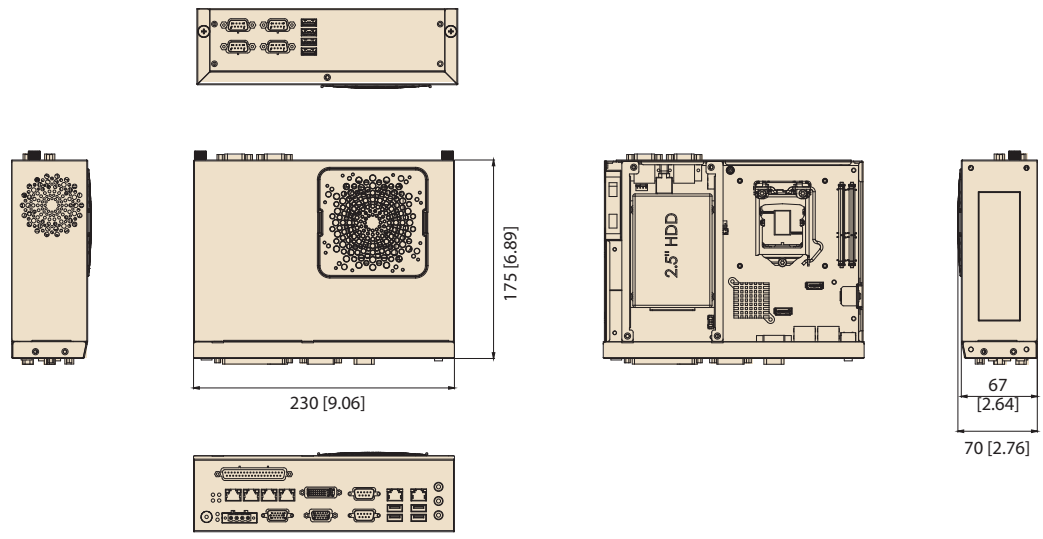
Specifications

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	H61		
	BIOS	AMI 64Mb SPI Flash		
Memory	Technology	Dual Channel DDR3 1066/1333 MHz (Non ECC)		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	204-pin SO-DIMM x 2		
Graphics	Chipset Integrated	Integrated Intel HD Graphics		
PoE	Controller	CH1 ~ CH4: Intel i210		
	Compliant	IEEE 802.3af		
	Power Output	15.4W per Channel		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN1: Intel 82579V, LAN2: Intel 82583V		
Storage	Internal 2.5" HDD Bay	1		
	CFast	1		
Front I/O	Display	VGA + DVI-D		
	USB	4 USB3.0		
	Serial	2 (RS-232, RS-422 or RS-485 via BIOS setting; RS-485 with auto-flow control)		
	DIO	8-bit (default), additional 32-bit (optional module AIIS-DIO32-00A1E)		
Rear I/O	USB	4 USB2.0		
	Serial	4 RS-232		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Requirement	Power Type	ATX		
	Power Input Voltage	19 V_{DC} ~ 24 V_{DC}		
	Minimum Power Input	DC 19-24V @ 8-6.3A		
	Power Adapter	AC to DC, DC24V/9.16A, 220W (Optional)		
Cooling	System Fan	1 (6cm / 27.7 CFM)		
Miscellaneous	LED Indicators	Power, HDD, temperature		
	Control	Power on/off switch		
Environment		Operating	Non-operating	
	Temperature	0 ~ 45° C (32 ~ 113° F)*	-40 ~ 70° C (-40 ~ 158° F)	
	Humidity	10 ~ 95% @ 40° C, non-condensing	10 ~ 95% @ 60° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2G, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	232 x 70 x 175 mm (9.06" x 2.76" x 6.89")		
	Weight	2.5 kg		

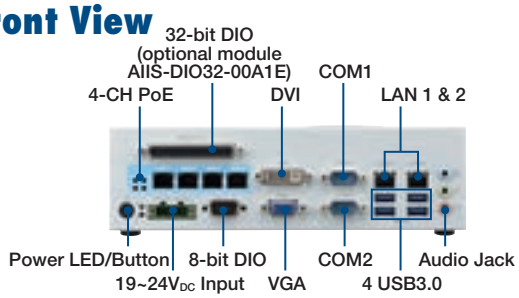
* Depend on CPU

Dimensions

Unit: mm [inch]



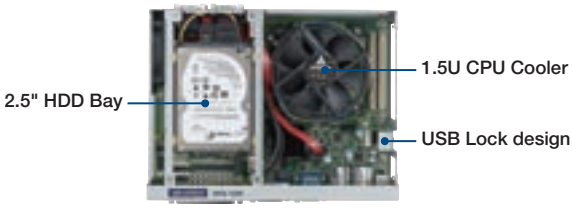
Front View

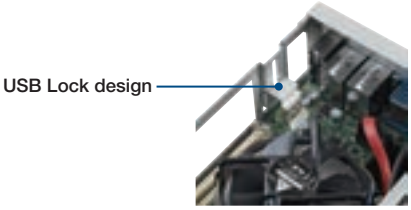


Rear View



Internal View





Ordering Information

Part Number	PoE Port	Display	USB 3.0/2.0	DIO	COM 232/422/485	COM 232
AIIS-1240-00A1E	4-CH	VGA+DVI-D	4 / 4	8-bit	2	4

Optional Accessories

Part Number	Description
1960058853N001	DIN-Rail Bracket
1757004518-01	220Watt DC24 Adapter
AIIS-DIO32-00A1E	DIO module, 32-bit, 9-pin USB interface

Note: If there is no 19~24V_{DC} source in your facility, this adapter is required to power on the system

Packing List

Items	Part Number	Quantity
AIIS-1240 Bare System	AIIS-1240-00A1E	1
Startup Manual	2006S12400	1
Driver CD	206K124000	1
Wallmount Bracket	1960014487T004	2
Rubber Foot	1990012452S000	4
CPU Cooler	1960060620N001	1

Advantech Video Wall Controller Solutions

Powered By Matrox® Mura MPX Series



ADVANTECH

Enabling an Intelligent Planet

Advantech Video Wall Controller

An Advantech video wall controller is designed for video wall applications.
Being strictly validated by the Matrox laboratory, Advantech video wall controller features Mura MPX Series compatibility, and industrial reliability, key characteristics are listed below.

- **Industrial Reliability:** System can run stably under 40°C temperature.
- **BIOS Optimized:** Multiple Mura MPX cards can be recognized by the system and function well.
- **Thermal Optimization:** No thermal issue even when multiple Mura MPX are installed in the system.
- **Data Switch Optimized:** Video captured can be displayed anywhere on the video wall.
- **Power Solution Optimized:** Power supply is sufficient for the system to carry multiple Mura MPX.
- **Remote Management:** A remote administrator can monitor and control the system by network connection.

8-output Solutions



AVS-240
- Supported: 2 Mura MPX-4/4 & 1 Mura MPX-V16
- Inputs: 8 Analog/Digital
- Outputs: 8 Analog/Digital
- Intel® Xeon® E5-2400 Series
- Dimension: 482 x 177 x 479 mm



AVS-290
- Supported: 2 Mura MPX-4/4
- Inputs: 8 Analog/Digital
- Outputs: 8 Analog/Digital
- Intel® Xeon® E3-1200 Series
- Dimension: 200 x 320 x 480 mm

20-output Solutions



AVS-540
- Supported: 5 Mura MPX-4/4
- Inputs: 20 Analog/Digital
- Outputs: 20 Analog/Digital
- Intel® Xeon® E5-2600 Series
- Dimension: 482 x 177 x 479 mm



AVS-541
- Supported: 5 Mura MPX-4/4 & 10 Mura MPX-V16
- Inputs: 20 Analog/Digital & 160 Analog
- Outputs: 20 Analog/Digital
- Intel® Xeon® E3-1200 V2 Series
- Dimension: 482 x 177 x 657 mm

40-output Solutions



AVS-840
- Supported: 10 Standard Mura MPX
- Inputs: 40 Analog/Digital
- Outputs: 40 Analog/Digital
- Intel® Xeon® E3-1200 V2 Series
- Dimension: 482 x 177 x 657 mm



AVS-860
- Supported: 10 Standard Mura MPX
- Inputs: 40 Analog/Digital
- Outputs: 40 Analog/Digital
- Intel® Xeon® E3-1200 V2 Series
- Dimension: 482 x 266 x 464 mm

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Intel Embedded Alliance Premier

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matrox Graphics for Professionals

Advantech Headquarters
No.1, Alley 20, Lane 26, Rueiguang Road,
Neihu District,Taipei, Taiwan, 114, R.O.C.

6

Advantech Video Wall Controllers

AVS-240	4U Rackmount Intel® Xeon® E5-2400 Video Wall Controller, Supporting 8-output Video Wall	*6-2*
AVS-290	Desktop/Wallmount Intel® Xeon® E3-1200 Video Wall Controller, Supporting 8-output Video Wall	*6-4*
AVS-540	4U Rackmount Intel® Xeon® E5-2600 Video Wall Controller, Supporting 20-output Video Wall	*6-6*
AVS-541	4U Rackmount Intel® Xeon® E3-1200V2 Video Wall Controller, Supporting 20-output Video Wall	*6-8*
AVS-840	4U Rackmount Intel® Xeon® E3-1200V2 Video Wall Controller, Supporting 40-output Video Wall	*6-10*
AVS-860	6U Rackmount Intel® Xeon® E3-1200V2 Video Wall Controller, Supporting 40-output Video Wall	*6-12*

To view all of Advantech Video Wall Controllers, please visit www.advantech.com/products.



AVS-240

4U Intel® Xeon® E5-2400 Video Wall Controller, Supporting 8-output Video Wall



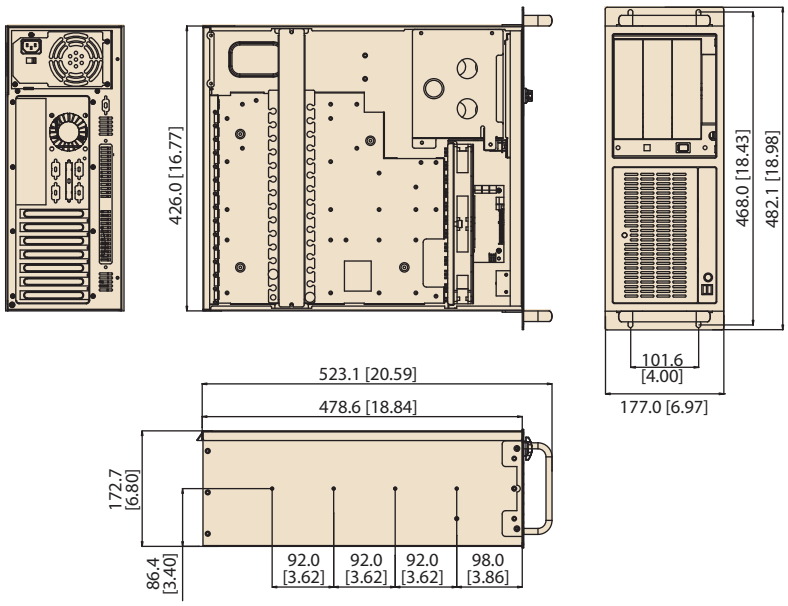
Features

- Validated by Matrox
- Support Mura Card : 2 Mura MPX-4/4 and 1 Mura MPX-V16
- Maximum Video Input: 8 Analog/Digital
- Maximum Video Output: 8 Analog/Digital
- Processor: Intel Xeon E5-2400 series up to 8 cores/ 16 threads
- Memory : DDR3-1333/1600 MHz (ECC) U-DIMM and R-DIMM up to 96 GB
- Remote Management: IPMI, Advantech Remote Monitoring Utility

Specifications

Processor System	Chipset	Intel C602J Chipset	
	CPU	Intel LGA1356 Xeon E5-2400 Single processor (up to 95W TDP)	
	L2 Cache	20/15/10 MB	
	Front Side Bus	-	
	Memory	ECC & Register or ECC or non ECC DDR3 1600/1333/1066 MHz UDIMMs, maximum 96 GB	
Graphics	Controller	Aspeed AST2300 (Needs being disabled when Mura MPX is installed)	
	VRAM	64 MB	
Expansion Slot	PCIe x16 (Gen 3.0)	16.0 GB/s per direction, 1 slot (For Mura MPX installation)	
	PCIe x8 (Gen 3.0)	8.0 GB/s per direction, 1 slot (For Mura MPX installation)	
	PCIe x4 (Gen 2.0)	2.0 GB/s per direction, 1 slot (For Mura MPX-V8/V16 installation)	
	PCIe x1 (Gen 2.0)	500 MB/s per direction, 1 slot	
	PCI	32 bit/33 MHz, 2 slots	
Drive Bay	5.25" Front-Accessible	3	
	3.5" (Front Accessible)	1	
	3.5" Internal	-	
Ethernet	Interface	Dual 10/100/1000 Mbps Gigabit Ethernet	
	Controller	Intel 82579LM + Intel 82574L	
Front I/O Interface	USB	2 x USB2.0	
	PS/2	1	
Rear I/O Interface	USB	4 x USB2.0	
	PS/2	2	
	COM	1	
	Disaplay	1 x VGA	
	Parallel	-	
	RJ-45	2	
Watchdog Timer	Output	Interrup, system reset	
	Interval	Programmable, 1~255 sec/min	
Power Supply	Power Output Wattage	80+ Bronze 500W Single Power Supply	
	Input Range	AC 100 ~ 240 V	
Cooling	Chassis Fan	2 (12 cm / 85 CFM each)	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power status, HDD activity, Temperature, Fan, and Power voltage status	
	Remote Management	Advantech Remote Monitoring Utility	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32~104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C	10 ~ 95% @ 40° C
	Vibration (5 ~ 500 Hz)	1 Grms	2 Grms
	Shock	10G (with 11ms duration, half since wave)	30G
Physical Characteristics	Dimension	482 x 177 x 479 mm (19" x 7" x 18.9")	

Dimensions



Unit: mm [inch]

Ordering Information

Advantech P/N	Description
AVS-240-00A1E	4U Rackmount Xeon E5-2400 Video Wall Controller Supporting Dual Matrox Mura MPX
1960055362N011	Cooler for Xeon E5-2400 series CPU with TDP Up To 95W

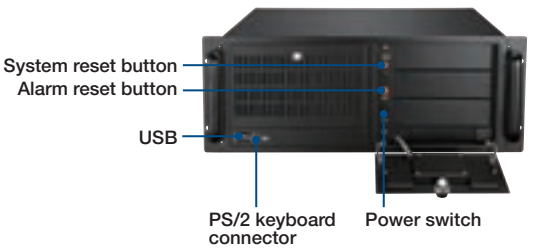
Note: Purchasing this CPU cooler is a must, other brand CPU cooler may result in compatibility issue.

System Contents

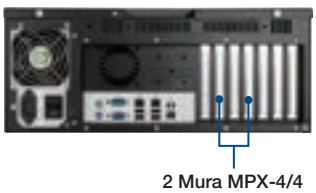
Items	Advantech P/N	Quantity
AVS-240 Bare-Bone System	N/A	1
Driver CD	2066820I00	1

Note: CPU cooler needs to be purchased separately.

Front View



Rear View



Compatible Processors

Advantech P/N	Description
96MPXE-1.8-15M13T	XEON 1.8G 15M 1356P 6CORE E5-2428L(G)- Sandy bridge
96MPXE-1.8-20M13T	XEON 1.8G 20M 1356P 8CORE E5-2448L(G)- Sandy bridge
96MPXE-2.0-10M13T	XEON 2.0G 10M 1356P 4CORE E5-2418L(G)- Sandy bridge

Validated Matrox Mura Cards

Advantech P/N	Model	Output	Input
96VG-2G-PE-MA	Mura MPX-4/0	4	0
96VG-2G-PE-MA1	Mura MPX-4/2	4	2
96VG-2G-PE-MA2	Mura MPX-4/4	4	4
96VG-1G-PE-MA	Mura MPX-SDI	2	2
96VG-128M-PE-MA	Mura MPX-V8	0	8
96VG-256M-PE-MA	Mura MPX-V16	0	16

Optional Parts

Item	Advantech P/N
Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays	IDT-5230E
Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays	IDT-3120E
Mobile rack for converting a 5.25" drive bay to four 2.5" SAS/SATA HDD trays	96RACK-5SS-CAGE-CR
SATA cable with lock	1700003194
ACP-4000 rail kit	9680006905
HD Audio-Card	PCA-AUDIO-HDA1E (Occupying 1 expansion slot)

Note:
1. To support 2 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 2 + IDT-3120E x 1
2. To support 3 3.5" SATA HDDs RAID with on-board RAID: 1700003194 x 3 + IDT-5230E x 1
3. To support 4 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 4 + 96RACK-5SS-CAGE-CR x 1

Validated OS

Advantech P/N	OS for Embedded System
968QS28F08	Windows Server® 2008 with Hyper-V™ Standard 64 Bit
968QSV2845	Windows Server® 2008 without Hyper-V™ Standard 64 Bit
968QW7PROE	Windows® 7 Professional 64 Bit

AVS-290

Desktop/Wallmount Intel® Xeon® E3-1200 Video Wall Controller, Supporting 8-output Video Wall



Features

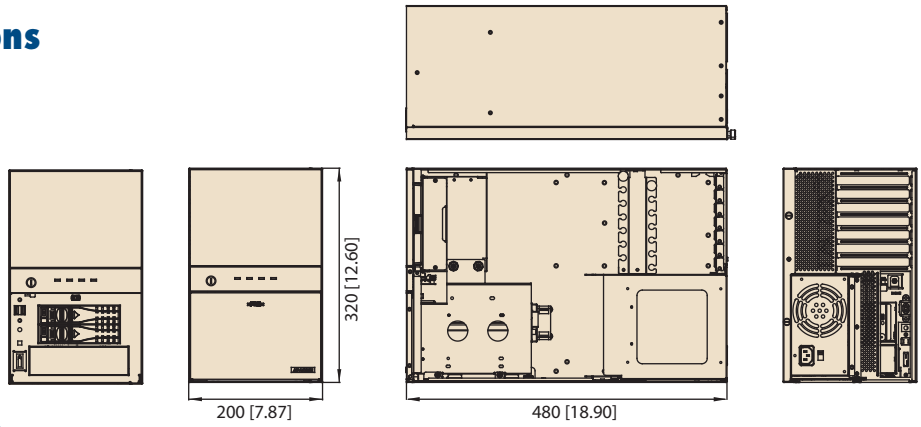
- Validated by Matrox
- Supports Mura Card : 2 Mura MPX-4/4
- Maximum Video Input: 8 Analog/Digital
- Maximum Video Output: 8 Analog/Digital
- Processor : Intel Xeon E3-1200 series up to 4 cores/ 8 threads
- Memory: DDR3-1333MHz (ECC) U-DIMM up to 32GB
- Remote Management: IPMI, Advantech Remote Monitoring Utility

Specifications

Processor System	Chipset	Intel C206 Chipset	
	CPU	Intel LGA1155 Xeon E3-1200 / Core i3-2120 / Pentium G850 Single processor	
	L2 Cache	8MB/6MB/3MB	
	Front Side Bus	-	
	Memory	Dual Channel DDR3 ECC/Non-ECC 1066/1333 MHz up to 32GB	
Graphics	Controller	Aspeed AST2300 (Needs being disabled when Mura MPX is installed)	
	VRAM	64 MB	
Expansion Slot	PCIe Gen.2 x16	2 (For Mura MPX installation. Auto switch to x8 link if slot 4 is occupied)	
	PCIe Gen.2 x4	1	
	PCIe Gen.2 x1	1	
	PCI 32bit/33MHz	3	
Drive Bay	Slime optical disk drive Bay	-	
	5.25" Front-Accessible	1	
	3.5" Hot-swappable	2 x SATA	
	3.5" Internal	1 x SATA	
Ethernet	Interface	Quad 10/100/1000 Mbps Gigabit Ethernets	
	Controller	GbE LAN1: Intel 82579LM; GbE LAN2: Intel 82574L; GbE LAN3/4: Intel 82580DB	
Front I/O Interface	USB	2 x USB2.0	
Rear I/O Interface	USB	4 x USB2.0	
	PS/2	2	
	COM	1 (RS-232), COM1 don't suppoer wake-om-modem)	
	Disaplay	1 x VGA	
	Parallel	-	
	RJ-45	4	
Watchdog Timer	Output	Interrupt, system reset	
	Interval	Programmable, 1 ~ 255 sec/min	
Power Supply	Power Output Wattage	80+ Bronze 400W ATX PS/2 Single Power Supply	
	Input Range	AC 100 ~ 240 V	
Cooling	Chassis Fan	1 (12 cm/85 CFM) + 1 (6 cm/27.7CFM)	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power status, HDD activity, Temperature and FAN Status	
	Remote Management	Advantech Remote Monitoring Utility	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C	10 ~ 95% @ 40° C
	Vibration (5-500 Hz)	0.5Grms	2Grms
	Shock	10G (with 11 ms duration, half sine wave)	30G
Physical Characteristics	Dimension	200 x 320 x 480 mm (7.9" x 12.6" x 18.9")	

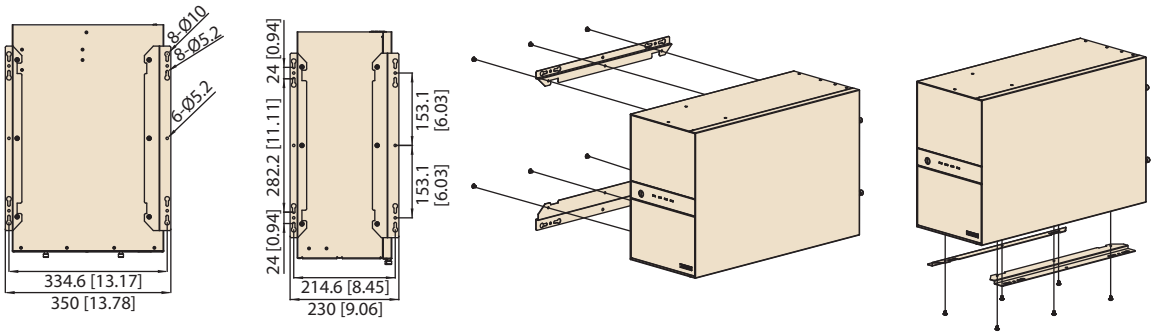
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



Ordering Information

Advantech P/N	Description
AVS-290-00A1E	Desktop/Wall-mount Xeon E3-1200 Video Wall Controller supporting dual Mura MPX
1960047669N001	Cooler for Xeon E3-1200 series CPU with TDP Up To 95W

Note: Purchasing this CPU cooler is a must, other brand CPU cooler may result in compatibility issue.

System Contents

Item	Advantech P/N	Quantity
AVS-290 Bare-Bone System	N/A	1
Driver CD	2066S78100	1

Note: CPU cooler needs to be purchased separately.

Compatible Processors

Advantech P/N	Description
96MPXE-3.1-6M11T	XEON 3.1G 6M 1155P 4CORE E3-1225(G)
96MPXE-3.4-8M11T	XEON 3.4G 8M 1155P 4CORE E3-1275(G)
96MPI3-3.3-3M11T	CORE 3.3G 3M 1155P 2CORE I3-2120(G)

Optional Accssories

Item	Advantech P/N
2130006149S000	Filter cover
PCA-AUDIO-HDA1E	HD Audio-Card (Occupying 1 expansion slot)

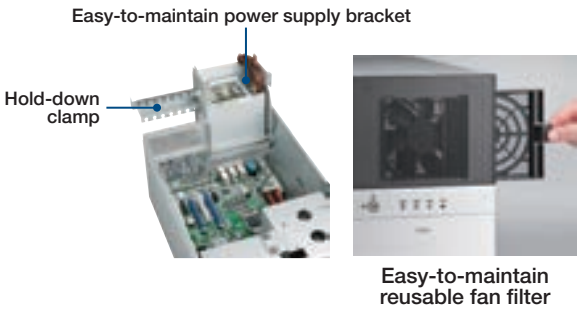
Validated OS

Advantech P/N	OS for Embedded System
968QS28F08	Windows Server® 2008 with Hyper-V™ Standard 64 Bit
968QSV2845	Windows Server® 2008 without Hyper-V™ Standard 64 Bit
968QW7PROE	Windows® 7 Professional 64 Bit

Validated Matrox Mura Cards

Advantech P/N	Model	Output	Input
96VG-2G-PE-MA	Mura MPX-4/0	4	0
96VG-2G-PE-MA1	Mura MPX-4/2	4	2
96VG-2G-PE-MA2	Mura MPX-4/4	4	4
96VG-1G-PE-MA	Mura MPX-SDI	2	2
96VG-128M-PE-MA	Mura MPX-V8	0	8
96VG-256M-PE-MA	Mura MPX-V16	0	16

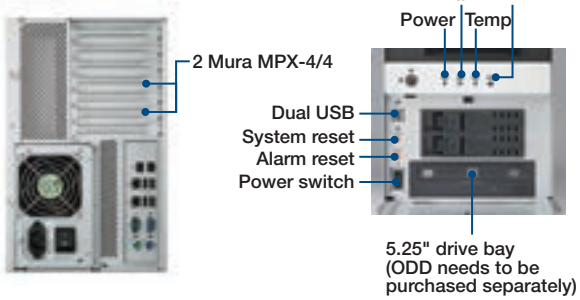
Inside view



Easy-to-maintain reusable fan filter

Dual SAS/SATA HDD trays

Rear view



AVS-540

4U Intel® Xeon® E5-2600 Video Wall Controller, Supporting 20-output Video Wall



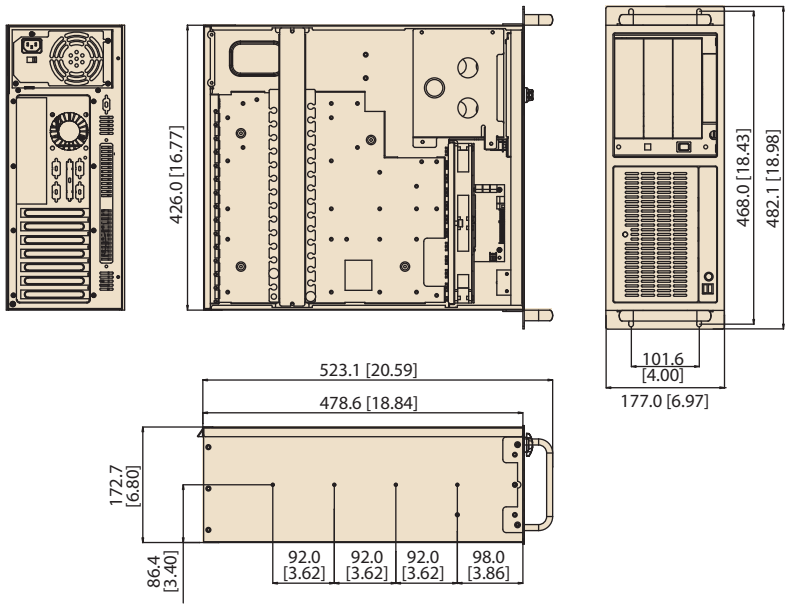
Features

- Validated by Matrox
- Supports Mura Cards: 5 Mura MPX-4/4
- Maximum Video Input: 20 Analog/Digital
- Maximum Video Output: 20 Analog/Digital
- Processor: Intel Xeon E5-2600 series up to 8 cores/ 16 threads
- Memory : DDR3-1333/1600 MHz (ECC) U-DIMM and R-DIMM up to 96 GB
- Remote Management: IPMI, Advantech Remote Monitoring Utility

Specifications

Processor System	Chipset	Intel C602J Chipset	
	CPU	Intel LGA2011 Xeon E5-2600 Single processor (up to 95W TDP)	
	L2 Cache	5/10/15/20 MB	
	Memory	ECC & Register or ECC or non ECC DDR3 1600/1333/1066 MHz UDIMMs, maximum 96 GB	
Graphics	Controller	Aspeed AST2300 (Needs being disabled when Mura MPX is installed)	
	VRAM	64 MB	
Expansion Slot	Slot location 1	PCI	
	Slot location 2	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot location 3	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot location 4	PCIe x16 slot (Gen3 x8 or x16 link), for Mura MPX-4/4 installation	
	Slot location 5	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot location 6	PCIe x16 slot (Gen3 x8 or x16 link), for Mura MPX-4/4 installation	
Drive Bay	5.25" Front-Accessible	3	
	3.5" (Front Accessible)	1	
	3.5" Internal	-	
Ethernet	Interface	Dual 10/100/1000 Mbps Gigabit Ethernet	
	Controller	Intel 82579LM + Intel I210	
Front I/O Interface	USB	2 x USB2.0	
	PS/2	1	
Rear I/O Interface	USB	4 x USB2.0, 2 x USB 3.0	
	PS/2	2	
	COM	1	
	Disaplay	1 x VGA	
	RJ-45	3 (1 is dedicated for IPMI)	
Watchdog Timer	Output	Interrup, system reset	
	Interval	Programmable, 1~255 sec	
Power Supply	Power Output Wattage	80+ Bronze 700W Single Power Supply	
	Input Range	AC 100 ~ 240 V	
Cooling	Chassis Fan	2 (12 cm / 114 CFM each)	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power status, HDD activity, Temperature, Fan, and Power voltage status	
	Remote Management	Advantech Remote Monitoring Utility	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32~104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C	10 ~ 95% @ 40° C
	Vibration (5 ~ 500 Hz)	1 Grms	2 Grms
	Shock	10G (with 11ms duration, half since wave)	30G
Physical Characteristics	Dimension	482 x 177 x 479 mm (19" x 7" x 18.9")	

Dimensions



Unit: mm [inch]

Ordering Information

Advantech P/N	Description
AVS-540-00A1E	4U Rackmount Xeon E5-2600 Video Wall Controller Supporting 5 Matrox Mura MPX
1960058073N001	Cooler for Xeon E5-2600 series CPU with TDP Up To 95W

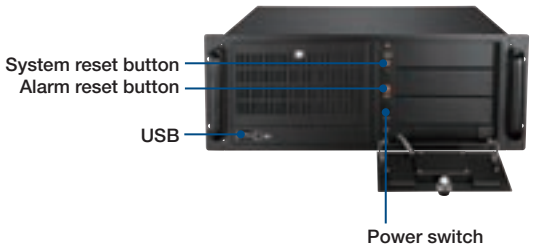
Note: Purchasing this CPU cooler is a must, other brand CPU cooler may result in compatibility issue.

System Contents

Items	Advantech P/N	Quantity
AVS-540 Bare-Bone System	N/A	1
Driver CD	2066822I00	1

Note: CPU cooler needs to be purchased separately.

Front View



Rear View



Compatible Processors

Advantech P/N	Description
96MPXE-2.0-15M20T	XEON 2.0G 15M 2011P 6CORE E5-2620(G)
96MPXE-1.8-20M20T	XEON 1.8G 20M 2011P 8CORE E5-2648L(G)
96MPXE-2.1-20M20T	XEON 2.1G 20M 2011P 8CORE E5-2658(G)

Validated Matrox Mura Cards

Advantech P/N	Model	Output	Input
96VG-2G-PE-MA	Mura MPX-4/0	4	0
96VG-2G-PE-MA1	Mura MPX-4/2	4	2
96VG-2G-PE-MA2	Mura MPX-4/4	4	4
96VG-1G-PE-MA	Mura MPX-SDI	2	2
96VG-128M-PE-MA	Mura MPX-V8	0	8
96VG-256M-PE-MA	Mura MPX-V16	0	16

Optional Parts

Item	Advantech P/N
Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays	IDT-5230E
Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays	IDT-3120E
Mobile rack for converting a 5.25" drive bay to four 2.5" SAS/SATA HDD trays	96RACK-5SS-CAGE-CR
SATA cable with lock	1700003194
ACP-4000 rail kit	9680006905
HD Audio-Card	PCA-AUDIO-HDA1E (Occupying 1 expansion slot)

Note:
1. To support 2 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 2 + IDT-3120E x 1
2. To support 3 3.5" SATA HDDs RAID with on-board RAID: 1700003194 x 3 + IDT-5230E x 1
3. To support 4 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 4 + 96RACK-5SS-CAGE-CR x 1

Validated OS

Advantech P/N	OS for Embedded System
968QS28F08	Windows Server® 2008 with Hyper-V™ Standard 64 Bit
968QSV2845	Windows Server® 2008 without Hyper-V™ Standard 64 Bit
968QW7PROE	Windows® 7 Professional 64 Bit

AVS-541

4U Intel® Xeon® E3-1200V2 Video Wall Controller, Supporting 20-output Video Wall



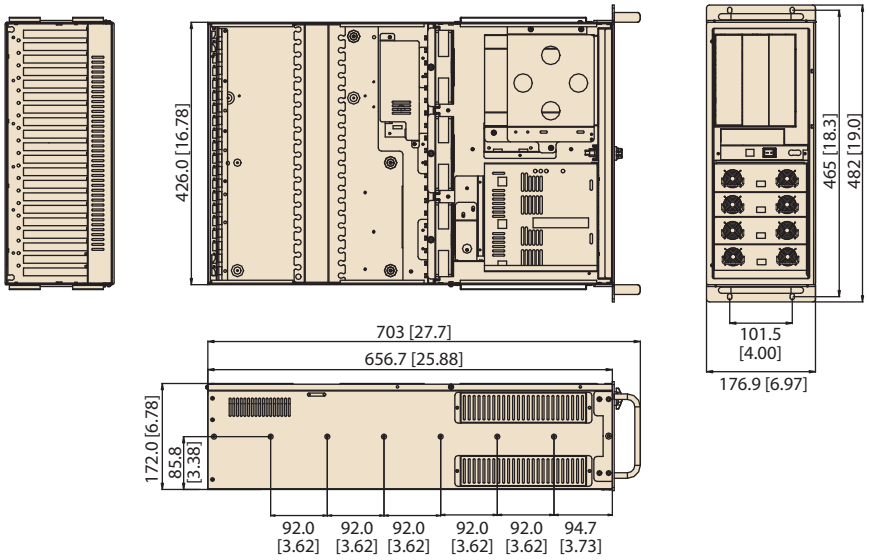
Features

- Validated by Matrox
- Supports Mura Cards: 5 Mura MPX-4/4 & 10 Mura MPX-V16
- Maximum Video Input: 20 Analog/Digital & 160 Analog
- Maximum Video Output: 20 Analog/Digital
- Processor: Intel Xeon E3-1200V2 series up to 4 cores/ 8 threads
- Memory : DDR3-1333/1600 MHz (ECC) U-DIMM up to 16 GB
- Remote Management: Advantech Remote Monitoring Utility, iAMT 8.0

Specifications

Processor System	Chipset	Intel C216 Chipset	
	CPU	Intel LGA1155 Xeon E3-1200V2 Single processor (up to 95W TDP)	
	L2 Cache	2/3/6/8 MB	
	Memory	ECC & Register or ECC or non ECC DDR3 1600/1333/1066 MHz UDIMMs, maximum 96 GB	
Graphics	Controller	Aspeed AST2300 (Needs being disabled when Mura MPX is installed)	
	VRAM	64 MB	
Expansion Slot	Slot Location 1 (PPCIEX4_1)	PCIex16 slot (Gen2 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 2 (P1PCIEX8_1)	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot Location 3 (P1PCIEX4_3)	PCIe x4 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 4 (P1PCIEX4_4)	PCIe x4 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 5 (P1PCIEX8_2)	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot Location 6 (P1PCIEX4_5)	PCIe x16 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 7 (P1PCIEX4_6)	PCIe x16 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 8 (P1PCIEX8_3)	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot Location 9 (P2PCIEX4_1)	PCIe x16 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 10 (P2PCIEX4_2)	PCIe x4 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 11 (P2PCIEX4_3)	PCIe x4 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 12 (P2PCIEX8_1)	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot Location 13 (P2PCIEX4_4)	PCIe x16 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 14 (P2PCIEX4_5)	PCIe x16 slot (Gen3 x4 link), for Mura MPX-V8/-V16 installation	
	Slot Location 15 (P2PCIEX8_2)	PCIe x16 slot (Gen3 x8 link), for Mura MPX-4/4 installation	
	Slot Location 16 (P2PCIEX4_6)	PCIe x16 slot (Gen3 x4 link)	
Drive Bay	5.25" Front-Accessible	3	
	3.5" (Front Accessible)	1	
	3.5" Internal	1	
Ethernet	Interface	Dual 10/100/1000 Mbps Gigabit Ethernet	
	Controller	Intel 82579LM + Intel 82574L	
Front I/O Interface	USB	2 x USB2.0	
	PS/2	1	
Rear I/O Interface	USB	1 x USB 3.0	
	PS/2	1 (KB & MS through the Y cable)	
	Disaplay	1 x VGA	
	RJ-45	2	
Watchdog Timer	Output	Interrup, system reset	
	Interval	Programmable, 1~255 sec	
Power Supply	Power Output Wattage	810W 3+1 redundant power supply (Front-accessible)	
	Input Range	AC 115 ~ 230 V (full range)	
Cooling	Chassis Fan	3 (12 cm / 114 CFM each)	
	Air Filter	4 (200 x 45 mm) + 1 (128 x 95 mm)	
Miscellaneous	LED Indicators	Power, HDD, fan, temperature, and power voltage status	
	Remote Management	Advantech Remote Monitoring Utility, iAMT 8.0	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32~104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C	10 ~ 95% @ 40° C
	Vibration (5 ~ 500 Hz)	1 Grms	2 Grms
	Shock	10G (with 11ms duration, half since wave)	30G
Physical Characteristics	Dimension	482 x 177 x 657 mm (19" x 7" x 26")	

Dimensions



Unit: mm [inch]

Ordering Information

Advantech P/N	Description
AVS-541-01A1E	4U Rackmount Xeon E3-1200V2 Video Wall Controller, Supporting 5 Matrox Mura MPX-4/4 & 10 Mura MPX-V16
1960047831N001	AVS-541 Proprietary CPU Cooler
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trusted Platform Module compliant TCG 1.2
1700020277-01	2 ports of USB 3.0 cable W/ BKT(30cm)
1700008822	DVI-D Cable

Note: Purchasing this CPU cooler is a must, other brand CPU cooler may result in compatibility issue.

System Contents

Items	Advantech P/N	Quantity
AVS-541 Bare-Bone System	N/A	1
Driver CD	2066512700	1
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1

Note: CPU cooler needs to be purchased separately.

Compatible Processors

Advantech P/N	Description
96MPXE-3.2-8M11T1	XEON 3.2G 8M 1155P 4CORE E3-1225V2(G)
96MPXE-3.5-8M11T	XEON 3.5G 8M 1155P 4CORE E3-1275V2(G)
96MPI3-3.3-3M11T1	CORE 3.3G 3M 1155P 2CORE I3-3220(G)

Validated Matrox Mura Cards

Advantech P/N	Model	Output	Input
96VG-2G-PE-MA	Mura MPX-4/0	4	0
96VG-2G-PE-MA1	Mura MPX-4/2	4	2
96VG-2G-PE-MA2	Mura MPX-4/4	4	4
96VG-1G-PE-MA	Mura MPX-SDI	2	2
96VG-128M-PE-MA	Mura MPX-V8	0	8
96VG-256M-PE-MA	Mura MPX-V16	0	16

Optional Parts

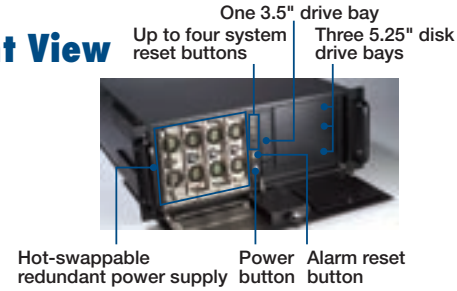
Item	Advantech P/N
Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays	IDT-5230E
Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays	IDT-3120E
Mobile rack for converting a 5.25" drive bay to four 2.5" SAS/SATA HDD trays	96RACK-5SS-CAGE-CR
SATA cable with lock	1700003194
ACP-4000 rail kit	9680006905
HD Audio-Card	PCA-AUDIO-HDA1E (Occupying 1 expansion slot)

Note:
1. To support 2 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 2 + IDT-3120E x 1
2. To support 3 3.5" SATA HDDs RAID with on-board RAID: 1700003194 x 3 + IDT-5230E x 1
3. To support 4 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 4 + 96RACK-5SS-CAGE-CR x 1

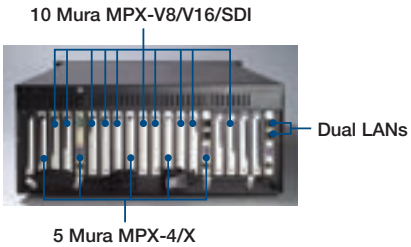
Validated OS

Advantech P/N	OS for Embedded System
968QS28F08	Windows Server® 2008 with Hyper-V™ Standard 64 Bit
968QSV2845	Windows Server® 2008 without Hyper-V™ Standard 64 Bit
968QW7PROE	Windows® 7 Professional 64 Bit

Front View



Rear View



AVS-840

4U Intel® Xeon® E3-1200V2 Video Wall Controller, Supporting 40-output Video Wall



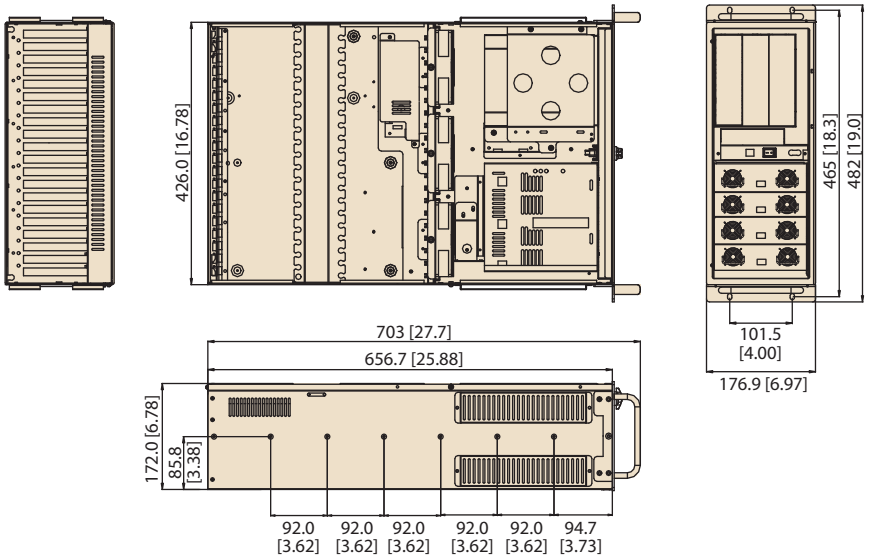
Features

- Validated by Matrox
- Support Mura Cards: 10 standard Mura MPX
- Maximum Video Input: 40 Analog/Digital
- Maximum Video Output: 40 Analog/Digital
- Processor: Intel Xeon E3-1200 V2 Series up to 4 cores/8 threads
- Memory : DDR3-1333/1600 MHz (ECC) U-DIMM and 16 GB
- Remote Management: Advantech Remote Monitoring Utility

Specifications

Processor System	Chipset	Intel C216 Chipset	
	CPU	Intel LGA 1155 Xeon E3-1200 V2 Single processor (up to 95W TDP)	
	L3 Cache	8 MB	
	Memory	ECC or non ECC DDR3 1333/1066 MHz UDIMMs, maximum 16 GB	
Graphics	Controller	Chipset integrated Intel HD Graphic (Needs being disabled when Mura MPX is installed)	
	VRAM	Shared ystem memory is subject to OS	
Expansion Slot	Slot Location 1 (PPCIEX4_1)	PCIex16 slot (x4 link)	
	Slot Location 2 (P1PCIEX16_1)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 3 (P1PCIEX16_2)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 4 (P1PCIEX16_3)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 5 (P1PCIEX16_4)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 6 (P1PCIEX16_5)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 7 (P2PCIEX16_1)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 8 (P2PCIEX16_2)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 9 (P2PCIEX16_3)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 10 (P2PCIEX16_4)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 11 (P2PCIEX16_5)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
Drive Bay	5.25" Front-Accessible	3	
	3.5" Front-Accessible	1	
	3.5" Internal	1	
Ethernet	Interface	Dual 10/100/1000 Mbps Gigabit Ethernet	
	Controller	LAN1: Intel 82579LM LAN2: Intel 82574L	
Front I/O Interface	USB	2 x USB2.0	
	PS/2	-	
Rear I/O Interface	USB	1 x USB 3.0, 4 x USB2.0 (via USB cable kit)	
	PS/2	1 (Y cable for mouse and keyboard is included in the package)	
	COM	-	
	Disaplay	1 x VGA	
	RJ-45	2	
Watchdog Timer	Output	Interrup, system reset	
	Interval	Programmable, 1~255 sec	
Power Supply	Power Output Wattage	810W 3+1 redundant power supply (Front-accessible)	
	Input Range	AC 100 ~ 240 V	
Cooling	Chassis Fan	3 (12 cm / 114 CFM each)	
	Air Filter	4 (200 x 45 mm) + 1 (128 x 95 mm)	
Miscellaneous	LED Indicators	Power status, HDD activity, Temperature, Fan, and Power voltage status	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32~104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C	10 ~ 95% @ 40° C
	Vibration (5 ~ 500 Hz)	1 Grms	2 Grms
	Shock	10G (with 11ms duration, half since wave)	30G
Physical Characteristics	Dimension	482 x 177 x 657 mm (19" x 7" x 26")	

Dimensions



Unit: mm [inch]

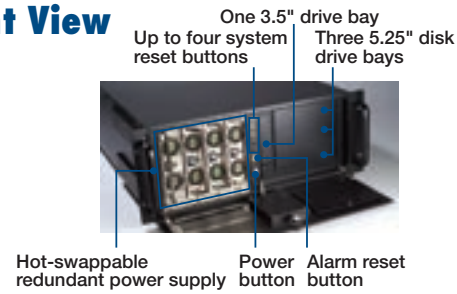
Ordering Information

Part Number	Power Supply
AVS-840-01A1E	4U Rackmount Xeon E3-1200 v2 Video Wall Controller, Support 10 Matrox Mura MPX
1960047831N001	PCE-7127 Proprietary CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trusted Platform Module compliant TCG 1.2
1700020277-01	2 ports of USB 3.0 cable W/ BKT(30cm)
1700008822	DVI-D Cable

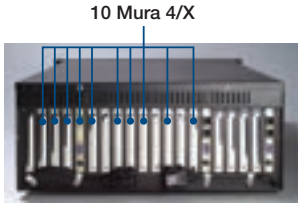
System Contents

Items	Advantech P/N	Quantity
AVS-840 barebone	N/A	1
Driver CD	2066512700	1
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1

Front View



Rear View



Compatible Processors

Advantech P/N	Description
96MPXE-3.2-8M11T1	XEON 3.2G 8M 1155P 4CORE E3-1225V2(G)
96MPXE-3.5-8M11T	XEON 3.5G 8M 1155P 4CORE E3-1275V2(G)
96MPI3-3.3-3M11T1	CORE 3.3G 3M 1155P 2CORE I3-3220(G)

Validated Matrox Mura Cards

Advantech P/N	Model	Output	Input
96VG-2G-PE-MA	Mura MPX-4/0	4	0
96VG-2G-PE-MA1	Mura MPX-4/2	4	2
96VG-2G-PE-MA2	Mura MPX-4/4	4	4
96VG-1G-PE-MA	Mura MPX-SDI	2	2
96VG-128M-PE-MA	Mura MPX-V8	0	8
96VG-256M-PE-MA	Mura MPX-V16	0	16

Optional Parts

Item	Advantech P/N
Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays	IDT-5230E
Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays	IDT-3120E
Mobile rack for converting a 5.25" drive bay to four 2.5" SAS/SATA HDD trays	96RACK-5SS-CAGE-CR
SATA cable with lock	1700003194
ACP-4000 rail kit	9680006905

Note:
1. To support 2 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 2 + IDT-3120E x 1
2. To support 3 3.5" SATA HDDs RAID with on-board RAID: 1700003194 x 3 + IDT-5230E x 1
3. To support 4 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 4 + 96RACK-5SS-CAGE-CR x 1

Validated OS

Advantech P/N	OS for Embedded System
968QS28F08	Windows Server® 2008 with Hyper-V™ Standard 64 Bit
968QSV2845	Windows Server® 2008 without Hyper-V™ Standard 64 Bit
968QW7PROE	Windows® 7 Professional 64 Bit

AVS-860

6U Intel® Xeon® E3-1200V2 Video Wall Controller, Supporting 40-output Video Wall



Features

- Validated by Matrox
- Support Mura Cards: 10 standard Mura MPX
- Maximum Video Input: 40 Analog/Digital
- Maximum Video Output: 40 Analog/Digital
- Processor: Intel Xeon E3-1200 V2 Series up to 4 cores/8 threads
- Memory : DDR3-1333/1600 MHz (ECC) U-DIMM and 16 GB
- Remote Management: Advantech Remote Monitoring Utility

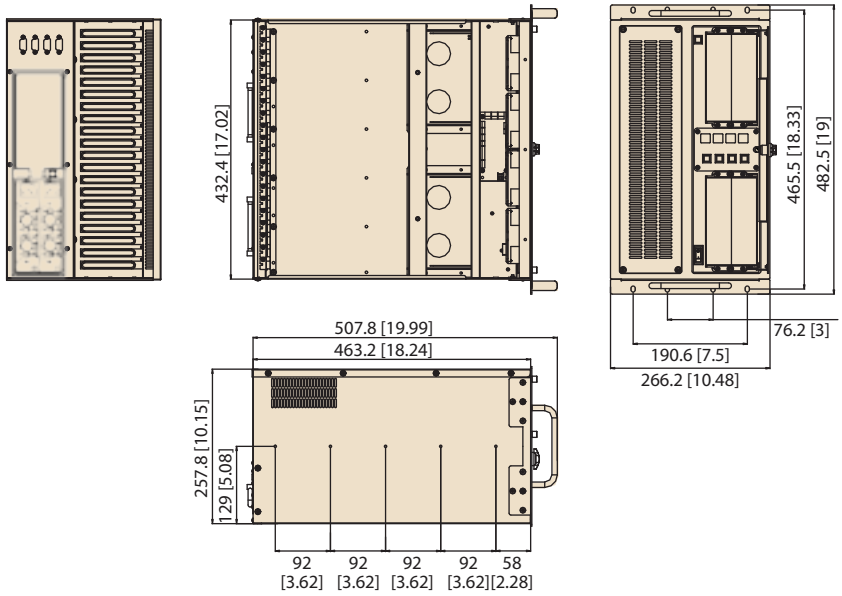
Specifications

Processor System	Chipset	Intel C216 Chipset	
	CPU	Intel LGA 1155 Xeon E3-1200 V2 Single processor (up to 95W TDP)	
	L3 Cache	8 MB	
	Memory	ECC or non ECC DDR3 1333/1066 MHz UDIMMs, maximum 16 GB	
Graphics	Controller	Chipset integrated Intel HD Graphic (Needs being disabled when Mura MPX is installed)	
	VRAM	Shared ystem memory is subject to OS	
Expansion Slot	Slot Location 1 (PPCIEX4_1)	PCIex16 slot (x4 link)	
	Slot Location 2 (P1PCIEX16_1)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 3 (P1PCIEX16_2)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 4 (P1PCIEX16_3)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 5 (P1PCIEX16_4)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 6 (P1PCIEX16_5)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 7 (P2PCIEX16_1)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 8 (P2PCIEX16_2)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 9 (P2PCIEX16_3)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 10 (P2PCIEX16_4)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
	Slot Location 11 (P2PCIEX16_5)	PCIe x16 slot (Gen2 x16 link), for Mura MPX-4/4 installation	
Drive Bay	5.25" Front-Accessible	4	
	3.5" Front-Accessible	-	
	3.5" Internal	2	
Ethernet	Interface	Dual 10/100/1000 Mbps Gigabit Ethernet	
	Controller	LAN1: Intel 82579LM LAN2: Intel 82574L	
Front I/O Interface	USB	2 x USB2.0	
	PS/2	-	
Rear I/O Interface	USB	1 x USB 3.0, 4 x USB2.0 (via USB cable kit)	
	PS/2	1 (Y cable for mouse and keyboard is included in the package)	
	COM	-	
	Disaplay	1 x VGA	
	RJ-45	2	
Watchdog Timer	Output	Interrup, system reset	
	Interval	Programmable, 1~255 sec	
Power Supply	Power Output Wattage	1+1 750W Redundant Power Supply	
	Input Range	AC 100 ~ 240 V	
Cooling	Chassis Fan	4 (9cm/110CFM each)	
	Smart FAN Control	Yes	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power status, HDD activity, Temperature, Fan, and Power voltage status	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32~104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C	10 ~ 95% @ 40° C
	Vibration (5 ~ 500 Hz)	1 Grms	2 Grms
	Shock	10G (with 11ms duration, half since wave)	30G
Physical Characteristics	Dimension	482 x 266 x 464 mm (19" x 10.5" x 18.3")	

All product specifications are subject to change without notice

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
AVS-860-01A1E	6U Rackmount Xeon E3-1200 v2 Video Wall Controller, Support 10 Matrox Mura MPX
1960047831N001	PCE-7127 Proprietary CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trusted Platform Module compliant TCG 1.2
1700020277-01	2 ports of USB 3.0 cable W/ BKT(30cm)
1700008822	DVI-D Cable

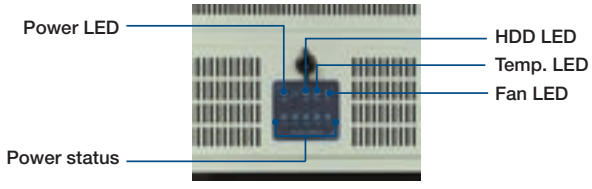
System Contents

Items	Advantech P/N	Quantity
AVS-860 barbone	N/A	1
Driver CD	2066512700	1
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1

Compatible Processors

Advantech P/N	Description
96MPXE-3.4-8M11T	XEON 3.4G 8M 1155P 4CORE E3-1275(G)
96MPXE-3.2-8M11T1	XEON 3.2G 8M 1155P 4CORE E3-1225V2(G) Ivy Bridge
96MPXE-3.5-8M11T	XEON 3.5G 8M 1155P 4CORE E3-1275V2(G) Ivy Bridge

Front View



Validated Matrox Mura Cards

Advantech P/N	Model	Output	Input
96VG-2G-PE-MA	Mura MPX-4/0	4	0
96VG-2G-PE-MA1	Mura MPX-4/2	4	2
96VG-2G-PE-MA2	Mura MPX-4/4	4	4
96VG-1G-PE-MA	Mura MPX-SDI	2	2
96VG-128M-PE-MA	Mura MPX-V8	0	8
96VG-256M-PE-MA	Mura MPX-V16	0	16

Optional Parts

Item	Advantech P/N
Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays	IDT-5230E
Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays	IDT-3120E
Mobile rack for converting a 5.25" drive bay to four 2.5" SAS/SATA HDD trays	96RACK-5SS-CAGE-CR
SATA cable with lock	1700003194
ACP-4000 rail kit	9680006905

Note:
1. To support 2 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 2 + IDT-3120E x 1
2. To support 3 3.5" SATA HDDs RAID with on-board RAID: 1700003194 x 3 + IDT-5230E x 1
3. To support 4 2.5" SATA HDDs RAID with on-board RAID: 1700003194 x 4 + 96RACK-5SS-CAGE-CR x 1

Validated OS

Advantech P/N	OS for Embedded System
968QS28F08	Windows Server® 2008 with Hyper-V™ Standard 64 Bit
968QSV2845	Windows Server® 2008 without Hyper-V™ Standard 64 Bit
968QW7PROE	Windows® 7 Professional 64 Bit

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AIMB-782

3rd Gen Intel Core i Processor-Based ATX Motherboard

- Intel® Core™ i7/i5/i3 Pentium® CPU
- DDR3 1066/1333/1600 up to 32GB
- PCIe x4 and PCIe x16 expansion slots
- 4 USB 3.0 and 2 SATA 6.0 Gb/s
- Supports quiet system solution and SUSIAccess remote management



ASMB-782

3rd Gen Intel Xeon Processor-Based ATX Server Board

- Intel® Xeon® E3/Core™ i3 CPU
- DDR3 ECC 1066/1333/1600 up to 32 GB
- 2 PCIe x8 and 2 PCIe x4 expansion slots
- 4 USB 3.0 and 2 SATA 6.0 Gb/s
- Supports quiet system solution and SUSIAccess remote management



HPC-7242

2U Rackmount Chassis with Up to 4 SAS/SATA HDD Trays

- 4 hot-swap SAS/SATA HDD trays
- 2 internal 2.5" drive bay and 1 slim ODD bay
- 80 Plus single and redundant power supply
- LED indicators and alarm notification for temperature and fan speed
- Smart fan for optimized thermal and acoustic balance



HPC-7442

4U Rackmount/Tower Chassis with Up to 8 SAS/SATA HDD Trays

- Up to 8 hot-swap SAS/SATA HDD trays
- 1 internal 3.5" drive bay and 1 slim ODD bay
- 80 Plus single and redundant power supply
- LED indicators and alarm notification for temperature and fan speed
- Smart fan for optimized thermal and acoustic balance

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7

Advantech Industrial Storage

ASR-3272	2U 12-Bay Intel Xeon E3-1200c2 Storage Server with Quad LANs	*7-2*
ASR-3472	4U 24-Bay Intel Xeon E3-1200c2 Storage Server with Quad LANs	*7-4*
ASR-1400	4U 24-Bay JBOD Storage Expansion Enclosure	*7-6*

To view all of Advantech Industrial Storage, please visit www.advantech.com/products.



ASR-3272

2U 12-bay Storage Appliance with Reliable Data Protection and Backup Solution



Features

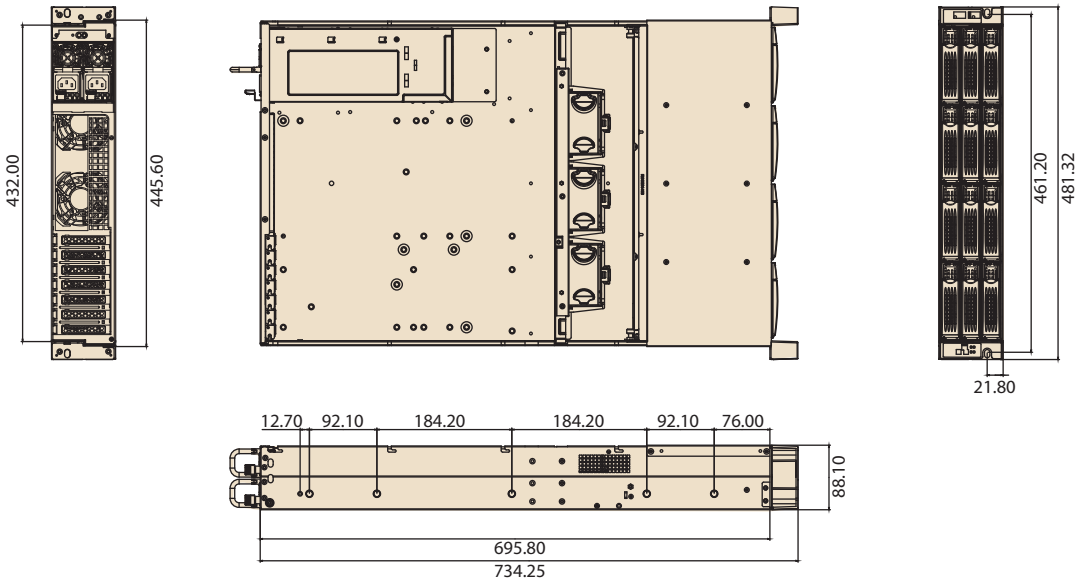
- Supports Intel® Xeon® E3-1200/E3-1200 v2 series up to 4 cores/8 threads
- Supports DDR3-1333/1600 MHz(ECC) U-DIMM up to 32 GB
- Supports 12x Hot-swap 3.5" & 2.5" SATA/SAS 6Gb/s drives
- Advanced Raid Feature by LSISAS2108 chip
- Remote Management with Intel AMT
- Support Disk RAID 0, 1, 5, 6, 10, 50, 60
- BBU option for data protection

Specification

System	Form Factor	2U 12-Bay	
	Number of Drives	12-bay (3.5")	
	Drive Type	SATA/SAS 6Gb/s or 3Gb/s	
	CPU Type	LGA 1155 Xeon 1200V2 or 3rd Generation Core i3 processor	
	Chipset	Intel C216 Chipset	
	Memory Type	4 x 240 pin DDR3 up to 32 GB	
	Storage Expansion	Optional Advantech IP-SAN	
	RAID Level	0, 1, 5, 6,10, 50, 60	
	TPM	Yes (optional)	
	Smart Fan Control	Yes (smart fan control for both cpu & sys fan)	
Expansion Slot	PCIe x16 slot with x8 link	2	
	PCIe x4 slot	2	
	PCI	3	
Display	Chipset	Integrated Intel HD Graphics(GT2-P4000 or GT1-2500)	
	Display Memory	1 GB maximum shared memory with 2 GB and above system memory installed	
	VGA	Onboard, supports up to 2048 x 1536 (@60Hz)	
Ethernet	Gigabit Ethernet	4	
I/O	Front Panel I/O Port	1 USB 2.0	
	Back Panel I/O Port	1 PS/2 Keyboard/Mouse 1 VGA Port 1 COM RS-232 Port 2 USB 2.0 Ports 2 USB 3.0 Ports 4 LAN RJ45 Port	
	Internal I/O Connector	1 TPM Pin Header 2 USB Type A connectors	
Power Supply	Power Output Wattage	650W Redundant Power	
	Input Range	AC 100-240V	
Mechanical	Dimension	699 x 432 x 88 (mm)	
	Weight	19 kg (without hard drivers)	
Environmental		Operation	Non-operation
	Temperature	0° C ~ 40° C (32° F ~ 104° F)	-20° C ~ 60° C (-4° F ~ 140° F)
	Humidity	10% ~ 85% @ 40° C, non-condensing	10% ~ 95% @ 40° C, non-condensing
Misc	Notification LED	Power Status, System Fail, LAN LED	

Dimensions

Unit: mm



Order Information

Advantech P/N	Description
ASR-3272-12A1E	2U-12 Bay Rackmount Storage Server
1960047831N001	Cooler for Xeon E3-1200 V2 series CPU and TDP up to 95W

Note: Purchasing this CPU cooler from Advantech is a must. Other brands' CPU coolers may result incompatibility.

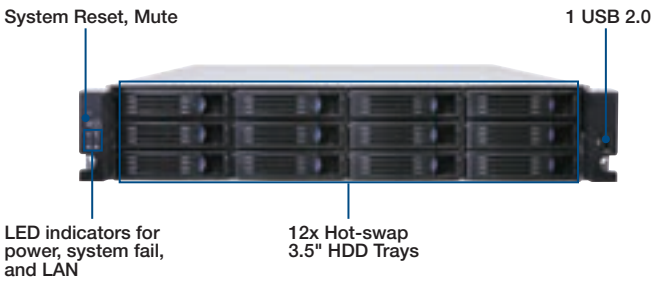
Optional Parts

Advantech P/N	Description
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution
96RC-IBBU07-LS	LSIIBBU07 BATTERY BACKUP UNIT

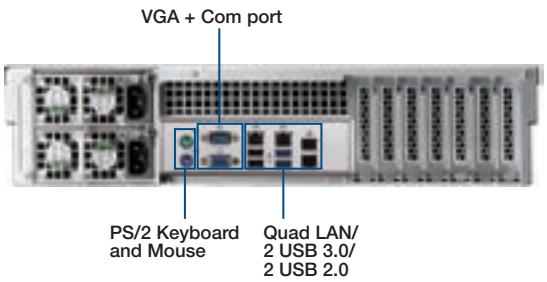
Compatible Processors

Advantech P/N	Description
96MPXE-3.5-8M11T	Xeon 3.5G 8M 1155P 4CORE E3-1275V2
96MPXE-3.2-8M11T1	Xeon 3.2G 8M 1155P 4CORE E3-1225V2(G)
96MPI3-3.3-3M11T1	Core 3.3G 3M 1155P 2CORE I3-3220(G)

Front View



Rear View



ASR-3472

4U 24-bay Storage Appliance with Reliable Data Protection and Backup Solution



Features

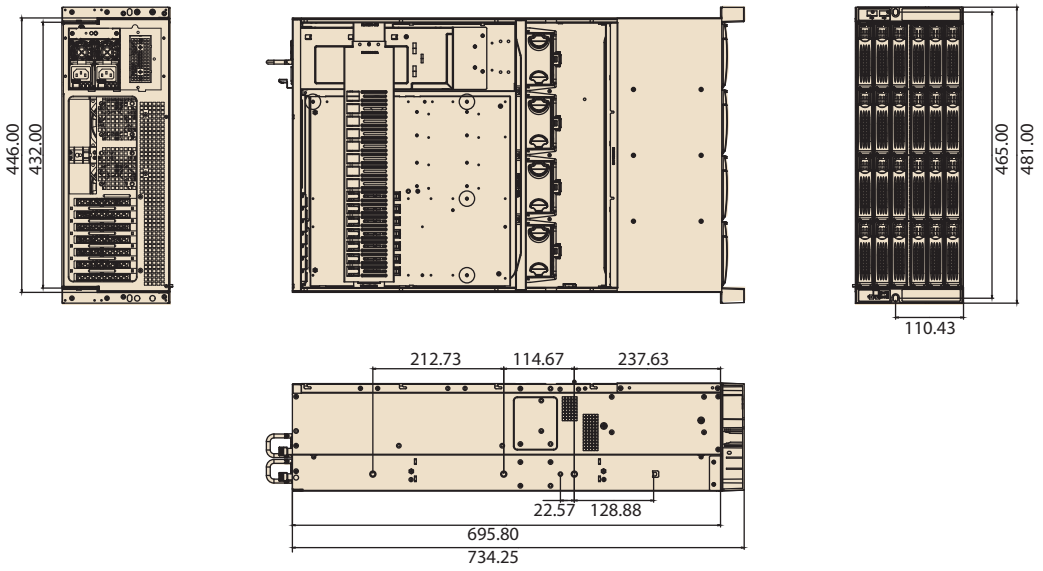
- Supports Intel® Xeon® E3-1200/E3-1200 v2 series up to 4 cores/8 threads
- Supports DDR3-1333/1600 MHz(ECC) U-DIMM up to 32 GB
- Supports 24x Hot-swap 3.5" & 2.5" SATA/SAS 6Gb/s drives
- Advanced Raid Feature by LSISAS2108 chip
- Remote Management with Intel AMT
- Support Disk RAID 0, 1, 5, 6, 10, 50, 60
- BBU option for data protection

Specification

System	Form Factor	4U 24-Bay	
	Number of Drives	24-bay (3.5")	
	Drive Type	SATA/SAS 6Gb/s or 3Gb/s	
	CPU Type	LGA 1155 Xeon 1200V2 or 3rd Generation Core i3 processor	
	Chipset	Intel C216 Chipset	
	Memory Type	4 x 240 pin DDR3 up to 32 GB	
	Storage Expansion	Optional Advantech IP-SAN	
	RAID Level	0, 1, 5, 6,10, 50, 60	
	TPM	Yes (optional)	
	Smart Fan Control	Yes (smart fan control for both cpu & sys fan)	
Expansion Slot	PCIe x16 slot with x8 link	2	
	PCIe x4 slot	2	
	PCI	3	
Display	Chipset	Integrated Intel HD Graphics(GT2-P4000 or GT1-2500)	
	Display Memory	1 GB maximum shared memory with 2 GB and above system memory installed	
	VGA	Onboard, supports up to 2048 x 1536 (@60Hz)	
Ethernet	Gigabit Ethernet	4	
I/O	Front Panel I/O Port	1 USB 2.0	
	Back Panel I/O Port	1 PS/2 Keyboard/Mouse 1 VGA Port 1 COM RS-232 Port 2 USB 2.0 Ports 2 USB 3.0 Ports 4 LAN RJ45 Port	
	Internal I/O Connector	1 Parallel Port pin header 1 COM Port pin header 1 Audio Port pin header 1 TPM Pin Header 1 USB 3.0 Pin Header 2 USB Type A connectors 3 USB 2.0 Pin Headers	
Power Supply	Power Output Wattage	875W Redundant Power	
	Input Range	AC 100-240V	
Mechanical	Dimension	699 x 432 x 176 (mm)	
	Weight	42 kg (without hard drivers)	
Environmental		Operation	Non-operation
	Temperature	0° C ~ 40° C (32° F ~ 104° F)	-20° C ~ 60° C (-4° F ~ 140° F)
	Humidity	10% ~ 85% @ 40° C, non-condensing	10% ~ 95% @ 40° C, non-condensing
Misc	Notification LED	Power Status, System Fail, LAN LED	

Dimensions

Unit: mm



Order Information

Advantech P/N	Description
ASR-3472-24A1E	4U-24Bay Rackmount Storage Server
1960047831N001	Cooler for Xeon E3-1200 V2 series CPU and TDP up to 95W

Note: Purchasing this CPU cooler from Advantech is a must. Other brands' CPU coolers may result incompatibility.

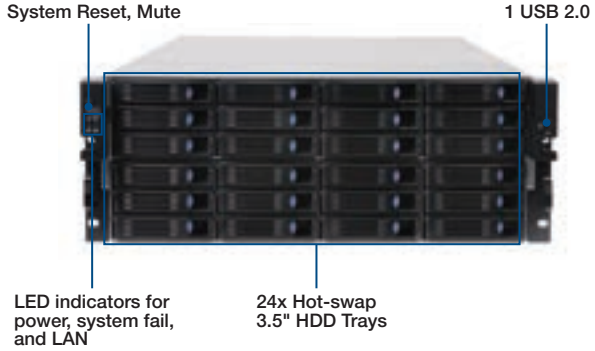
Compatible Processors

Advantech P/N	Description
96MPXE-3.5-8M11T	Xeon 3.5G 8M 1155P 4CORE E3-1275V2
96MPXE-3.2-8M11T1	Xeon 3.2G 8M 1155P 4CORE E3-1225V2(G)
96MPI3-3.3-3M11T1	Core 3.3G 3M 1155P 2CORE I3-3220(G)

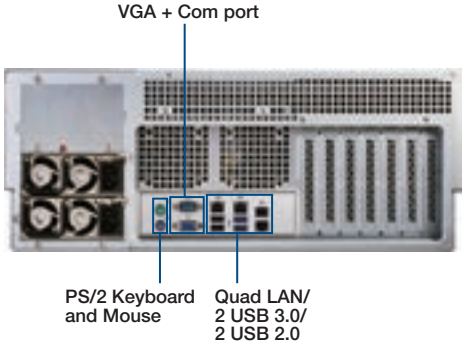
Optional Parts

Advantech P/N	Description
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1700008809	Printer port cable kit
1701090401	COM port cable with bracket
1700020277-01	Dual port USB 3.0 cable with bracket
AIMB-AUDIO-HDA1E	HD Audio-Card
96RC-IBBU07-LS	LSIIBBU07 BATTERY BACKUP UNIT

Front View



Rear View



ASR-1400

4U 24-bay Reliable Disk Expansion Enclosure to Fit Industrial Applications



Features

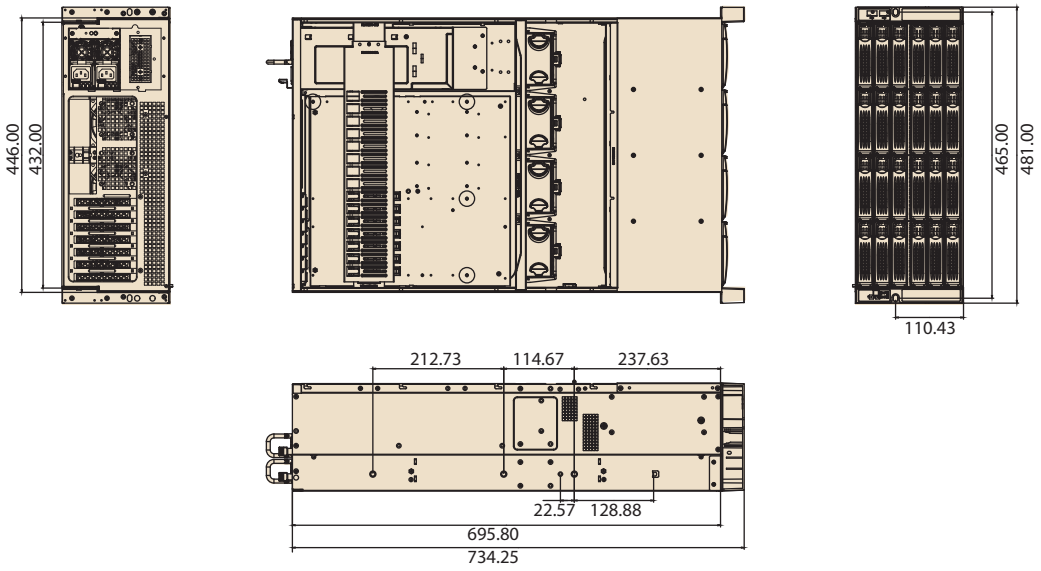
- Supports 24x Hot-swap 3.5" SATA/SAS 6Gb/s drives
- high efficiency(80+) redundant power supplies
- two 6Gb/s SAS host ports, optimal performance for bandwidth-demanding applications
- SES Enclosure Management and Smart Fan control

Specification

System	Form Factor	4U-24Bay	
	Number of Drives	24-Bays (3.5")	
	Drive Type	SATA/SAS 6Gb/s or 3Gb/s	
	SAS Expansion Port	2 x 6Gb/s SAS 4x wide port	
	Smart Fan Control	Yes (smart fan control for both cpu & sys fan)	
Power Supply	Power Output Wattage	875W Redundant Power	
	Input Range	AC 100-240V	
Mechanical	Dimension	699 x 432 x 176 (mm)	
	Weight	41 kg (without hard drives)	
Environmental		Operation	Non-operation
	Temperature	0° C ~ 40° C (32° F ~ 104° F)	-20° C ~ 60° C (-4° F ~ 140° F)
	Humidity	10% ~ 85% @ 40° C, non-condensing	10% ~ 95% @ 40° C, non-condensing
Misc	Notification LED	Power Status, System Fail	

Dimensions

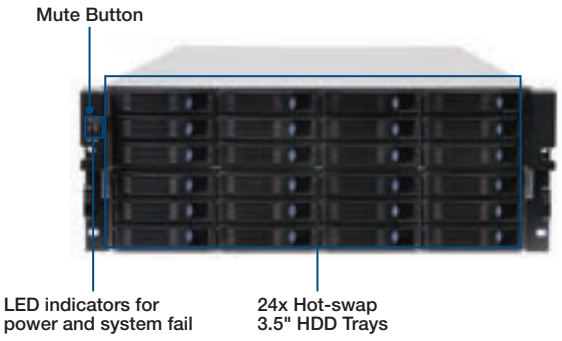
Unit: mm



Order Information

Advantech P/N	Description
ASR-1400-24A1E	4U 24-Bay JBOD Storage Expansion Solution

Front View



Rear View



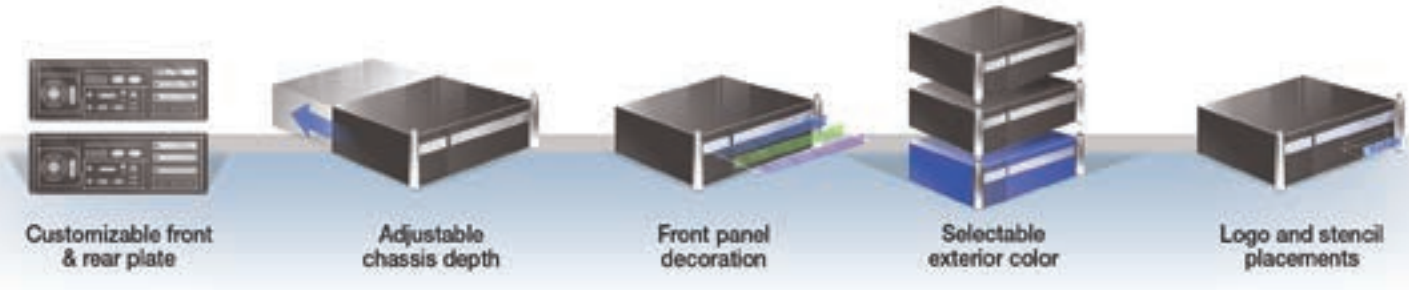
System Design to Order Services

Build Your Dream System in 30-Days



Total Cost Reduction





8

Pre-configured Systems

Selection Guide		*8-2*
Wallmount Systems		
SYS-2W5122-4U01	Wallmount Intel® LGA1150 Xeon® E3 V3 MicroATX System with PS/2 Power Supply	*8-6*
SYS-7W7132-4A01	Wallmount Intel® LGA1155 Core™ i7/ i5/ i3 ATX System with Dual Display	*8-8*
SYS-4W6025-4F01	Wallmount Intel® LGA1155 Core™ i7/ i5/ i3 PICMG 1.3 System with 4 Expansion Slots	*8-10*
1U Rackmount Systems		
SYS-1U1010-4F01	1U Intel® LGA1155 Core™ i7/ i5/ i3 with One Slim ODD and Two 3.5" HDD Trays	*8-12*
SYS-1U1320-4F01	1U Intel® LGA1155 Xeon®/Core™ i3 support ECC RAM, Dual SATA/SAS HDD Trays	*8-14*
2U Rackmount Systems		
SYS-2U2320-4A01	2U Intel® LGA1155 Core™ i7/ i5/ i3 MicroATX System with 2 Front Access HDD Tray	*8-16*
SYS-2U2010-4A02	2U Intel® LGA1155 Core™ i7/ i5/ i3 MicroATX System with 2 Front Access HDD Tray	*8-18*
4U Rackmount Systems		
SYS-4U4000-4F01	4U Intel® Core™ i7/i5/i3 LGA 1155 PICMG 1.3 System with 11 Expansion Slots	*8-20*
SYS-4U510-4A02	4U Intel® Core™ i7/i5/i3 LGA 1155 ATX System with 4 Front Access HDD Trays	*8-22*
SYS-4U610-4F01	4U Cost-effective System for Intel® Core™ i7/i5/i3 LGA 1155 PICMG 1.3 System with 12 Expansion Slots	*8-24*

To view all of Advantech's Pre-configured Systems, please visit www.advantech.com/products.



Pre-configured Systems





Selection Guide

Model Name		SYS-2W5122-4U01	SYS-4W6025-4F01
Form Factor		Wallmount	Wallmount
Processor System	Chipset	C226	Q77
	CPU	Intel Xeon E3-Series LGA1150 Max. 3.5 GHz	Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz
	Core	4	Max. 4
	Cache	Max. 8 MB	Max. 8 MB
	Memory	DDR3 1333/1600 MHz Max. 16 GB	DDR3 1333/1600 MHz Max. 16 GB
Graphic	Controller	Intel HD Graphics	Chipset integrated Intel HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
Expansion	PCIE x16	2 (Gen3, x16 slot with x8 link)	1
	PCIE x8	-	-
	PCIE x4	1	1
	PCIE x1	-	-
	PCI	1	2
HDD Bay	Slim ODD	1 Front-accessible	-
	5.25"	-	-
	3.5"	1 Front-accessible, 1 Interanl	1 Front-accessible, 1 Interanl
	2.5"	-	-
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel I217-LM;LAN2: Intel I210-AT	LAN 1: Intel 82579LM; LAN 2: Intel 82583V
Front I/O	Display	-	-
	LAN	-	-
	USB	2 USB3.0	2 USB3.0
	COM	-	-
	PS/2	-	-
	Audio	-	-
Rear I/O	Display	VGA + DVI + 2 DB	VGA
	LAN	2	2
	USB	2 USB3.0; 2 USB 2.0	1 USB3.0
	COM	-	-
	PS/2	-	1
	Audio	2 (Mic-in, Line-out)	-
Watchdog timer	Output	System reset	System reset
	Interval	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min
Power Supply	Output Wattage	300 W	270 W
	Input Range	AC 100 ~ 240 V	AC 100 ~ 240 V
Cooling	System Fan	1 (12 cm / 85 CFM)	1 (9 cm / 53 CFM)
	Air Filter	Yes	Yes
Physical Characteristics	Dimensions (W x H x D)	157 x 360 x 340 mm (6.2" x 14.2" x 13.4")	111 x 212 x 420 mm (4.4" x 8.3" x 16.5")
	Weight	6.5 kg (14.3 lb)	4.7 kg (10.3 lb)
Page		8-6	8-10





SYS-7W7132-4A01	SYS-1U1010-4F01
Wallmount	1U
H61	Q77
Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz	Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz
4	Max. 4
Max. 8 MB	Max. 8 MB
DDR3 1333/1600 MHz Max. 16 GB	DDR3 1333/1600 MHz Max. 16 GB
Intel HD Graphics	Chipset integrated Intel HD Graphics
Shared system memory is subject to OS	Shared system memory is subject to OS
1	1
-	-
1	1
-	-
5	-
-	1 Front-accessible
1 Front-accessible	-
1 Front-accessible, 2 internal	1 Front-accessible
-	-
10/100/1000 Mbps	10/100/1000 Mbps
Intel 82579V	LAN 1: Intel 82579LM; LAN 2: Intel 82583V
-	-
-	-
2 USB2.0	2 USB3.0
-	-
-	-
-	-
VGA	VGA
1	2
4 US2.0	1 USB3.0
2	0
2	1
2 (Mic-in, Line-out)	-
System reset	System reset
Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min
300 W	300 W
AC 100 ~ 240 V	AC 100 ~ 240 V
1 (12 cm/85 CFM)	4 (4 cm/24 CFM x 3 + 15 CFM x 1)
Yes	-
200 x 330 x 430 mm (7.9" x 13" x 16.9")	480 x 44 x 497 mm (19" x 1.7" x 19.6")
9.96 kg (21.93 lb)	8 kg (17.6 lb)
8-8	8-12

Pre-configured Systems





Selection Guide

Model Name		SYS-1U1320-4F01	SYS-2U2320-4A01
Form Factor		1U	2U
Processor System	Chipset	C216	H61
	CPU	Intel Xeon E3-Series LGA1155 Max. 3.5 GHz	Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz
	Core		4
	Cache	Max. 8 MB	Max. 8 MB
	Memory	DDR3 (ECC) 1333/1600 MHz Max. 16 GB	DDR3 1333/1600 MHz Max. 16 GB
Graphic	Controller	Chipset integrated Intel HD Graphics	Intel HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
Expansion	PCIE x16	-	2
	PCIE x8	2	-
	PCIE x4	-	-
	PCIE x1	-	-
	PCI	-	1
HDD Bay	Slim ODD	1 Front-accessible	-
	5.25"	-	1 Front-accessible
	3.5"	2 Front-accessible	1 Front-accessible, 2 Internal
	2.5"	-	-
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN 1: Intel 82579LM; LAN 2: Intel 82574L	Intel 82579V
Front I/O	Display	-	-
	LAN	-	-
	USB	2 USB3.0	2 USB2.0
	COM	-	-
	PS/2	-	1
	Audio	-	-
Rear I/O	Display	VGA	VGA
	LAN	2	1
	USB	1 USB3.0	4 USB2.0
	COM	0	2
	PS/2	1	2
	Audio	-	2 (Mic-in, Line-out)
Watchdog timer	Output	System reset	System reset
	Interval	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min
Power Supply	Output Wattage	300 W	300 W
	Input Range	AC 100 ~ 240 V	AC 100 ~ 240 V
Cooling	System Fan	4 (4 cm/24 CFM x 3 + 15 CFM x 1)	2 (8 cm /47 CFM each)
	Air Filter	x	Yes
Physical Characteristics	Dimensions (W x H x D)	480 x 44 x 617 mm (19" x 1.7" x 24.3")	482 x 88 x 480 mm (19" x 3.46" x 18.9")
	Weight	8.8 kg (19.4 lb)	10.7 kg (23.5 lb)
Page		8-14	8-16









SYS-2U2010-4A02	SYS-4U4000-4F01	SYS-4U510-4A02	SYS-4U610-4F01
2U	4U	4U	4U
Q77	Q77	H61	H61
Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz	Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz	Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz	Intel core i7/ i5/ i3 LGA1155 Max. 3.4 GHz
Max. 4	Max. 4	4	4
Max. 8 MB	Max. 8 MB	Max. 8 MB	Max. 8 MB
DDR3 1333/1600 MHz Max. 16 GB	DDR3 1333/1600 MHz Max. 16 GB	DDR3 1333/1600 MHz Max. 16 GB	DDR3 1333/1600 MHz Max. 16 GB
Chipset integrated Intel HD Graphics	Chipset integrated Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS
1	1	1	1
-	-	-	-
-	3	1	-
2	-	-	3
-	7	5	8
-	-	-	-
-	3 Front-accessible	3 Front-accessible	3 Front-accessible
2 Front-accessible, 2 Internal	1 Front-accessible	1 Front-accessible, 1 Interanl	1 Front-accessible, 1 Interanl
-	-	-	-
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
LAN 1: Intel 82579LM; LAN 2: Intel 82583V	LAN 1: Intel 82579LM; LAN 2: Intel 82583V	Intel 82579V	Intel 82579V
-	-	-	-
-	-	-	-
2 USB3.0	2 USB3.0	2 USB2.0	-
-	-	-	-
1	1	1	-
-	-	-	-
VGA + DVI	VGA	VGA	VGA
2	2	1	1
2 USB3.0; 2 USB2.0	1 USB3.0	4 US2.0	-
2	-	2	1
2	1	2	1
2 (Mic-in, Line-out)	-	2 (Mic-in, Line-out)	-
System reset	System reset	System reset	System reset
Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min
300 W	300 W	300 W	300 W
AC 100 ~ 240 V	AC 100 ~ 240 V	AC 100 ~ 240 V	AC 100 ~ 240 V
2 (8 cm /47 CFM each) + 1 (6 cm /28 CFM)	2 (12 cm / 85 CFM each)	1 (12 cm / 77 CFM)	1 (12 cm / 85 CFM)
Yes	Yes	Yes	Yes
482 x 88 x 480 mm (19" x 3.46" x 18.9")	482 x 177 x 479 mm (19" x 7" x 18.9")	482 x 177 x 446 mm (19" x 7" x 17.6")	482 x 177 x 449 mm (19" x 7" x 17.8")
11.7 kg (25.7 lb)	15.2 kg (33.5 lb)	10.7 kg (23.5 lb)	16.2 kg (35.6 lb)
8-18	8-20	8-22	8-24

SYS-2W5122-4U01

Wallmount Intel® LGA1150 Xeon® E3 V3 MicroATX System with PS/2 Power Supply



Features

- Intel® C226 Platform
  - Supports LGA 1150 Intel® Xeon® E3 V3 processors
  - DDR3 1600 MHz ECC UDIMM up to 32GB
- Thoughtful & Management design
  - Supports iAMT 9.0 or IPMI module (optional)
  - Two 3.5" SATA HDD bays with shock-resistant
  - Easy-to-maintain system fan and reusable air filter
  - 80 plus bronze 300 W power supply

Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

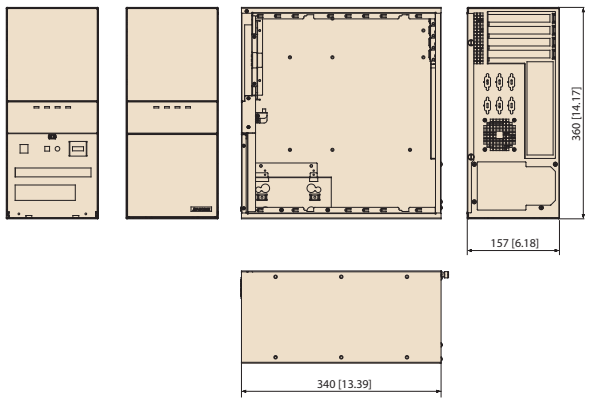
SUSIAccess Remote Device Management

Specification

Processor System	CPU	Xeon E3-1275 v3	Xeon E3-1225 v3	Xeon E3-1268 v3
	Core	4	4	4
	Base Frequency	3.5 GHz	3.2 GHz	2.3 GHz
	L3 Cache	8 MB	8 MB	8 MB
	Chipset	Intel C226		
	BIOS	AMI 128 Mbit SPI (UEFI)		
Memory	Technology	Dual Channel DDR3 ECC/Non-ECC 1066/1333/1600 MHz		
	Max. Capacity	32 GB (8 GB per DIMM)		
	Socket	4 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	2 (Gen3, x16 slot with x8 link)		
	PCI Express x4	1		
	PCI	1		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN1: Intel I217-LM; LAN2: Intel I210-AT		
Storage	Slim Optical Drive	1 x Front-accessible		
	Internal 3.5" HDD Bay	1		
	Internal 3.5" HDD Bay	1		
Front I/O Interface	USB	2 USB3.0		
Rear I/O Interface	Display	VGA + DB + HDMI		
	LAN	2		
	USB	2 USB3.0; 2 USB 2.0		
	Audio	2 (Mic-in, Line-out)		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	1 (12 cm / 85 CFM)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	Power, HDD, fan and temperature		
	Control	Power on/off switch		
Environment		Operating		Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)		-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing		10 ~ 95% @ 40° C, non-condensing
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis		2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (WxHxD)	157 x 360 x 340 mm (6.2" x 14.2" x 13.4")		
	Weight	6.5 kg (14.3 lb)		

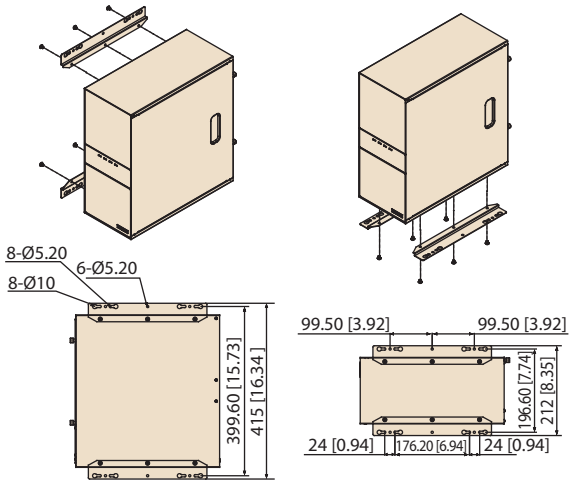
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



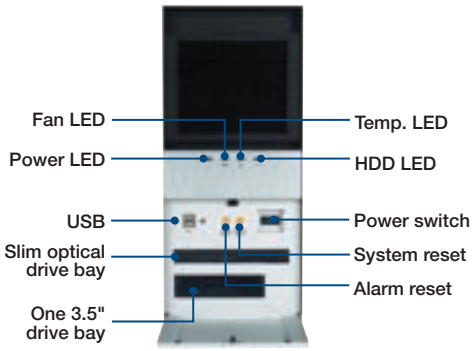
Ordering Information

Please visit Advantech eStore for order entry.
http://buy.advantech.com/

System Contents

Item	Part Number
Chassis	IPC-5122-00XE
Motherboard	ASMB-584G2-00A1E
Power Supply	PS8-300ATX-ZBE

Front View



Interior View



SYS-7W7132-4A01

Wallmount Intel® LGA1155 Core™ i7/ i5/ i3 ATX System with Dual Display



Features

- Intel® H61 Platform
  - Supports Intel® Core™ i7/i5/i3/Pentium processor
  - DDR3 1066/1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - One 5.25" ODD and three 3.5" HDD bays with shock-resistant
  - Thumb-screw design for top cover opening easily
  - 80 plus bronze 300 W power supply

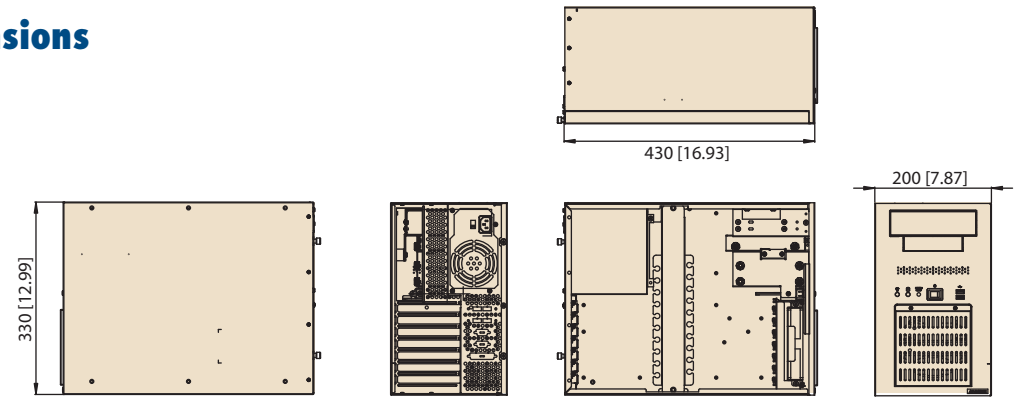
Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

Specification

Processor System	CPU	Core i7 3xxx/2xxx	Core i5 3xxx/2xxx	Core i3 3xxx/2xxx	Pentium G8xx
	Core	4	4	2	2
	Base Frequency	3.4 GHz	3.4/3.3 GHz	3.4 GHz	2.9 GHz
	L3 Cache	8 MB	6 MB	3 MB	3 MB
	Chipset	Intel H61			
	BIOS	AMI 64 Mbit SPI			
Memory	Technology	Dual Channel DDR3 Non-ECC 1066/1333/1600 MHz			
	Max. Capacity	16 GB (8 GB per DIMM)			
	Socket	2 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics			
Expansion slot	PCI Express x16	1			
	PCI Express x4	1			
	PCI	5			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	Intel 82579V			
Storage	5.25" HDD Bay	1 Front-accessible			
	3.5" HDD Bay	1 Front-accessible, 2 internal			
Front I/O Interface	USB	2 USB2.0			
Rear I/O Interface	Display	VGA			
	LAN	1			
	USB	4 USB2.0			
	COM	2			
	PS/2	2			
	Audio	2 (Mic-in, Line-out)			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
Power Supply	Output Rating	AC 300W, ATX			
	Input Voltage	100 V_{AC} ~ 240 V_{AC}			
Cooling	System Fan	1 (12 cm / 85 CFM)			
	Air Filter	Yes			
Miscellaneous	LED Indicators	Power, HDD			
	Control	Power Switch, System Reset Button			
Environment		Operating		Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)		-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing		10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis		2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration			
Physical Characteristics	Dimension (W x H x D)	200 x 330 x 430 mm (7.9" x 13" x 16.9")			
	Weight	9.96 kg (21.93 lb)			

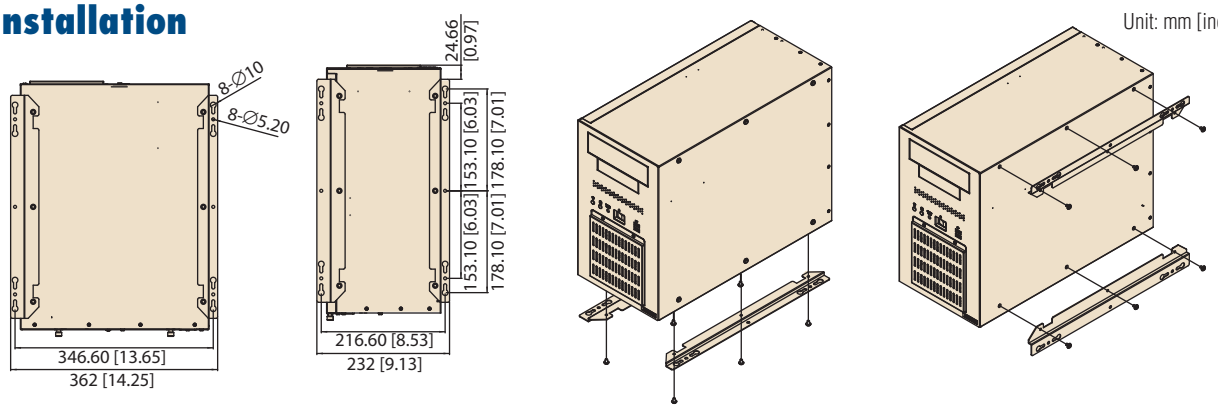
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



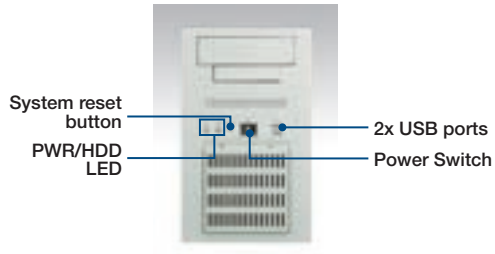
Ordering Information

Please visit Advantech eStore for order entry.
http://buy.advantech.com/

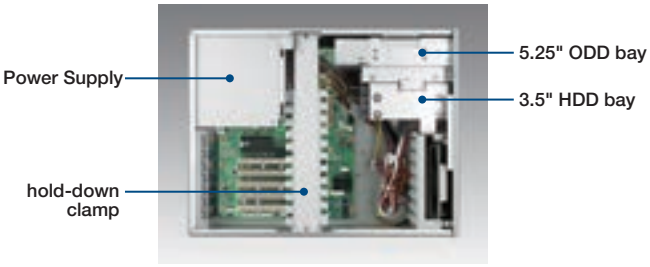
System Contents

Item	Part Number
Chassis	IPC-7132MB-00XE
Motherboard	AIMB-701VG-00A1E
Power Supply	PS8-300ATX-ZBE

Front view



Interior View



SYS-4W6025-4F01

Wallmount Intel® LGA1155 Core™ i7/ i5/ i3 PICMG 1.3 System with 4 Expansion Slots



Features

- Intel® Q77 Platform
  - Supports Intel® Core™ i7/i5/i3/Pentium processor
  - DDR3 1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - Supports iAMT8.0 and TPM 1.2 (optional)
  - Two 3.5" HDD bays with shock-resistant
  - Optional one rackmount carrier for multi-system solution
  - 270 W power supply

Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

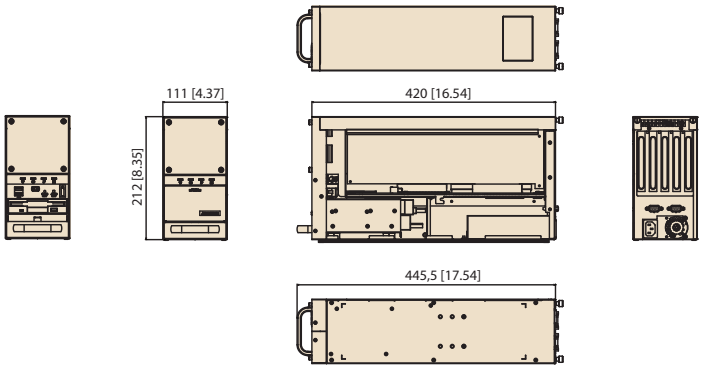
SUSIAccess Remote Device Management

Specification

Processor System	CPU	Core i7-3770	Core i7-2600	Core i5-3550S	Core i5-2400	Core i3-3220	Core i3-2120
	Core	4	4	4	4	2	2
	Base Frequency	3.4 GHz	3.4 GHz	3.0 GHz	3.1 GHz	3.3 GHz	3.3 GHz
	L3 Cache	8 MB	8 MB	6 MB	6 MB	3 MB	3 MB
	Chipset	Intel Q77					
	BIOS	AMI 64 Mbit SPI					
Memory	Technology	Dual Channel DDR3 Non-ECC 1333/1600 MHz					
	Max. Capacity	16 GB (8 GB per DIMM)					
	Socket	2 x 240-pin DIMM					
Graphics	Controller	Intel HD Graphics					
Expansion slot	PCI Express x16	1					
	PCI Express x4	1					
	PCI	2					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	LAN 1: Intel 82579LM; LAN 2: Intel 82583V					
Storage	3.5" HDD Bay	1 Front-accessible, 1 internal					
Front I/O Interface	USB	2 USB3.0					
Rear I/O Interface	Display	VGA					
	LAN	2					
	USB	1 USB3.0					
	PS/2	1					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 ~ 255 sec/min					
Power Supply	Output Rating	AC 270W, ATX					
	Input Voltage	100 V_{AC} ~ 240 V_{AC}					
Cooling	System Fan	1 (9 cm / 53 CFM)					
	Air Filter	Yes					
Miscellaneous	LED Indicators	Power, fan, temperature, HDD					
	Control	Power switch and system reset buttons					
Environment		Operating			Non-operating		
	Temperature	0 ~ 40°o C (32 ~ 104° F)			-20 ~ 60° C (-4 ~ 140° F)		
	Humidity	10 ~ 85% @ 40° C, non-condensing			10 ~ 95% @ 40° C, non-condensing		
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis			2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis		
	Shock	10G, half sine wave, 11 ms duration					
Physical Characteristics	Dimension (W x H x D)	111 x 212 x 420 mm (4.4" x 8.3" x 16.5")					
	Weight	4.7 kg (10.3 lb)					

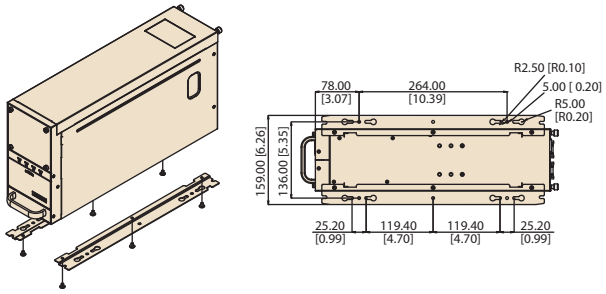
Dimensions

Unit: mm [inch]



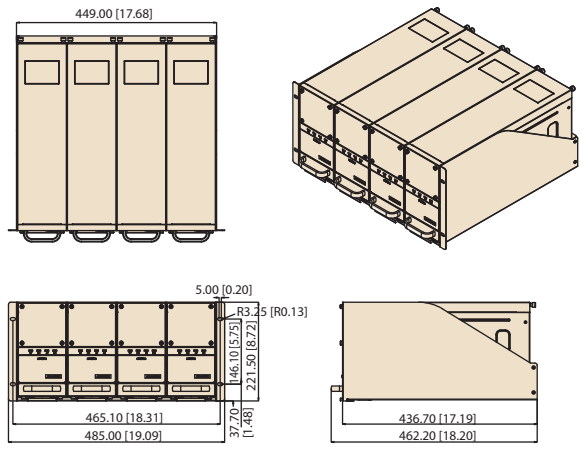
Installation

Single System



Quad System

Unit: mm [inch]



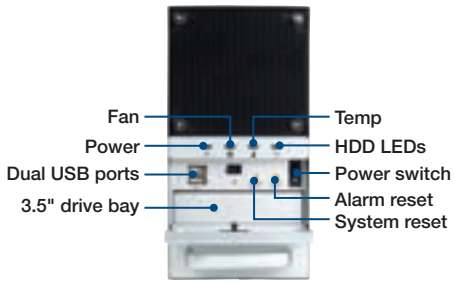
Ordering Information

Please visit Advantech eStore for order entry.
http://buy.advantech.com/

System Contents

Item	Part Number
Chassis	IPC-6025BP-27ZE
SBC Board	PCE-5127G2-00A1E
Backplane	PCE-5B05-02A1E
Power Supply	1757001847

Front View



Interior View



4 IPC-6025 combined as a 5U quad-system rackmount IPC

SYS-1U1010-4F01

1U Intel® LGA1155 Core™ i7/ i5/ i3 with One Slim ODD and Two 3.5" HDD Trays



Features

- Intel® Q77 Platform
  - Supports Intel® Core™ i7/i5/i3 processor
  - DDR3 1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - Supports iAMT8.0 and TPM 1.2 (optional)
  - One slim ODD and two 3.5" disk drives with shock-resistant
  - Efficient cooling design prevents the system from over-heating
  - 300 W power supply

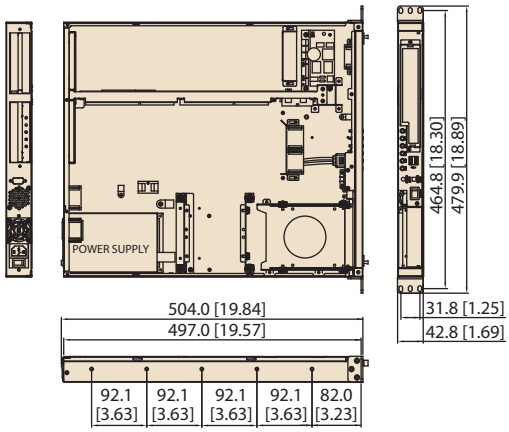
Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

Specification

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Intel Q77		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 Non-ECC 1333/1600 MHz		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	2 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	1		
	PCI Express x4	1		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN 1: Intel 82579LM; LAN 2: Intel 82583V		
Storage	Slim ODD	1 Front-accessible		
	3.5" HDD Bay	1 Front-accessible		
Front I/O Interface	USB	2 USB3.0		
Rear I/O Interface	Display	VGA		
	LAN	2		
	USB	1 USB3.0		
	PS/2	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	4 (4 cm/24 CFM x 3 + 15 CFM x 1)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	System: Power, HDD, Temperature, Fan		
	Control	Power switch, system reset & alarm reset button		
Environment		Operating		Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)		-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing		10 ~ 95% @ 40° C, non-condensing
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis		2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	480 x 44 x 497 mm (19" x 1.7" x 19.6")		
	Weight	8 kg (17.6 lb)		

Dimensions

Unit: mm [inch]



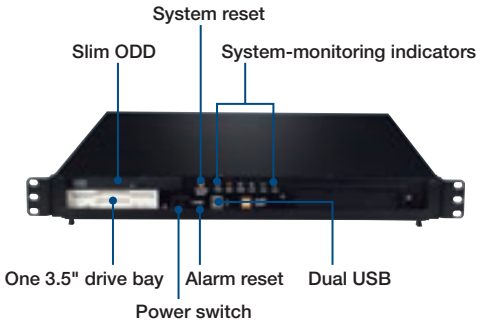
Ordering Information

Please visit Advantech eStore for order entry.
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System Contents

Item	Part Number
Chassis	ACP-1010BP-00XE
SBC Board	PCE-5127G2-00A1E
Backplane	PCE-5B03V-00A1E
Power Supply	1757000160G

Front View



Interior View



ACP-1010BP/1320BP

SYS-1U1320-4F01

1U Intel® LGA1155 Xeon®/ Core™ i3 Support ECC RAM, Dual SATA/SAS HDD Trays



Features

- Intel® C216 Platform
  - Supports LGA1155 Intel® Xeon®/Core™i3 processors
  - DDR3 1333/1600 MHz (ECC) up to 16GB
- Thoughtful & Management design
  - Supports iAMT8.0 and TPM 1.2 (optional)
  - One slim ODD and two 3.5" disk drives with shock-resistant
  - Efficient cooling design prevents the system from over-heating
  - 300 W power supply

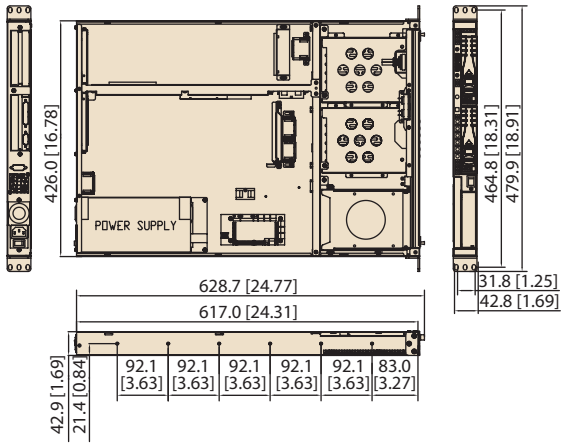
Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

Specification

Processor System	CPU	Xeon E3-1275 v2	Xeon E3-1225 v2	Core i3-3220
	Core	4	4	2
	Base Frequency	3.5 GHz	3.2 GHz	3.3 GHz
	L3 Cache	8 MB	8 MB	3 MB
	Chipset	Intel C216		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 ECC 1333/1600 MHz		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	2 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x8	2		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN 1: Intel 82579LM; LAN 2: Intel 82574L		
Storage	3.5" HDD Bay	2 Front-accessible		
Front I/O Interface	USB	2 USB3.0		
Rear I/O Interface	Display	VGA		
	LAN	2		
	USB	1 USB3.0		
	PS/2	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	4 (4 cm/24 CFM x 3 + 15 CFM x 1)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	System: Power, HDD, Temperature, Fan		
	Control	Power switch, system reset & alarm reset button		
Environment		Operating	Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	480 x 44 x 617 mm (19" x 1.7" x 24.3")		
	Weight	8.8 kg (19.4 lb)		

Dimensions

Unit: mm [inch]



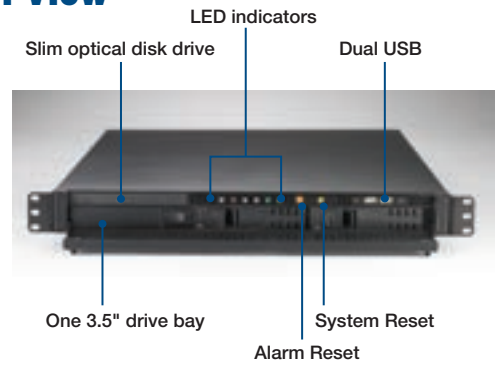
Ordering Information

Please visit Advantech eStore for order entry.
http://buy.advantech.com/

System Contents

Item	Part Number
Chassis	ACP-1320BP-00XE
SBC Board	PCE-7127G2-00A1E
Backplane	PCE-7B03V-00A1E
Power Supply	1757000160G

Front View



Interior View



SYS-2U2320-4A01

2U Intel® LGA1155 Core™ i7/ i5/ i3 MicroATX System with 2 Front Access HDD Tray



Features

- Intel® H61 Platform
  - Supports Intel® Core™ i7/i5/i3 processor
  - DDR3 1066/1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - One slim ODD, two internal 3.5" HDD bays with shock-resistant
  - Reusable and washable air filters
  - 300 W power supply

Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

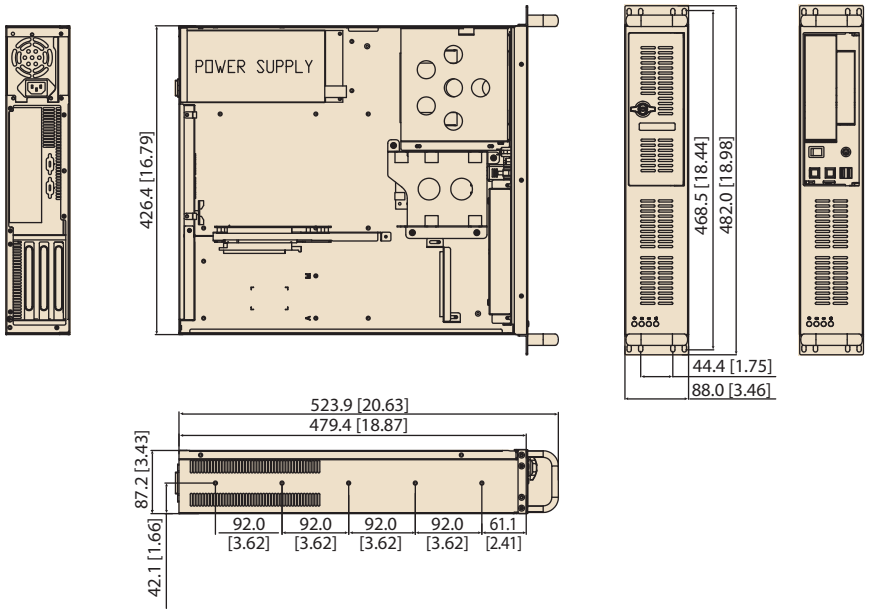
SUSIAccess Remote Device Management

Specification

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Intel H61		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 Non-ECC 1066/1333/1600 MHz		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	2 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	2		
	PCI	1		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	Intel 82579V		
Storage	5.25" HDD Bay	1 Front-accessible		
	3.5" HDD Bay	1 Front-accessible, 2 internal		
Front I/O Interface	USB	2 USB2.0		
Rear I/O Interface	Display	VGA		
	LAN	1		
	USB	4 USB2.0		
	COM	2		
	PS/2	2		
	Audio	2 (Mic-in, Line-out)		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	2 (8 cm /47 CFM each)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	Power, HDD, temperature, fan		
	Control	Power Switch, System Reset Button		
Environment		Operating	Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	482 x 88 x 480 mm (19" x 3.46" x 18.9")		
	Weight	10.7 kg (23.5 lb)		

Dimensions

Unit: mm [inch]



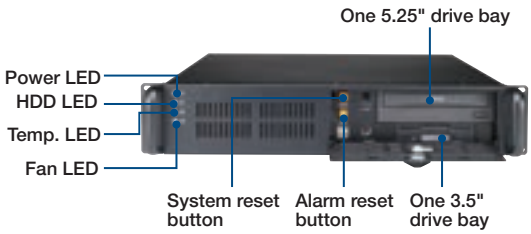
Ordering Information

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System Contents

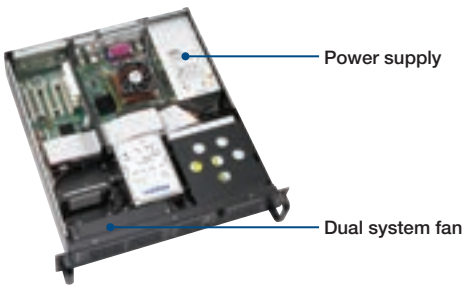
Item	Part Number
Chassis	ACP-2010MB0-00XBE
Motherboard	AIMB-701VG-00A1E
Riser Card	AIMB-RP3P8-12A1E
Power Supply	1757000007G

Front View



ACP-2010MB

Interior View



ACP-2010MB

SYS-2U2010-4A02

2U Intel® LGA1155 Core™ i7/ i5/ i3 MicroATX System with 2 Front Access HDD Tray



Features

- Intel® Q77 Platform
  - Supports Intel® Core™ i7/i5/i3 processor
  - DDR3 1066/1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - Dual mobile SAS/SATA HDD bays with shock-resistant
  - Reusable and washable air filters
  - 300 W power supply

Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

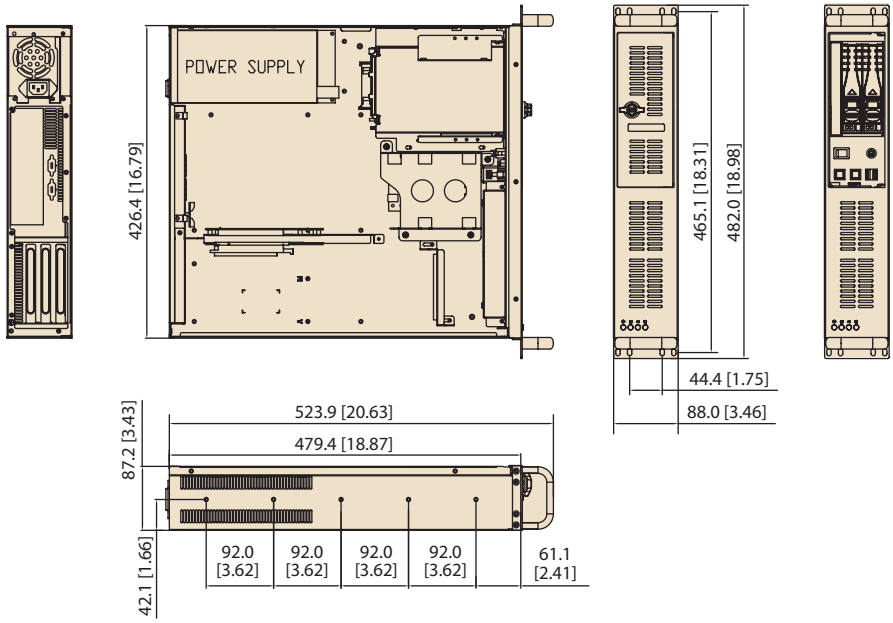
SUSIAccess Remote Device Management

Specification

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Intel Q77		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 Non-ECC 1066/1333/1600 MHz		
	Max. Capacity	32 GB (8 GB per DIMM)		
	Socket	4 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	1		
	PCI Express x1	2		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN 1: Intel 82579LM; LAN 2: Intel 82583V		
Storage	3.5" HDD Bay	2 Front-accessible, 2 Internal		
Front I/O Interface	USB	2 USB3.0		
Rear I/O Interface	Display	VGA + DVI		
	LAN	2		
	USB	2 USB3.0; 2 USB2.0		
	COM	2		
	PS/2	2		
	Audio	2 (Mic-in, Line-out)		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	2 (8 cm /47 CFM each) + 1 (6 cm /28 CFM)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	Power, HDD, temperature, fan		
	Control	Power Switch, System Reset Button		
Environment		Operating	Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	482 x 88 x 480 mm (19" x 3.46" x 18.9")		
	Weight	11.7 kg (25.7 lb)		

Dimensions

Unit: mm [inch]



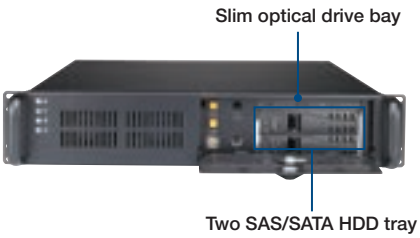
Ordering Information

Please visit Advantech eStore for order entry.
http://buy.advantech.com/

System Contents

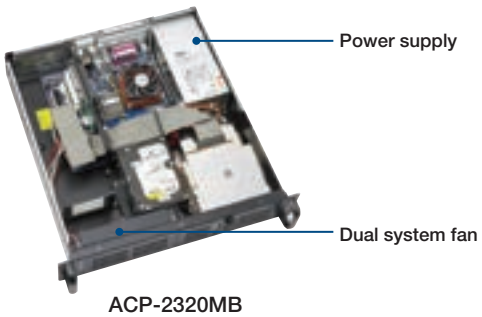
Item	Part Number
Chassis	ACP-2320MB0-00XBE
Motherboard	AIMB-782QG2-00A1E
Riser Card	AIMB-R431F-21A1E
Power Supply	1757000007G

Front View



ACP-2320MB

Interior View



ACP-2320MB

SYS-4U4000-4F01

4U Intel® Core™ i7/i5/i3 LGA 1155 PICMG 1.3 System with 11 Expansion Slots



Features

- Intel® Q77 Platform
  - Supports Intel® Core™ i7/i5/i3 processor
  - DDR3 1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - Supports iAMT8.0 and TPM 1.2 (optional)
  - Three 5/25" and one 3.5" disk drives with shock-resistant
  - Lockable front door prevents unauthorized access
  - 300 W power supply

Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

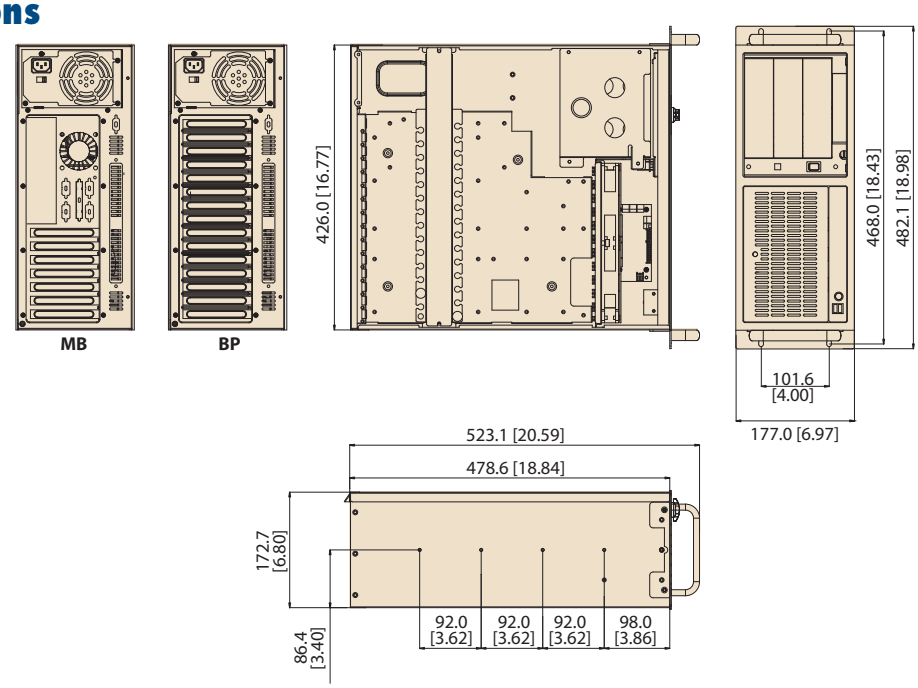
SUSIAccess Remote Device Management

Specification

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Intel Q77		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 Non-ECC 1333/1600 MHz		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	2 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	1		
	PCI Express x4	3		
	PCI	7		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	LAN 1: Intel 82579LM; LAN 2: Intel 82583V		
Storage	5.25" HDD Bay	3 Front-accessible		
	3.5" HDD Bay	1 Front-accessible		
Front I/O Interface	USB	2 USB3.0		
	PS/2	1		
Rear I/O Interface	Display	VGA		
	LAN	2		
	USB	1 USB3.0		
	PS/2	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	2 (12 cm / 85 CFM each)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	System: Power, HDD, Temperature, Fan		
	Control	Power switch, system reset & alarm reset button		
Environment		Operating		Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)		-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing		10 ~ 95% @ 40° C, non-condensing
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis		2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	482 x 177 x 479 mm (19" x 7" x 18.9")		
	Weight	15.2 kg (33.5 lb)		

Dimensions

Unit: mm [inch]



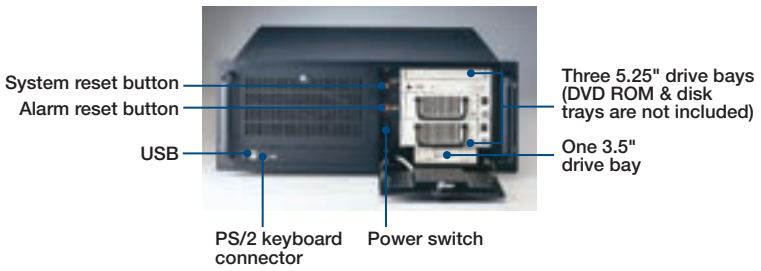
Ordering Information

Please visit Advantech eStore for order entry.
http://buy.advantech.com/

System Contents

Item	Part Number
Chassis	ACP-4000BP-00XE
SBC Board	PCE-5127G2-00A1E
Backplane	PCE-5B12-07A1E
Power Supply	PS8-300ATX-ZBE

Front View





SYS-4U510-4A02

4U Intel® Core™ i7/i5/i3 LGA 1155 ATX System with 4 Front Access HDD Trays



Features

- Intel® H61 Platform
  - Supports Intel® Core™ i7/i5/i3 processor
  - DDR3 1066/1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - Three 5.25" and two 3.5" HDD bays with shock-resistant
  - Front-accessible USB & PS/2 interfaces
  - 300 W power supply

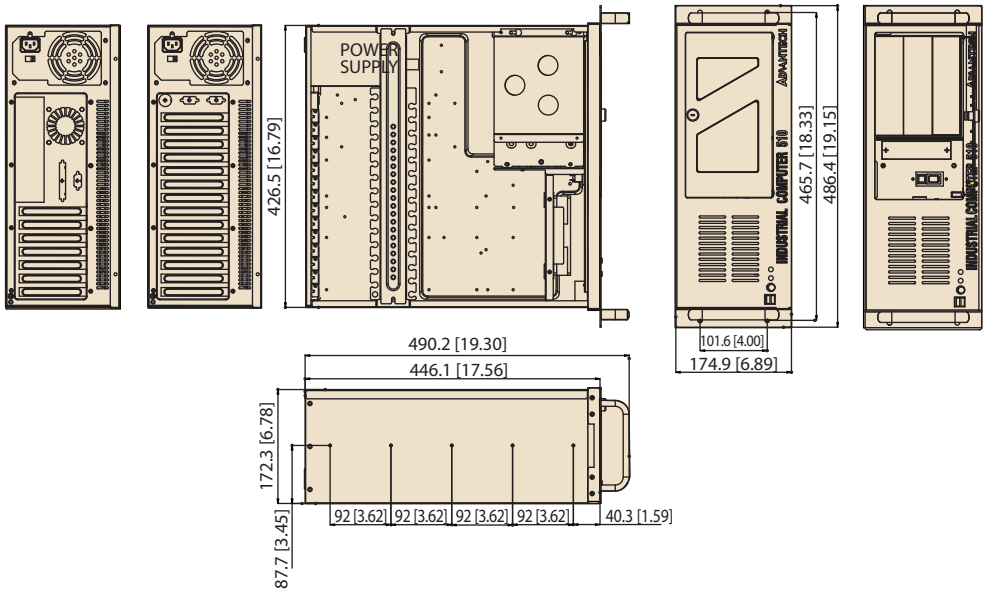
Remote Mgmt. | Power Optimized | Thermal Optimized | Long Life Cycle

Specification

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Intel H61		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 Non-ECC 1066/1333/1600 MHz		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	2 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	1		
	PCI Express x4	1		
	PCI	5		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	Intel 82579V		
Storage	5.25" HDD Bay	3 Front-accessible		
	3.5" HDD Bay	1 Front-accessible, 1 internal		
Front I/O Interface	USB	2 USB2.0		
	PS/2	1		
Rear I/O Interface	Display	VGA		
	LAN	1		
	USB	4 USB2.0		
	COM	2		
	PS/2	2		
	Audio	2 (Mic-in, Line-out)		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	1 (12 cm / 77 CFM)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	Power & HDD		
	Control	Power Switch, System Reset Button		
Environment		Operating	Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	482 x 177 x 446 mm (19" x 7" x 17.6")		
	Weight	10.7 kg (23.5 lb)		

Dimensions

Unit: mm [inch]



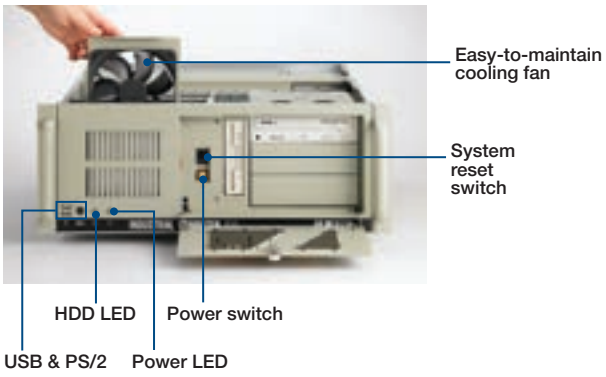
Ordering Information

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System Contents

Item	Part Number
Chassis	IPC-510MB-00XBE
Motherboard	AIMB-701VG-00A1E
Power Supply	PS8-300ATX-ZBE

Front View



Interior View



Motherboard can fit in 450 mm (17.7") depth

SYS-4U610-4F01

4U Cost-effective System for Intel® Core™ i7/i5/i3 LGA 1155 PICMG 1.3 System with 12 Expansion Slots



SUSIAccess Remote Device Management

CE FCC RoHS COMPLIANT 2002/95/EC

Features

- Intel® H61 Platform
  - Supports Intel® Core™ i7/i5/i3 processor
  - DDR3 1066/1333/1600 MHz up to 16GB
- Thoughtful & Management design
  - Three 5.25" and two 3.5" HDD bays with shock-resistant
  - Front-accessible air filter for easy system maintenance
  - Lockable front door prevents unauthorized access
  - 300 W power supply

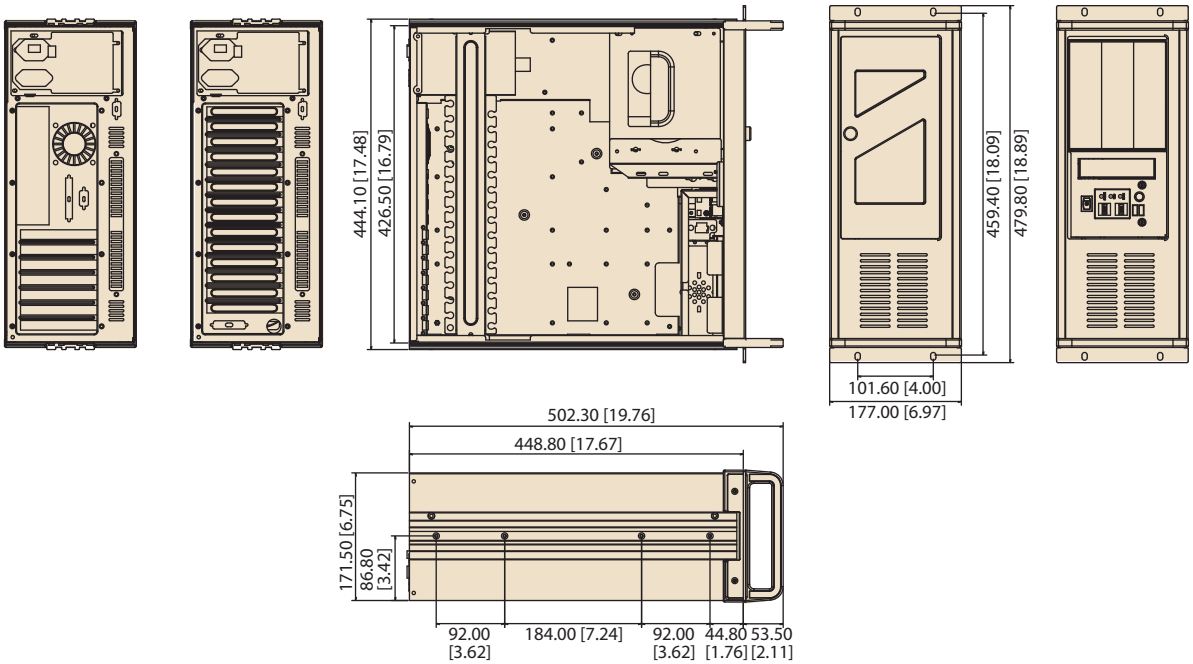
Remote Mgmt. | Power Optimized | Thermal Optimized | 7 5years Long Life Cycle

Specification

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220
	Core	4	4	2
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz
	L3 Cache	8 MB	6 MB	3 MB
	Chipset	Intel H61		
	BIOS	AMI 64 Mbit SPI		
Memory	Technology	Dual Channel DDR3 Non-ECC 1066/1333/1600 MHz		
	Max. Capacity	16 GB (8 GB per DIMM)		
	Socket	2 x 240-pin DIMM		
Graphics	Controller	Intel HD Graphics		
Expansion slot	PCI Express x16	1		
	PCI Express x1	3		
	PCI	8		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	Intel 82579V		
Storage	5.25" HDD Bay	3 Front-accessible		
	3.5" HDD Bay	1 Front-accessible, 1 internal		
Front I/O Interface	USB	2		
	PS/2	1		
Rear I/O Interface	Display	VGA		
	LAN	1		
	COM	1		
	PS/2	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Supply	Output Rating	AC 300W, ATX		
	Input Voltage	100 V_{AC} ~ 240 V_{AC}		
Cooling	System Fan	1 (12 cm / 77 CFM)		
	Air Filter	Yes		
Miscellaneous	LED Indicators	Power & HDD		
	Control	Power Switch, System Reset Button		
Environment		Operating	Non-operating	
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Vibration	1Grms, random, 5~500Hz, 3 axes, 1 hr/axis	2Grms, sine wave, 5~500Hz, 3 axes, 1 hr/axis	
	Shock	10G, half sine wave, 11 ms duration		
Physical Characteristics	Dimension (W x H x D)	482 x 177 x 449 mm (19" x 7" x 17.8")		
	Weight	16.2 kg (35.6 lb)		

Dimensions

Unit: mm [inch]



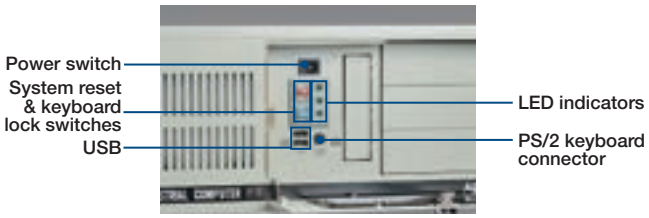
Ordering Information

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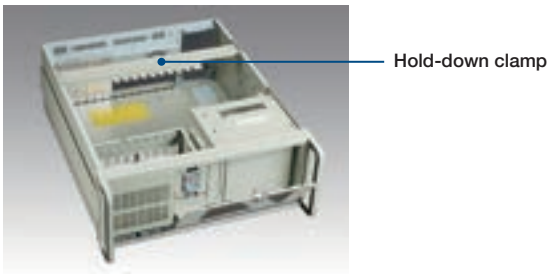
System Contents

Item	Part Number
Chassis	IPC-610BP-00XHE
Motherboard	PCE-5026VG-00A1E
Backplane	PCE-5B13-08A1E
Power Supply	PS8-300ATX-ZBE

Front View



Interior View



Enjoy Tranquil Moments
with Quiet Industrial Computers



iPC Intelligent Industrial Quiet

ADVANTECH

Enabling an Intelligent Planet

Advantech Intelligent IPCs, Now with Built-in Quiet

Advantech's Quiet Industrial Computers are designed for placement in environments sensitive to noise, such as network communications, POS, medical systems, or offices that require noise-reduction technology. These computers feature acoustic and thermal optimization, with Smart Fan to adjust the rotation speed while addressing both noise and cooling issues. Complying with the ISO 7779 Standard, Advantech controls noise down to as low as 35 dBA, and provides a range of selections at the sound level of your choice, from 35 dBA on up.

35 dBA Series



ACP-4320
4U Rackmount Chassis with Dual SAS/SATA HDD Trays



IPC-7220
Desktop/Wallmount Chassis For ATX Motherboard



AIMB-767
LGA775 Intel® Core™ 2 Quad ATX with Dual VGA/DVI, 4 COM, Dual LAN



AIMB-781
LGA1155 Intel® Core™ i7/i5/i3/Pentium ATX with DVI/VGA, Dual Gigabit LAN, DDR3, SATA III

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Neihu District, Taipei, Taiwan 11491, R.O.C.
Tel: 886-2-2792-7818
Email: IPC@advantech.com.tw

9

Industrial Computer Chassis

Selection Guide		*9-2*
Compact Chassis		
IPC-3012	Compact Chassis for PICMG 1.3 Half Size SHB	*9-6*
IPC-6806S	Compact Chassis for Half Size SHB/SBC	*9-8*
IPC-3026	Quiet Compact Chassis for Half Size SHB/SBC	*9-10*
ARK-6610/6620	Compact Chassis for Mini-ITX Motherboard	*9-12*
ARK-6622	Compact Chassis with one front slot for Mini-ITX Motherboard	*9-14*
IPC-6006	6-Slot Backplane Card Cage	*9-16*
Desktop/Wallmount Chassis		
IPC-5122	Desktop/Wallmount Chassis for MicroATX Motherboard	*9-18*
IPC-7130	Desktop/Wallmount Chassis with Dual SAS/SATA HDD Trays for ATX/MicroATX Motherboard	*9-20*
IPC-6025	5-Slot Desktop/Wallmount Chassis with Scalability as 5U Quad-System Solution	*9-22*
IPC-6606/6608	6/8-Slot Desktop/Wallmount Chassis	*9-24*
IPC-6806	6-Slot Desktop/Wallmount Chassis for Full/Half-Size SBC	*9-26*
IPC-6908	8-Slot Desktop/Wallmount Chassis for Full-Size SBC	*9-28*
IPC-7132	Cost-effective Wallmount Chassis for ATX/mATX Motherboard and 10-slot Backplane	*9-30*
IPC-7220	Desktop/wallmount Chassis for ATX/mATX Motherboard	*9-32*
IPC-5120/7120	Desktop/Wallmount Chassis with front I/O Interfaces for ATX/mATX Motherboard	*9-34*
1U Rackmount Chassis		
IPC-100-60SE	1U Compact Fanless System with Intel® Atom™ N450 on Board	*9-36*
ACP-1010/1320	1U Rackmount Chassis for Full-size SHB/SBC or ATX/MicroATX Motherboard with Dual SAS/SATA HDD Trays	*9-38*
2U Rackmount Chassis		
ACP-2000/IPC-602	2U 6-Slot Rackmount Chassis with Front USB and PS/2 Interfaces	*9-40*
ACP-2010MB/2320MB	2U Rackmount Chassis for ATX/MicroATX Motherboard with Low-Profile Rear Bracket Option	*9-42*
IPC-603MB	2U 3-Slot Rackmount Chassis for ATX/MicroATX Motherboard with Front I/O	*9-44*
4U Rackmount Chassis		
ACP-4000	4U Rackmount Chassis with Visual & Audible Alarm Notification	*9-46*
ACP-4010	4U Rackmount Chassis for ATX/CEB/EEB Motherboard or Full-size SHB/SBC with Dual System Support	*9-48*
ACP-4320	Quiet 4U Rackmount Chassis Ready with Dual SAS/SATA HDD Trays	*9-50*
ACP-4360	4U Rackmount Chassis with 6 Hot-Swap SAS / SATA Trays for RAID	*9-52*
IPC-510	Economical 4U Rackmount Chassis with Front USB and PS/2 Interfaces	*9-54*
IPC-610-F	Classic 4U 15-Slot Rackmount Chassis	*9-56*
IPC-610-H	4U Rackmount Chassis with Visual Alarm Notification	*9-58*
IPC-610-L/IPC-611	4U 15-Slot Rackmount Chassis with Front-Accessible Fan	*9-60*
IPC-619/IPC-619S	Compact 4U Rackmount Chassis for Motherboard & Full-Size/Half-Size SHB/SBC	*9-62*
IPC-623	4U 20-Slot Rackmount Chassis with Multi-System and Front-Accessible Redundant Power Supply	*9-64*
6U Rackmount Chassis		
IPC-622	6U 20-Slot Rackmount Chassis Supporting Quad-System and Redundant Power Supply	*9-66*
Server Chassis		
HPC-7242	2U Rackmount Chassis for ATX Motherboard with 4 SAS/SATA HDD Trays	*9-68*
HPC-7442	4U Rackmount/Tower Chassis for EATX/ATX Motherboard with Up to 8 SAS/SATA HDD Trays	*9-70*





To view all of Advantech's Industrial Computer Chassis, please visit www.advantech.com/products.

Industrial Computer Chassis

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Height (1U = 1.75")			Compact Chassis					
Model Name			IPC-3012	IPC-6806S	IPC-3026	ARK-6610 ARK-6620	ARK-6622H/L	IPC-6006
Form Factor Support			PICMG 1.3	PICMG 1.3/1.0	PICMG1.0/1.3	Mini-ITX	Mini-ITX	PICMG 1.0
Drive Bay	Slim Optical Drive		-	1	-	1/-	-	-
	3.5"	Front	-	-	-	-	-	-
		Internal	2 x 2.5"	1 x 3.5" 1x 2.5"	1	1/1	2 x 2.5"	-
	5.25"		-	-	-	-	-	-
Front I/O	USB		Yes	Yes	Yes	Yes (on motherboard) + 2 cutouts	Yes (on motherboard)	-
	PS/2		-	-	-	Yes (on motherboard)	Yes (on motherboard)	-
Cooling	No. of Fans		2	1	1	1/2	2/1	-
	CFM		27.7	53	53	52.5 /27.72	27.7/15.5	-
Power	AC		250W ATX/PFC	150W ATX/PFC	150W ATX/PFC	180 W ATX/PFC	180 W ATX/PFC	-
	AC Redundant		-	-	-	-	-	-
	DC		-	-	-	-	-	-
No. of Slots /			2	6	6/6	1 for ARK-6610	1/0	6/6 (IPC-6006)
No. of Full-size Cards								6/0 (IPC-6006S)
Passive Backplane Options	PICMG 1.0		-	refer to Chapter 12	refer to Chapter 12	-	-	refer to Chapter 12
	PICMG 1.3		PCE-3B03A	refer to Chapter 12	refer to Chapter 12	-	-	-
System Fault Detection			-	-	Yes	Yes	Yes	-
Dimensions (W x H x D)	mm		232 x 90 x 232	191 x 170 x 285	150 x 222 x 270	250 x 156 x 253 (ARK-6610) 272 x 88 x 232 (ARK-6620)	272 x 88 x 232	158 x 186 x 368 (IPC-6006) 158 x 186 x 215 (IPC-6006S)
	inch		9.13 x 3.54 x 9.13	7.7 x 6.7 x 11.2	5.9 x 8.7 x 10.6	9.8 x 6.1 x 10 (ARK-6610) 10.7 x 3.5 x 9.1 (ARK-6620)	10.7 x 3.5 x 9.1	6.2 x 7.3 x 14.5 (IPC-6006) 6.2 x 7.3 x 8.4 (IPC-6006S)
Weight	kg		3.24	5.6 (IPC-6806S)	4.4	4.8 (ARK-6610) 3.5 (ARK-6620)	3.49	2.5 (IPC-6006) 1.6 (IPC-6006S)
	lb		7.14	12.3 (IPC-6806S)	9.7	10.5 (ARK-6610) 7.7 (ARK-6620)	7.68	5.5 (IPC-6006) 3.5 (IPC-6006S)
Page			9-6	9-8	9-10	9-12	9-14	9-16











Desktop / Wallmount Chassis								
IPC-5122	IPC-7130	IPC-6025	IPC-6606/6608	IPC-6806	IPC-6908	IPC-7132	IPC-7220	IPC-5120/7120
MicroATX	ATX/MicroATX	PICMG 1.0/1.3	PICMG 1.0/1.3	PICMG 1.0	PICMG 1.0/1.3	PICMG 1.0/1.3 ATX/MicroATX	ATX/MicroATX	MicroATX/ATX
1	-	-	-	-	-	-	-	-
1	2	1	1	1	1	2	1	1
1	1	1	-	1	1	1	1	1
-	1	-	1 (IPC-6606) 2 (IPC-6608)	1 (IPC-6806W) 0 (IPC-6806)	2	1	2	1
Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes (on motherboard)
-	-	-	-	-	-	-	Yes	Yes (on motherboard)
1	2	1	1	1	2	1	1	2
85	1 x 85 1 x 27.7	53	53 (IPC-6606) 85 (IPC-6608)	58 (IPC-6806W) 53 (IPC-6806)	53	85	85	1 x 85 1 x 10
300W ATX/PFC 400W ATX/PFC	300W ATX/PFC 400W ATX/PFC	270 W ATX/PFC 300W ATX/PFC	250W ATX/PFC 300W ATX/PFC	250W ATX/PFC 300W ATX/PFC	300W ATX/PFC 400W ATX/PFC	300W ATX/PFC 400W ATX/PFC	300W ATX/PFC 400W ATX/PFC	250W ATX/PFC 300W ATX/PFC
-	-	-	-	-	300W 1+1	-	300W 1+1 400W 1+1	-
-	-	-	-	-	300W ATX	-	300W ATX	-
4/0	7/4	5/5	6/6 (IPC-6606)	6/6	8/8	7/10	7/7	7/0
			8/8 (IPC-6608)					
-			refer to Chapter 12			-	-	-
-			refer to Chapter 12			PCE-5B09-04 PCE-5B09-06	-	-
Yes	Yes	-	-	-	Yes	-	Yes	-
157 x 360 x 340	200 x 320 x 480	111 x 212 x 420	173 x 254 x 396 (IPC-6606) 173 x 315 x 410 (IPC-6608)	166 x 170 x 393 (IPC-6806) 198 x 213 x 393 (IPC-6806W)	200 x 300 x 463	200 x 330 x 430	200 x 320 x 480	380 x 164 x 316.5
6.2 x 14.2 x 13.4	7.87 x 12.59 x 18.89	4.4 x 8.3 x 16.5	6.8 x 10 x 15.6 (IPC-6606) 6.8 x 12.4 x 16.1 (IPC-6608)	6.5 x 6.7 x 15.4 (IPC-6806) 7.8 x 8.4 x 15.4 (IPC-6806W)	7.9 x 11.8 x 18.2	7.87 x 12.99 x 16.92	7.9 x 12.6 x 18.9	15 x 6.5 x 12.5
6.5	12.8	4.7	9 (IPC-6606) 11 (IPC-6608)	6.3 (IPC-6806) 7.8 (IPC-6806W)	12.9	9.96	13.7	9
14.3	28.2	10.3	19.8 (IPC-6606) 24.2 (IPC-6608)	13.9 (IPC-6806) 17.2 (IPC-6806W)	28.5	21.9	30.5	19.8
9-18	9-20	9-22	9-24	9-26	9-28	9-30	9-32	9-34

Industrial Computer Chassis



Height (1U = 1.75")			1U Rackmount		2U Rackmount			4U Rackmount			
Model Name			IPC-100-60SE	ACP-1010/1320	ACP-2000/ IPC-602	ACP-2010MB/ ACP-2320MB	IPC-603MB	ACP-4000	ACP-4010/ ACP-4320	ACP-4360	IPC-510
Form Factor Support			Mini-ITX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3	ATX/MicroATX	ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX
Drive Bay	Slim Optical Drive		1	1	1/-	-/1	1	-	-	1	-
	3.5"	Front	-	1/2 (SAS/SATA) + 1	41306	1/2 (SAS/SATA)	-	1	1/2 (SAS/SATA) + 1	6 (SAS/SATA) + 1	1
		Internal	-	1/-	-/1	2	1	-	1/-	-	1
	5.25"		-	-	-/1	1/-	-	3	2	-	3
Front I/O	USB		Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes
	PS/2		-	-	Yes	Yes	-	Yes	-	-	Yes
Cooling	No. of Fans		0	2 (MB), 4 (BP)	2	2/3	2	2	2/2	3	1
	CFM		-	2 x 24 (MB)/ 3 x 24 + 1 x 15 (BP)	2 x 47/ 2 x 40	2 x 47/ 2 x 47 + 1 x 28	47	85	2 x 85/ 1 x 114 + 1 x 28	1 x 114 + 2 x 47	77
Power	AC		-	250W ATX/PFC 300W ATX/PFC	250W ATX/PFC (IPC-602) 300W ATX/PFC 400W ATX/PFC	300W ATX/PFC 400W ATX/PFC	300W ATX/PFC	300W ATX/PFC 400W ATX/PFC	300W ATX/PFC 400W ATX/PFC	400W ATX/PFC 500W ATX/PFC 700W ATX/PFC	250W ATX/PFC 300W ATX/PFC 400W ATX/PFC
	AC Redundant		-	-	300W 1+1 (ACP-2000)	-	-	300W 1+1 500W 1+1	300W 1+1 500W 1+1	500W 1+1	-
	DC		60W	-	-	-	-	-	-	-	-
No. of Slots / No. of Full-size Cards			2/0	MB: 1/1 BP: 3/2	6/6	3/3	3/0	15/11	15/15 (ACP-4010) 15/10 (ACP-4320)	15/9	14/8
Passive Backplane Options	PICMG 1.0		-	refer to Chapter 5		-	-	refer to Chapter 5			
	PICMG 1.3		-	refer to Chapter 5		-	-	refer to Chapter 5			
System Fault Detection			-	Yes	Yes	Yes	-	Yes	Yes	Yes	-
Dimensions (W x H x D)	mm		480 x 44 x 288	1010:00:00 480 x 44 x 497 1320:00:00 480 x 44 X 617	482 x 88 x 451	482 x 88 x 480	482 x 88 x 308	482 x 177 x 479	482 x 177 x 479	482 x 177 x 501	486 x 177 x 446
	inch		19 x 1.7 x 11.3	1010:00:00 19 x 1.7 x 19.6 1320:00:00 19 x 1.7 x 24.3	19 x 3.5 x 17.8	19 x 3.5 x 18.9	19 x 3.5 x 12.1	19 x 7 x 18.9	19 x 7 x 18.9	19 x 7 x 19.8	19 x 7 x 17.6
Weight	kg		2.2	8	11.5/11.3	10.7/11.7	6.4	15.2	16.6/17.6	19.5	10.7
	lb		4.8	17.6	25.3/24.9	23.5/25.7	14.1	33.5	36.5/38.7	42.9	23.5
Page			9-36	9-38	9-40	9-42	9-44	9-46	9-48/9-50	9-52	9-54

Server Chassis

NEW NEW



4U Rackmount						5U Rackmount	6U Rackmount	7U Rackmount	2U Rackmount	4U Rackmount
IPC-610-F	IPC-610-H	IPC-610-L	IPC-611	IPC-619/619S	IPC-623	ACP-5360	IPC-622	ACP-7360	HPC-7242	HPC-7442
PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0/1.3	PICMG 1.0/1.3 ATX/MicroATX	PICMG 1.0	PICMG 1.0/1.3 ATX/MicroATX	ATX/MicroATX	EATX/ATX
-	-	-	-	-	-	1	-	1	1	1
1	1	1	1	-	1	6 (SAS/SATA)+1	-	6 (SAS/SATA)+1	4 (SAS/SATA)	4 (SAS/SATA)
1	-	-	-	1	1	-	2	-	2 (2.5")	1
3	3	3	3	2/1	3	1	4	2	-	-
-	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes
-	Yes	-	-	-	-	Yes	-	Yes	-	-
1	2	1	1	1	3	7	4	6	3	2
85	85	85	85	85	114	3 x 114 + 2 x 47 + 2 x 25	58	4 x 58 + 2 x 47	1 x 47 + 2 x 28	1 x 114 + 1 x 55
300W ATX/PFC 400W ATX/PFC	300W ATX/PFC 400W ATX/PFC	250W ATX/PFC 300W ATX/PFC	250W ATX/PFC 300W ATX/PFC	250W ATX/PFC 300W ATX/PFC 400W ATX/PFC	400W ATX/PFC 500W ATX/PFC	-	400W ATX/PFC 500W ATX/PFC	-	500W ATX/PFC	400W ATX/PFC 500W ATX/PFC 700W ATX/PFC
300W 1+1	300W 1+1	300W 1+1	300W 1+1	-	460W 1+1 570W 2+1 810W 3+1	460W 1+1 570W 2+1 810W 3+1	460W 1+1	460W 1+1 570W 2+1 810W 3+1	700W 1+1	500W 1+1 800W 1+1
-	-	-	-	-	-	-	-	-	-	-
15/10	15/11	15/11	15/11	15/10 10/0	20/20	20/20	20/20	20/20	3/3	7/7
refer to Chapter 5									-	-
refer to Chapter 5									-	-
-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
BP: 482 x 177 x 449 MB: 482 x 177 x 499	482 x 177 x 479	482 x 177 x 479	482 x 177 x 479	482 x 177 x 430/	482 x 177 x 657	482 x 222 x 662	482 x 266 x 464	482 x 307 x 502	482 x 88 x 525	482 x 177 x 600
BP: 19 x 7 x 17.8 MB: 19 x 7 x 19.6	19 x 7 x 18.9	19 x 7 x 18.9	19 x 7 x 18.9	19 x 7 x 16.9 / 19 x 7 x 10.8	19 x 7 x 26	19 x 8.75 x 26	19 x 10.5 x 18.3	19 x 12.1 x 19.7	19 x 3.5 x 20.7	19 x 7 x 23.6
18	15	14.5	14.2	8.15	26	30	30	35	13.7	18.5
39.6	33	31.9	31.2	33/17.6	57	66	66	77	30.12	40.68
9-56	9-58	9-58	9-60	9-62	9-64	online	9-66	online	9-68	9-70

IPC-3012

Compact Chassis for PICMG 1.3 Half Size SHB



Features

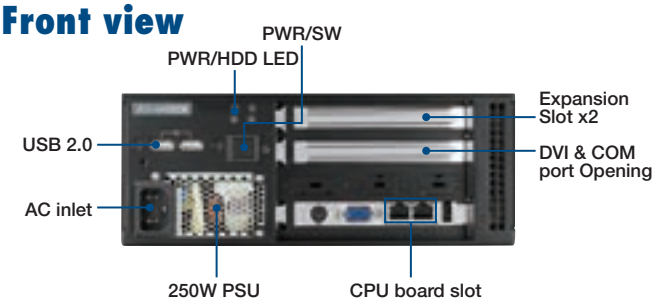
- Compact chassis with two front expansion slots
- Shockproof drive bay for two 2.5" HDDs
- Equipped 80 plus FLEX 250W power supply
- Thumb-screw for top cover easy opening
- Bidirectional to mount chassis on wall or workbench

CE FCC RoHS COMPLIANT 2002/95/EC

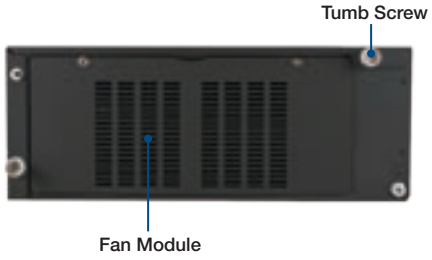
Specifications

Disk Drive Bay		Front-accessible	Internal
	2.5"	-	2
Cooling	Fan	2 (6 cm/27 CFM)	
	Air Filters	Yes	
Front I/O interface	USB	2	
Miscellaneous	LED Indicators	Power, HDD	
	Control	Power Switch	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85 % @ 40° C, non-condensing	10 ~ 95 % @ 40° C, non-condensing
	Vibration (5-500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	
Physical Characteristics	Dimensions (W x H x D)	232 x 90 x 232 mm	
	Weight	3.24 kg (7.14 lb)	

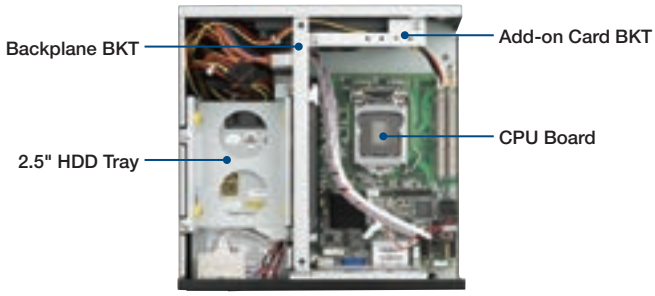
Front view



Rear view

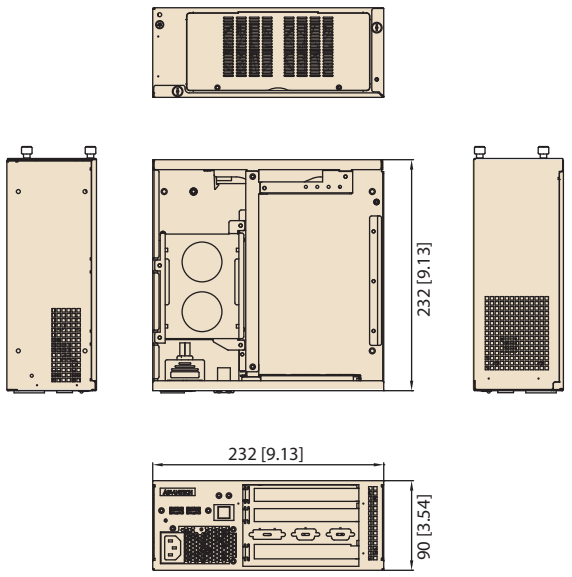


Inside view



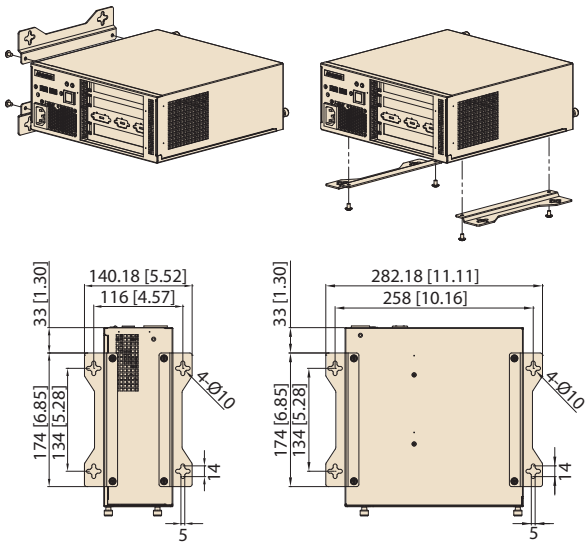
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
IPC-3012-25ZE	1757004308-01

Power Supply Options

Part Number	Watt	Input
1757004308-01	250W	AC 100 ~ 240 V (full range)

CPU board Options

Part Number	Description
PCE-3026G2-00A1E	PICMG 1.3 Half-size SHB

Backplane Options

Model	PICMG	PCIe
PCE-3B03A-00A1E	PICMG 1.3	1 (PCIe x4), 1 (PCIe x16)

Optional Accessories

Part Number	Description
1750006419	27.72 CFM, system fan 60 x 60 x 13 mm
1990005760T00B	Filter cover for ARK-6620
1960053207N001	1.5U CPU cooler for one add-on card applied
1960053065N001	1U CPU cooler for two add-on cards applied

IPC-6806S

Compact Chassis for Half Size SHB/SBC



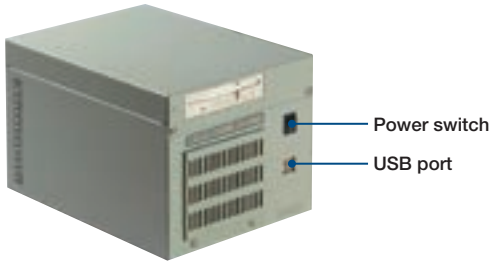
Features

- Shockproof drive bay for 3.5" HDD
- Two Front access USB ports
- Support 6-slot PICMG 1.3/1.0 backplane
- Easy maintain system fan and filter

Specifications

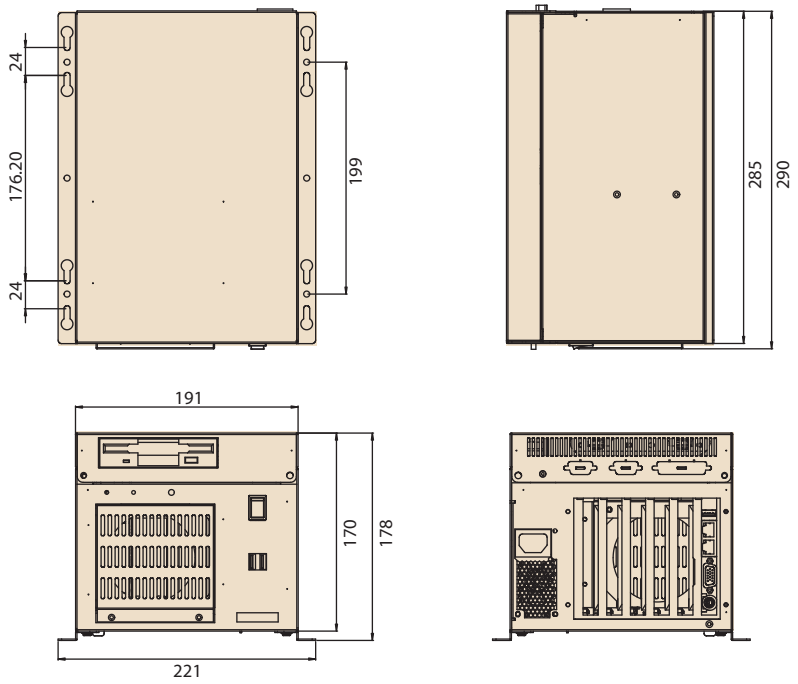
Model Name		IPC-6806S	
Drive Bay	5.25"	-	
	3.5"	2 (1-front-accessible, 1 internal)	
Cooling	Fan	1 (9cm / 53 CFM)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
Miscellaneous	LED Indicators	Power and HDD	
	Control	Power switch and system reset button	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	0.5 Grms	2G
	Shock	10 G (with 11 ms duration, half sine wave)	30G
Physical Characteristics	Dimensions (W x H x D)	191 x 170 x 285 mm (7.5" x 6.7" x 11.2")	
	Weight	5.6 kg (12.3 lb)	

Front View



Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply	Backplane	Switch
IPC-6806SB-15ZBE	1757000209G	-	AT

IPC-3026

Quiet Compact Chassis for Half Size SHB/SBC



Features

- Support 6-slot PICMG 1.3/1.0 backplane
- Shockproof drive bay for one 3.5" HDD
- Support two 2.5" HDDs by hot-swap tray
- LED indicators for system fault detection
- Lockable front door prevent unauthorized access

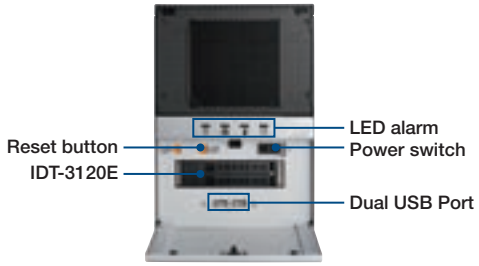
Quiet

CE FCC RoHS

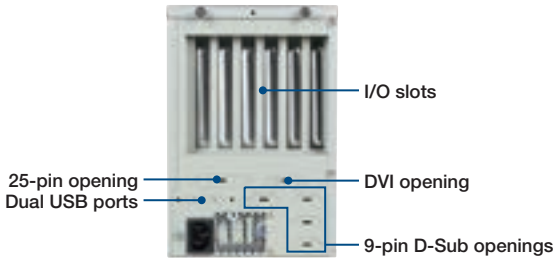
Specifications

Disk Drive Bay		Front-accessible	Internal
	3.5"	-	1
Cooling	Fan	1 (9 cm 44.6 CFM)	
	Air Filters	Yes	
I/O Interface	USB	2 (Front accessible), 2 (Rear accessible)	
Miscellaneous	LED Indicators	Power, HDD, Temp, Fan	
	Front Panel	Reset button, Power switch	
	Rear Panel	Reserved four 9-pin D-Sub openings, 25-pin opening, DVI opening, dual USB ports	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5-500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	150 x 222 x 270 mm	

Front View

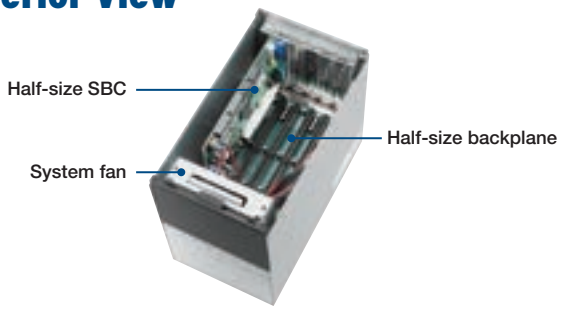


Rear View



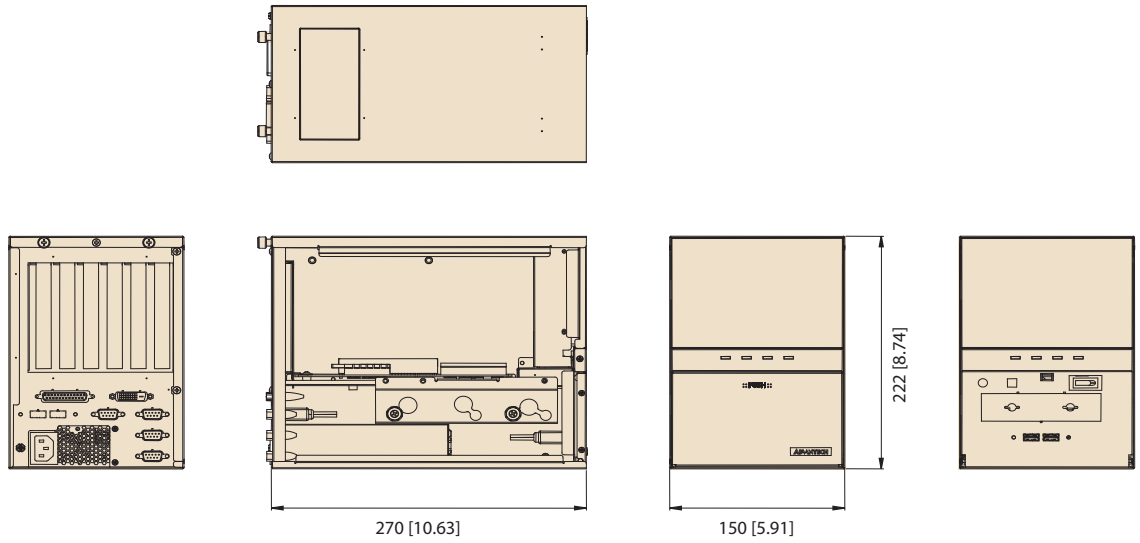
Note: Hot swap drive bay module should be bought separately.

Interior View



Dimensions

Unit: mm [inch]



Ordering Information

Model name	Power Supply
IPC-3026BP-15ZE	1757003464-11

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part number	Specifications	
	Watt	Input
1757003464-11 (ATX, PFC)	150W	AC 100 ~ 240 V (full-range)

Backplane Options

Part Number	Slot	Segment
PCA-6106-0B2E	6 ISA	Single
PCA-6105P5-0B2E	5 PCI	Single

Optional Accessories

Ordering P/N	Description
IDT-3120E	Mobile rack for dual 2.5" SATA HDDs with a 3.5" drive bay occupancy

ARK-6610/6620

Compact Chassis for Mini-ITX Motherboard



Features

- ARK-6610 with one front I/O expansion slot
- Various cut-outs for COM/DVI/LVDS,USB,S/C-video
- Shockproof drive bay for slim ODD and 3.5" HDD
- Bottom door to access CF card or Mini-PCIe card
- Optional equipped FLEX power supply

CE FCC RoHS

Specifications

		ARK-6610	ARK-6620
Disk Drive Bay	Slim Optical Drive	1	-
	3.5" (internal)	1	1
I/O Interface	COM	5	2
	USB	2	-
	DVI/LVDS	2	1
	S/C-Video	1	1
	WLAN Antenna	1	1
Cooling	Fan	1 (9 cm / 52.5 CFM)	2 (6 cm / 27.7 CFM, each)
	Air Filter	Yes	Yes
Miscellaneous	LED Indicators	Power, HDD, temperature	Power, HDD, temperature
	Control	Power switch	Power switch
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85%, 40° C, non-condensing	10 ~ 95%, @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	250 x 156 x 253 mm (9.8" x 6.1" x 10")	272 x 88 x 232 mm (10.7" x 3.5" x 9.1")
	Weight	4.76 kg (10.47 lb)	3.49 kg (7.68 lb)

Front View

ARK-6610

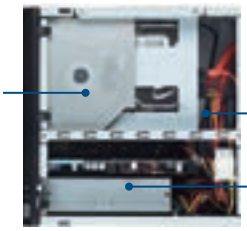


ARK-6620

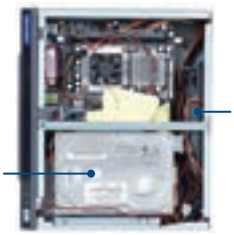


Inside View

ARK-6610



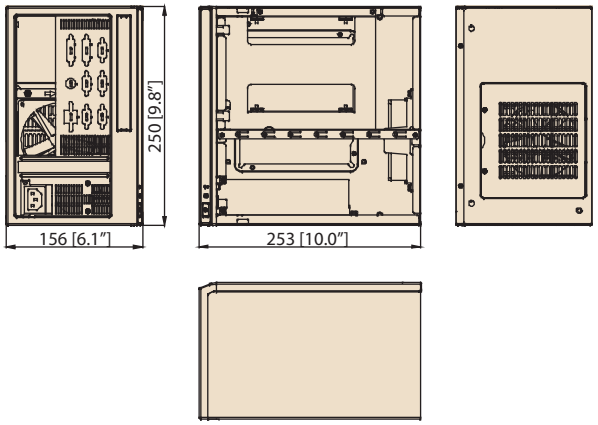
ARK-6620



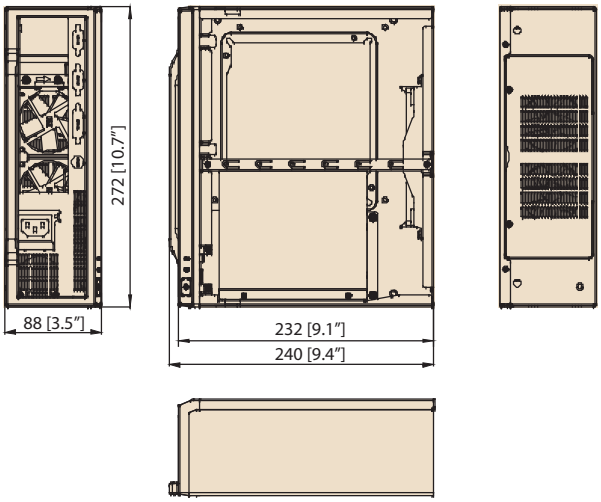
Dimensions

Unit: mm [inch]

ARK-6610

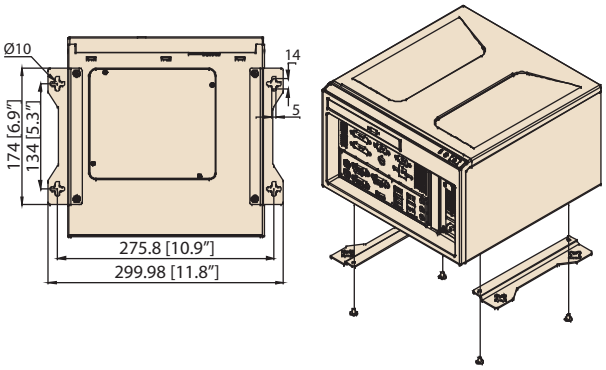


ARK-6620

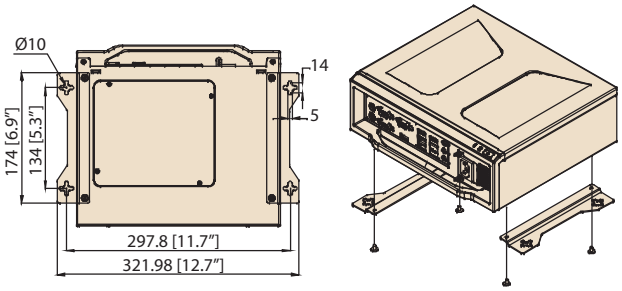


Installation

ARK-6610



ARK-6620



Chassis Ordering Information

Part Number	Power Supply
ARK-6610-00XBE	-
ARK-6610-18ZBE	1757000878
ARK-6620-00XBE	-
ARK-6620-18ZBE	1757000878

Optional Accessories

Part Number	Description
1750002561	52.5 CFM, 92 x 92 x 25.4 mm system cooling fan (For ARK-6610)
1750006419	27.7 CFM, system cooling fan 60 x 60 x 13 mm (For ARK-6620)
98R2662001E	VESA mounting kit for ARK-6620

ARK-6622

Compact Chassis with one front slot for Mini-ITX Motherboard



Features

- With front I/O interfaces and one expansion slot
- Shockproof drive bay for two 2.5" HDDs
- Bottom door to access CF card or Mini-PCIe card
- LED indicators for system fault detection
- Equipped 180W FLEX power supply

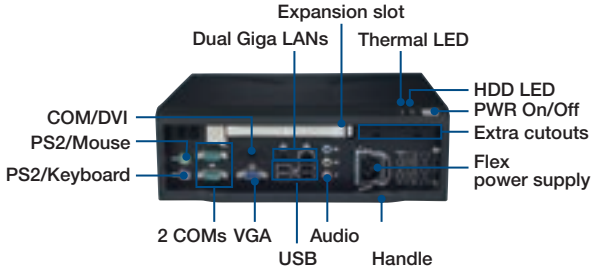
CE FCC RoHS

Specifications

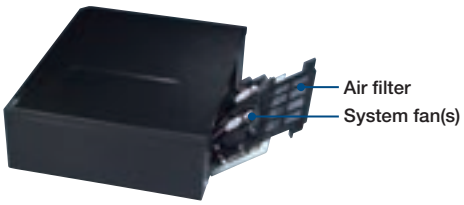
Disk Drive Bay	2.5" (internal)	2	
Front I/O Openings	USB	4	
	PS/2	2	
	COM	2	
	DVI/COM	1	
	RJ-45	2	
	Audio	3 (Mic-in, Line-out, Line-in)	
	VGA	1	
	Expansion slot	1*	
	Reserved cutouts	2 x DB-9 and 2 x Wireless Antenna Opening	
Cooling	System Fan	ARK-6622H 2 (6 cm/27.7CFM)	ARK-6622L 1 (6 cm/15.4CFM)
	Air Filter	Yes	Yes
Miscellaneous	LED Indicators	Power, HDD, Temperature	
	Control	Power switch	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85%, @ 40° C, non-condensing	10 ~ 95%, @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	272 x 88 x 232 mm (10.7" x 3.5" x 9.1")	
	Weight	3.49 kg (7.68 lb)	

* The expansion slot is supported by dedicated riser cards, so an optional riser card is required for the add-on card.
* 176 mm (W) x 22 mm (H) space is available for add-on cards to assemble in slot.

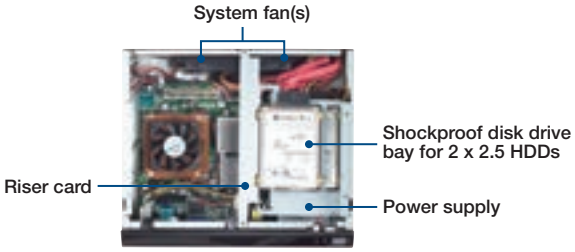
Front View



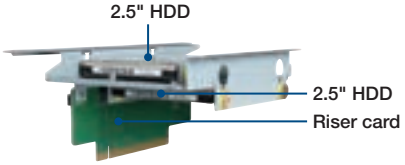
Rear Cover for Replacing Fans



Inside View

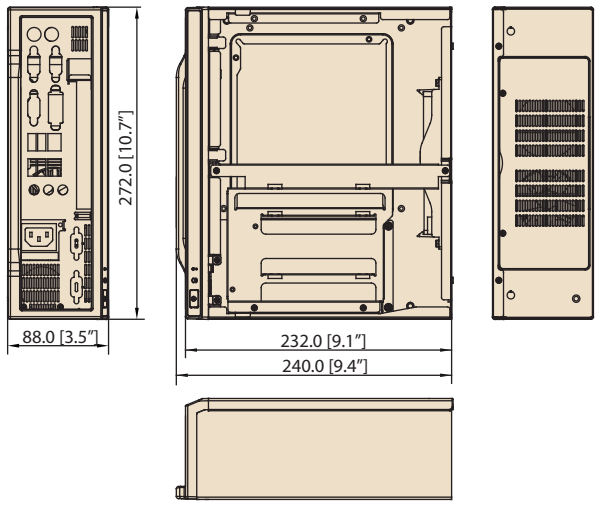


2.5" HDDs and Riser Card Bracket



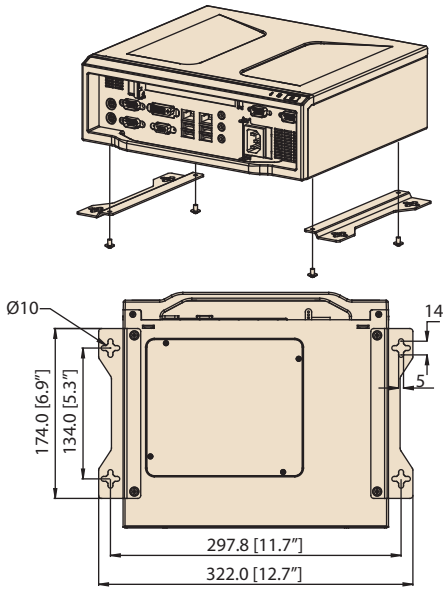
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



Ordering Information

Part Number	Power Supply	Recommended Motherboard	Recommended Riser Card
ARK-6622H-18ZE	1757000878	AIMB-270/262	9892662210E
ARK-6622L-18ZE	1757000878	AIMB-258 AIMB-210	9892662210E 9892662200E

Optional Accessories

Part Number	Description
9892662200E	PCI Interface Riser Card (for AIMB-210)
9892662210E	PCIe x16 Interface Riser Card (AIMB-258/262/270)
98R2662001E	VESA mounting kit
1750006419	27.7 CFM system cooling fan (For ARK-6622H)
1750005863	15.4 CFM system cooling fan (For ARK-6622L)

IPC-6006

6-Slot Backplane Card Cage



Features

- Open-frame card cadge for embedded system
- Shockproof hold-down clamp design
- Support 6-slots full size and half size SBC
- Support one PS/2 power supply, one 3.5" HDD and one cooling fan

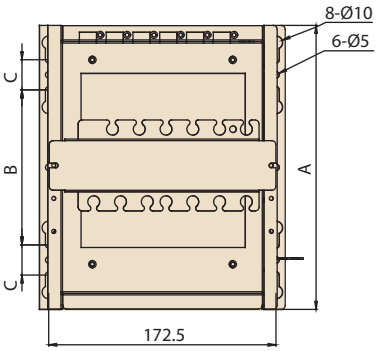
Specifications

Model Name	IPC-6006	IPC-6006S
Supported Backplanes	PCA-6106-0B2E PCA-6106P3-0D2E PCA-6106P4-0A2E PCA-6105P5-0B2E	PCA-6106-0B2E PCA-6105P5-0B2E
Dimensions (W x H x D)	158 x 186 x 368 mm (6.2" x 7.3" x 14.5")	158 x 186 x 215 mm (6.2" x 7.3" x 8.4")
Weight	2.2 kg (4.8 lb)	1.6 kg (3.5 lb)

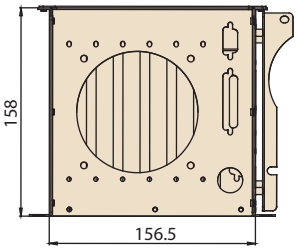


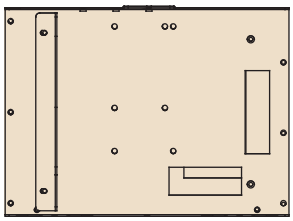
Dimensions

Unit: mm [inch]



Dimensions		
	IPC-6006	IPC-6006S
A	368	215.34
B	270	117.54
C	24	22.86





Ordering Information

Part Number	Description
IPC-6006-BAREE	Full-size card cage without backplane
IPC-6006S-BAREE	Half-size card cage without backplane

Passive Backplane Options

Part Number	Slot	Segment
PCA-6106-0B2E	6 ISA	Single
PCA-6106P3-0D2E	2 ISA, 2 PCI, 1 PICMG/PCI, 1 PICMG	Single
PCA-6106P4-0A2E	4 PCI, 2 PICMG	Single
PCA-6105P5-0B2E	5 PCI	Single

IPC-5122

Desktop/Wallmount Chassis for MicroATX Motherboard



Features

- Shockproof drive bay for slim ODD and 3.5" or 2.5" HDD
- Lockable front door prevent unauthorized access
- LED indicators for system fault detection
- Easy-to-maintain system fan and reusable air filter

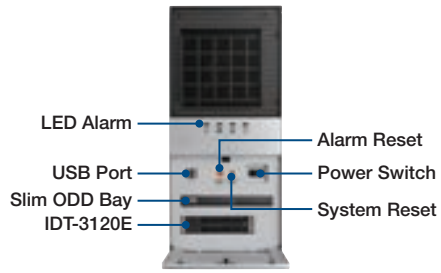
Quiet

CE FCC RoHS COMPLIANT 2002/95/EC

Specifications

Drive Bay		Front-accessible	Internal
	Slim Optical Drive	1	-
	3.5"	1	1
Cooling	Fan	1 (12 cm / 85 CFM)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
Miscellaneous	LED Indicators	Power, HDD, fan and temperature	
	Control	Power switch, alarm reset and system reset buttons	
	Rear Panel	Six 9-pin D-Sub openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40°C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	157 x 360 x 340 mm (6.2" x 14.2" x 13.4")	
	Weight	6.5 kg (14.3 lb)	

Front View



Note: Hot swap drive bay module and Slim ODD should be bought separately.

Inside view



Rear view





Easy-open door

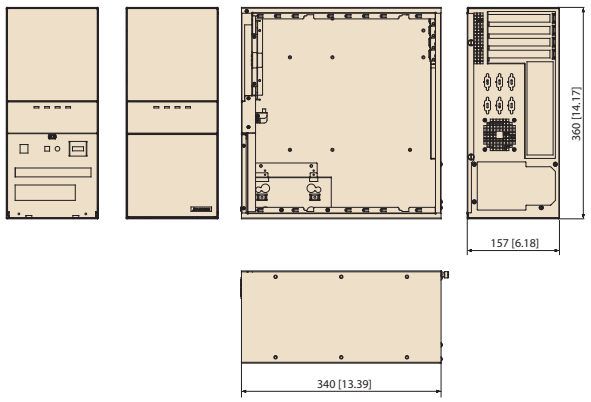




Gently press the hook to pull the air filter out

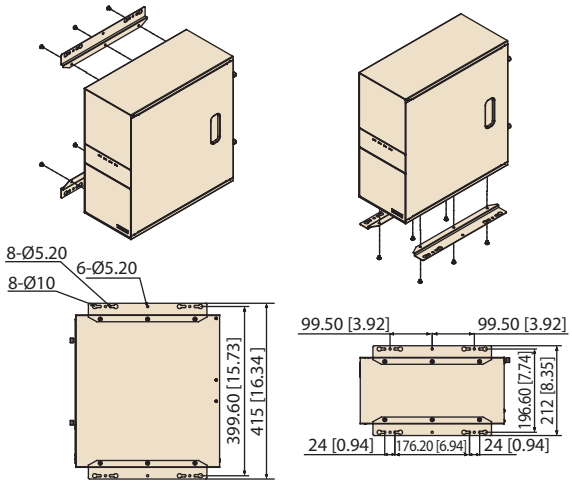
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
IPC-5122-00XE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC100~240V (full-range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC100~240V (full-range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays

IPC-7130

Desktop/Wallmount Chassis with Dual SAS/SATA HDD Trays for ATX/MicroATX Motherboard



Features

- Shockproof drive bay for one 5.25" ODD and three 3.5" HDD (two 3.5" HDD trays and one internal 3.5" drive bay)
- Lockable front door prevent unauthorized access
- LED indicators for system fault detection
- Bidirectional to mount chassis on the wall or workbench

Quiet

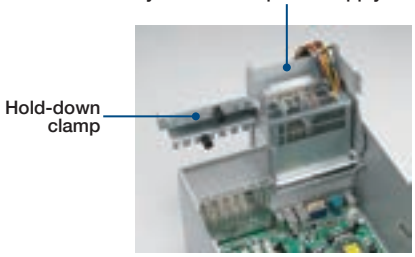
CE FCC RoHS

Specifications

Disk Drive Bay		Front-accessible	Internal
	3.5"	2 SAS / SATA HDDs (mobile trays also compatible with 2.5" HDD/SSD)	1
	5.25"	1	-
Cooling	Fan	1 (12 cm/73.8 CFM) + 1 (6 cm/21.2 CFM)	
	Air Filters	Yes	
I/O Interface	USB	2 (Front accessible)	
Miscellaneous	LED Indicators	Power, fan, temperature, HDD	
	Front Panel	Power, HDD, Temp, Fan	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85 % @ 40° C, non-condensing	10 ~ 95 % @ 40° C, non-condensing
	Vibration (5-500 Hz)	0.5 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	200 x 320 x 480 mm (7.9" x 12.6" x 18.9")	

Inside view







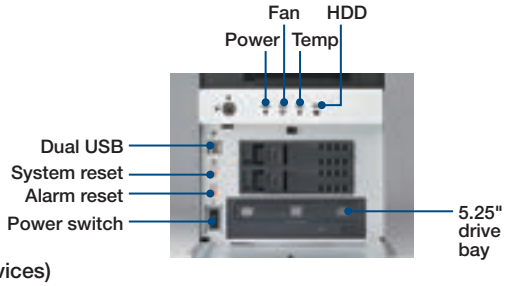
Easy-to-maintain reusable fan filter



Dual SAS/SATA HDD trays
(Compatible with both 2.5" and 3.5" devices)

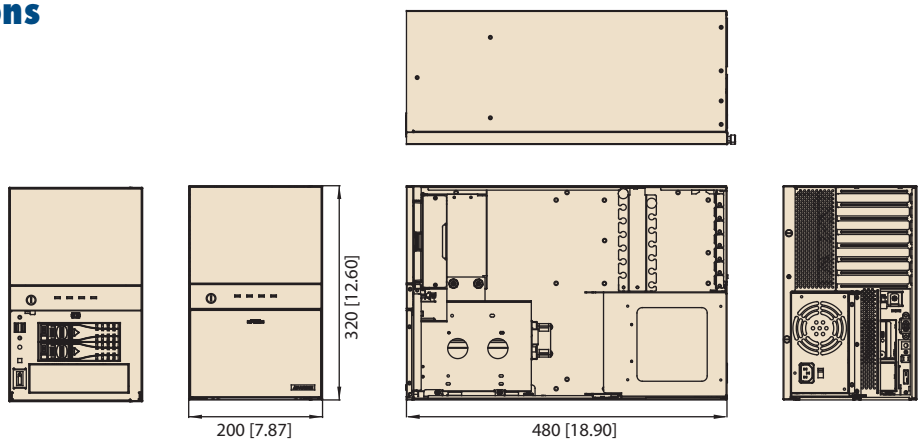
Rear view





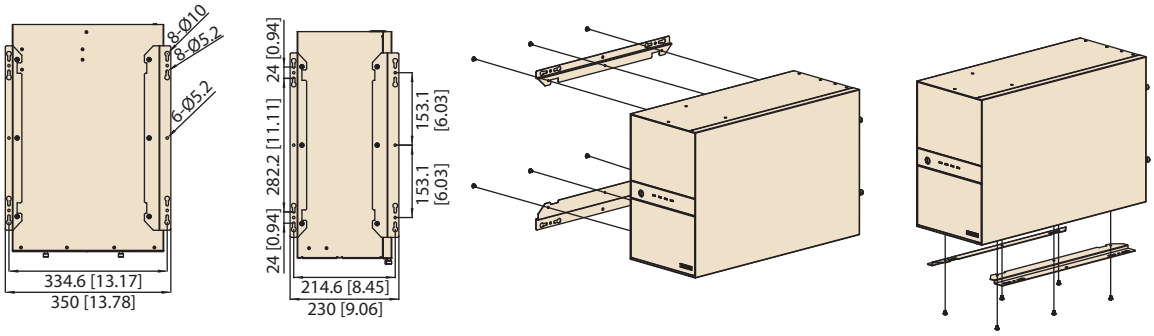
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
IPC-7130-00XE	Without power supply, with ATX switch

Optional Accssories

Part Number	Description
1750006045	73.84 CFM, System fan 120 x 120 x 25 mm
1750006376	21.22 CFM, HDD fan 60 x 60 x 13 mm

Power Supply Options

Part Number	Watt	Input
PS8-300ATX-ZBE (ATX,PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX,PFC)	400W	AC 100 ~ 240 V (full range)
RPS-300ATX-ZE (ATX, PFC) 1+1 (Redundant)	300W	AC 100 ~ 240 V (full range)

IPC-6025

5-Slot Desktop/Wallmount Chassis with Scalability as 5U Quad-System Solution



Features

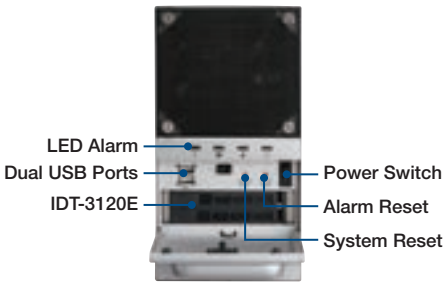
- Front handle for easy withdraw in rackmount carrier
- Lockable front door prevent unauthorized access
- Shockproof drive bay for two 3.5" HDDs
- LED indicators for system fault detection
- Optional rackmount carrier for quad-system solution

Quiet

Specifications

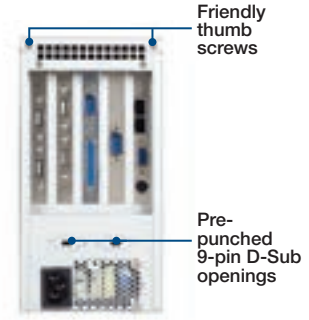
Drive Bay		Front-accessible	Internal
	3.5"	1	1
Cooling	Fan	1 (9 cm / 46.6 CFM)	
	Air Filters	Yes	
Front I/O Interface	USB	2	
Miscellaneous	LED Indicators	Power, fan, temperature, HDD	
	Control	Power switch and system reset buttons	
	Rear Panel	Reserved Two 9-pin D-Sub openings	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	111 x 212 x 420 mm (4.4" x 8.3" x 16.5")	
	Weight	4.7 kg (10.3 lb)	

Front View



Note: Hot swap drive bay module should be bought separately.

Rear View

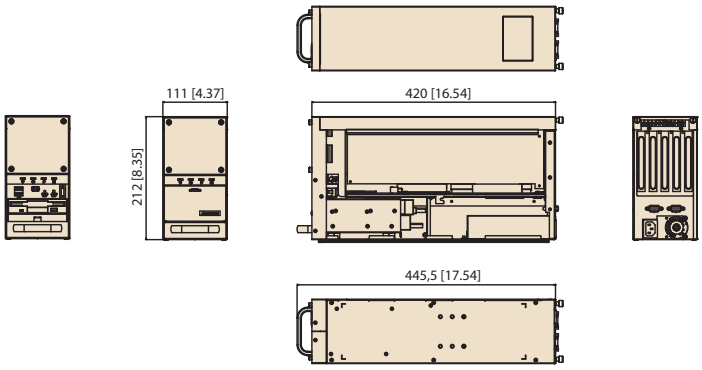




4 IPC-6025 combined as a 5U quad-system rackmount IPC

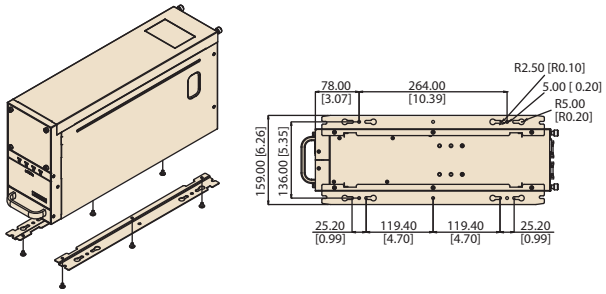
Dimensions

Unit: mm [inch]



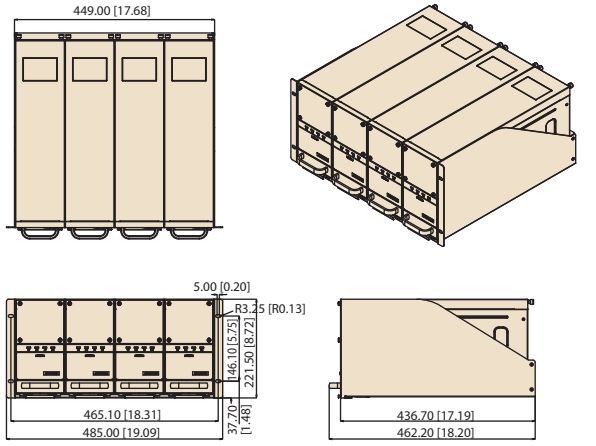
Installation

Single System



Quad System

Unit: mm [inch]



Ordering Information

Part Number	Power Supply	Backplane
IPC-6025BP-27ZE	1757001847	-

Power Supply Options

(For detailed power supply specs, please Refer to Chapter 12)

Part Number	Specifications	
	Watts	Input
1757001847 (ATX, PFC)	270W	AC100 ~ 240V (full-range)

Backplane Options

Model	PICMG1.3/1.0	PCIe	PCI-X	PCI	ISA	PCI/ISA
PCE-5B04-20A1E	PICMG1.3	1 (PCIe x16)	2		-	-
PCE-5B05-02A1E	PICMG1.3	1 (PCIe x16) 1 (PCIe x4)	-	2	-	-
PCE-7B05-20A1E	PICMG1.3	2 (PCIe x8)	2	-	-	-
PCA-6105P3-5A1E	PICMG1.0	-	-	2	1	1

Optional Accessories

Ordering P/N	Description
9892602501E	Rackmount carrier for Quad System solution
IDT-3120E	Mobile rack for dual 2.5" SATA HDDs

IPC-6606/6608

6/8-Slot Desktop/Wallmount Chassis



Features

- Support 6/8-slot PICMG 1.0 backplane
- Shockproof drive bay for 5.25" ODD and 3.5" HDD
- Two front access USB ports
- Bidirectional to mount chassis on wall or workbench
- Easy maintain system fan and filter

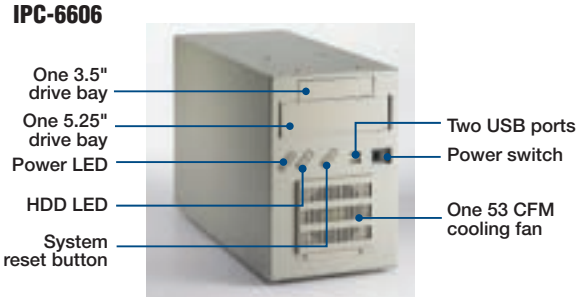
CE FCC RoHS

Specifications

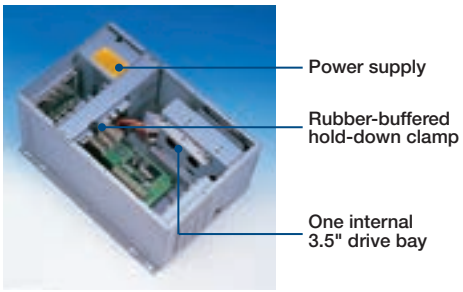
Model Name		IPC-6606	IPC-6608
Drive Bay	5.25"	1	2
	3.5"	2 (1 front-accessible, 1 internal)	1
Front I/O Interface	USB	2	2
Cooling	Fan	1 (9 cm / 53 CFM)	1 (12 cm / 85 CFM)
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power and HDD	
	Control	Power switch and reset button	
Environment	Temperature	0 ~ 40° C (32 ~ 104° F), operating	
	Humidity	10 ~ 85% @ 40° C, non-condensing	
Physical Characteristics	Dimensions (W x H x D)	173 x 254 x 396 mm (6.8" x 10" x 15.6")	173 x 315 x 410 mm (6.8" x 12.4" x 16.1")
	Weight	9 kg (19.8 lb)	11 kg (24.2 lb)

Front View

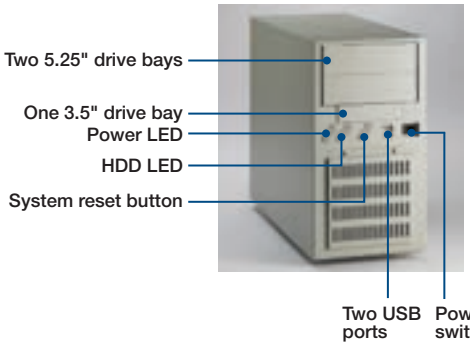
IPC-6606

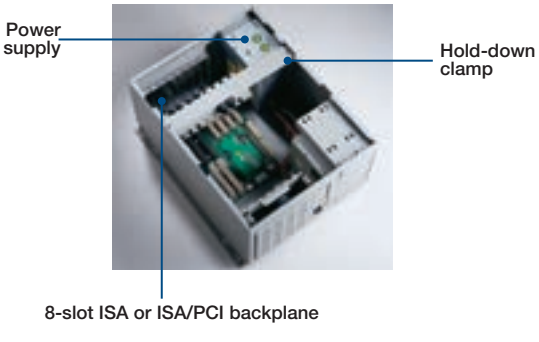


Inside View



IPC-6608



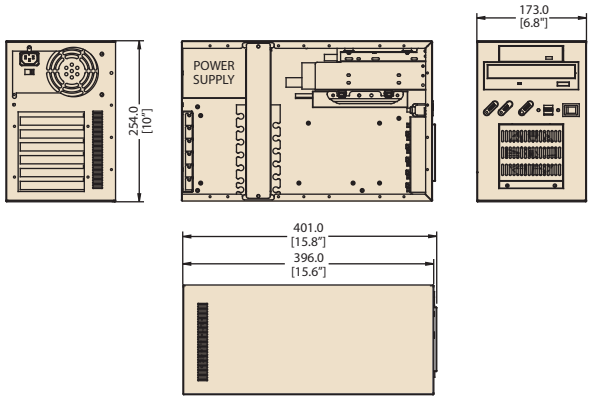




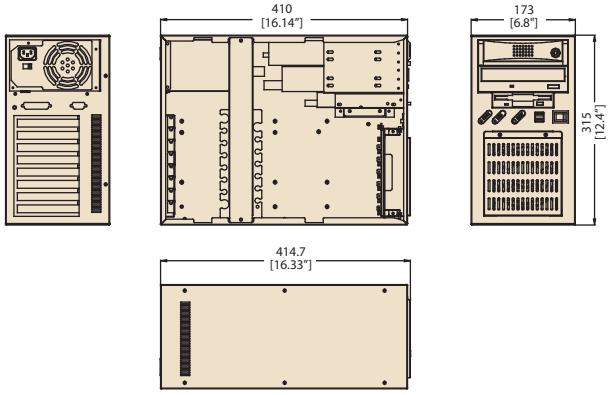
Dimensions

Unit: mm [inch]

IPC-6606



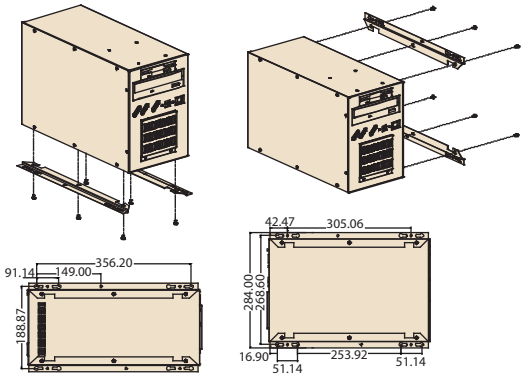
IPC-6608



Installation

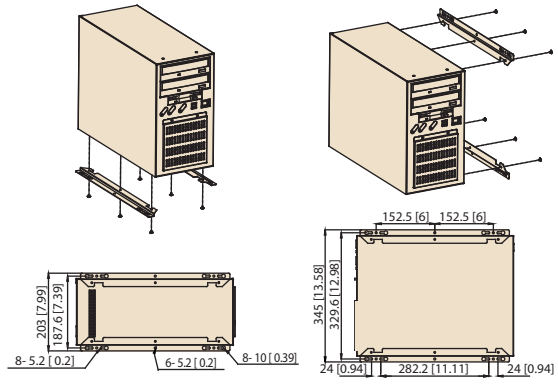
Unit: mm [inch]

IPC-6606



Bidirectional mounting

IPC-6608



Ordering Information

Part Number	Power Supply	Backplane	Switch
IPC-6606			
IPC-6606BP-00XE	-	-	AT/ATX
IPC-6606P3-25BE	1757004307-01	PCA-6106P3-0D2E	AT
IPC-6606P3-30CE	1757004367-01	PCA-6106P3-0D2E	ATX
IPC-6608			
IPC-6608BP-00E	-	-	AT/ATX
IPC-6608BP-25BE	1757004307-01		ATX
IPC-6608BP-30CE	1757004367-01		ATX

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Power Supply Options

(For detailed power supply specs, please Refer to Chapter 12)

Part Number	Specifications	
	Watts	Input
PS8-250ATX-ZE (ATX, PFC)	250W	AC 100 ~ 240 V (full-range)
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full-range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full-range)

IPC-6806

6-Slot Desktop/Wallmount Chassis for Full/Half-Size SBC



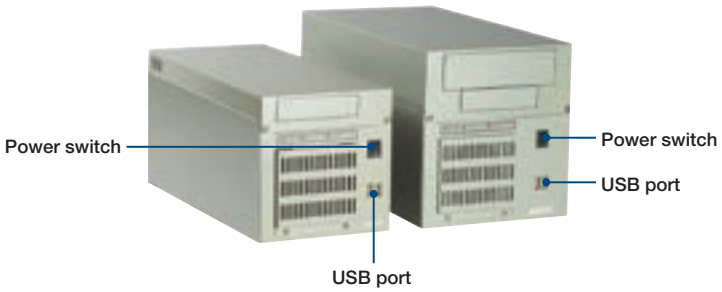
Features

- IPC-6806 support 6-slot PICMG 1.0 backplane
- IPC-6806W support 6-slot PICMG 1.3/1.0 backplane
- Shockproof drive bay for 5.25" ODD and 3.5" HDD
- Two front access USB ports

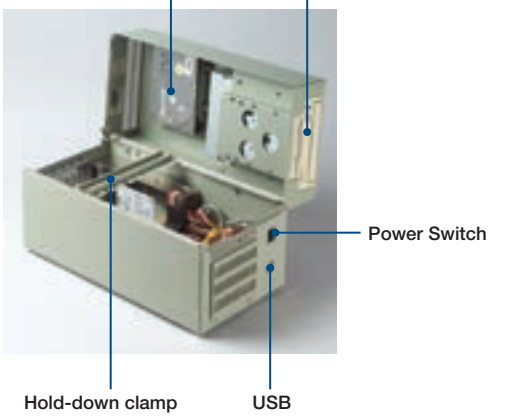
Specifications

Model Name		IPC-6806	IPC-6806W
Drive Bay	5.25"	-	1 (Front-accessible)
	3.5"	2 (1 Front-accessible, 1 Internal)	2 (1 Front-accessible, 1 Internal)
Cooling	Fan	1 (9cm / 53 CFM)	1 (9cm / 58 CFM)
	Air Filter	Yes	Yes
Front I/O Interface	USB	2	2
Miscellaneous	LED Indicators	Power and HDD	
	Control	Power switch and system reset button	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	0.5 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	166 x 170 x 393 mm (6.5" x 6.7" x 15.4")	198 x 213 x 393 mm (7.8" x 8.4" x 15.4")
	Weight	6.3 kg (13.9 lb)	8 kg (17.6 lb)

Front View

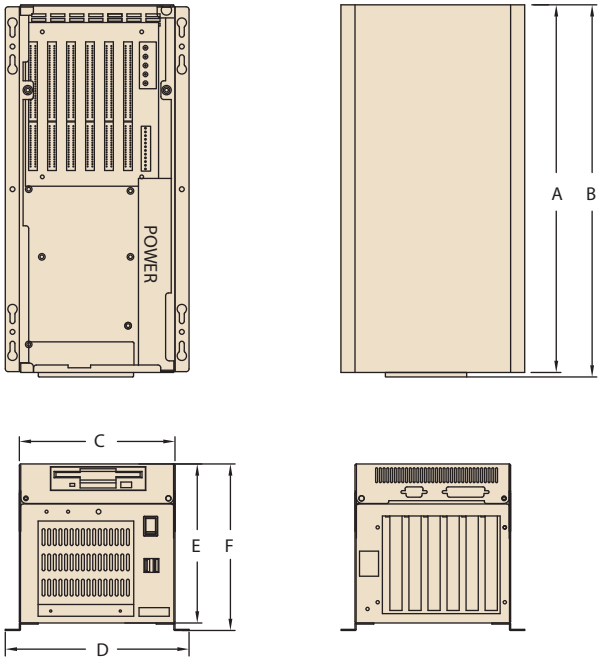


Inside View



IPC-6806W

Dimensions



Unit: mm [inch]

Dimensions		
	IPC-6806	IPC-6806W
A	393	393
B	398	398
C	166	198
D	196	228
E	170	213
F	178	221

Ordering Information

Part Number	Power Supply	Backplane	Switch
IPC-6806BP-25ZCE	1757001397	-	ATX
IPC-6806WB-30ZBE	1757000160G	-	AT

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Watts	Input
1757001397 (IPC-6806) (ATX, PFC)	250W	AC100~240V (full-range)
1757000160G (ATX, PFC)	300W	AC100~240V (full-range)

IPC-6908

8-Slot Desktop/Wallmount Chassis for Full-Size SBC



CE FCC RoHS COMPLIANT 2002/95/EC

Features

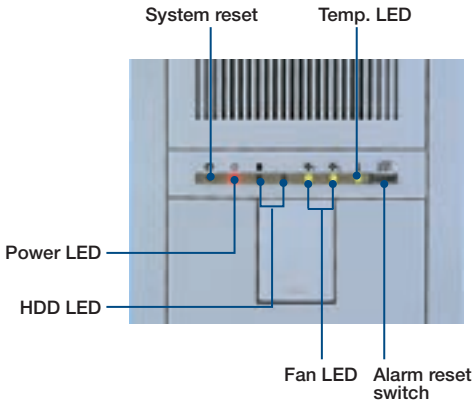
- Support 8-slot PICMG 1.3/1.0 backplane
- Shockproof drive bay for two 5.25" ODDs and two 3.5" HDDs
- LED indicators for system fault detection
- Hot-swap system fan for easy-to-maintain
- Optional 80 plus PS2 or redundant power supply

Specifications

Drive Bay		Front-accessible	Internal
	5.25"	2	-
	3.5"	1	1
Cooling	Fan	1 (hot-swappable, 9 cm / 53 CFM each)	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power, HDD, temperature and fan	
	Control	System reset and alarm reset	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	
Physical Characteristics	Dimensions (W x H x D)	200 x 300 x 463 mm (7.9" x 11.8" x 18.2")	
	Weight	12 kg (26.4 lb)	

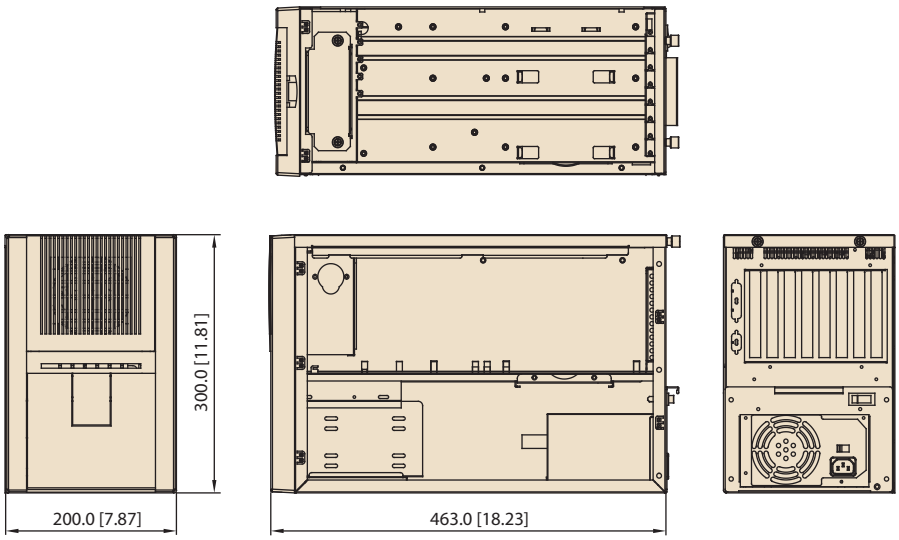


Hot-swappable cooling fan module contains one 53 CFM cooling fans



Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply	Backplane	Switch
IPC-6908BP-BE	-	-	ATX
IPC-6908BP-30CE	1757004367-01	-	ATX

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full-range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full-range)
PS-300ATX-DC48E (ATX)	300W	DC -48 V
RPS-300ATX-ZE (ATX, PFC)	300W	AC 100 ~ 240 V (full-range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 2.5" or 3.5" SAS/SATA HDD trays

IPC-7132

Cost-effective Wallmount Chassis for ATX/mATX Motherboard and 10-slot Backplane



Features

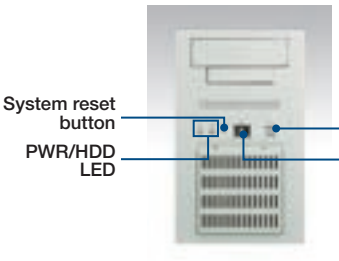
- Support ATX/mATX M/B and 10-slot PICMG 1.3 backplane
- Shockproof drive bay for one 5.25" ODD and three 3.5" HDDs
- Thumb-screw for top cover easy opening
- Bidirectional option to mount chassis on wall or workbench
- Two front access USB ports

CE FCC RoHS

Specifications

Disk Drive Bay		Front-accessible	Internal
	3.5"	1	2
	5.25"	1	-
Cooling	Fan	1 (12 cm/85 CFM)	
	Air Filters	Yes	
Front I/O interface	USB	2	
Miscellaneous	LED Indicators	Power, HDD	
	Control	Power Switch, System Reset Button	
	Rear panel	4x USB, 2x DB-9, 1x LPT port	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85 % @ 40° C, non-condensing	10 ~ 95 % @ 40° C, non-condensing
	Vibration (5-500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	
Physical Characteristics	Dimensions (W x H x D)	200 x 330 x 430 mm (7.9" x 13" x 16.9")	
	Weight	9.96 kg (21.93 lb)	

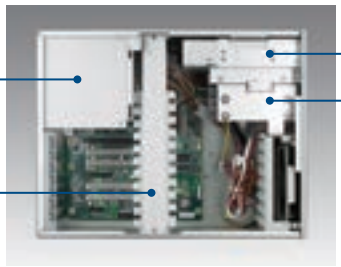
Front view



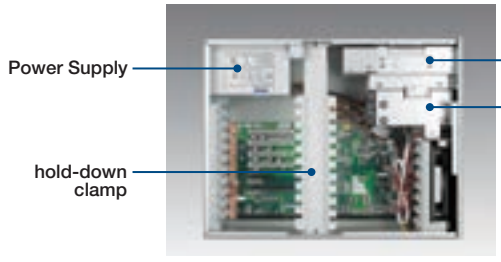


Easy-to-maintain cooling fan

Inside view

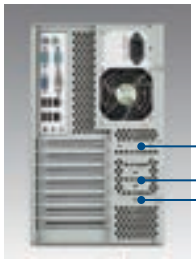


IPC-7132MB

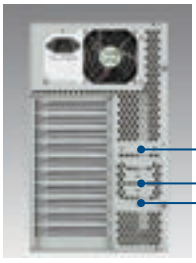


IPC-7132BP

Rear view



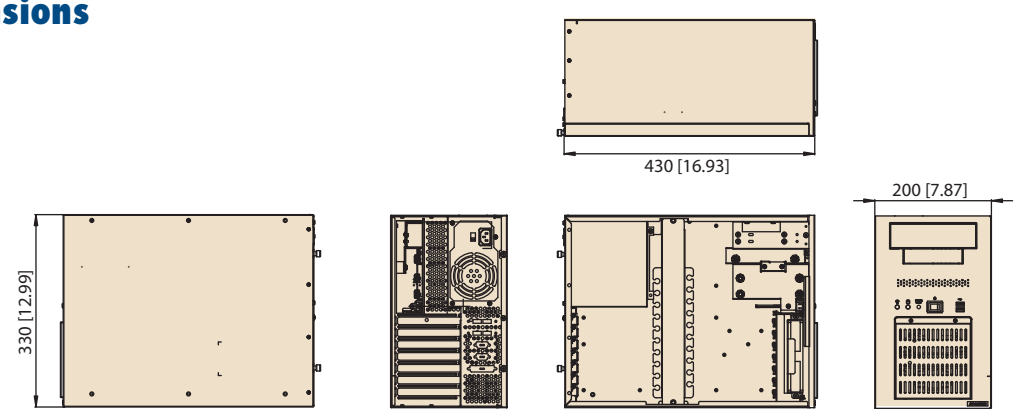
IPC-7132MB



IPC-7132BP

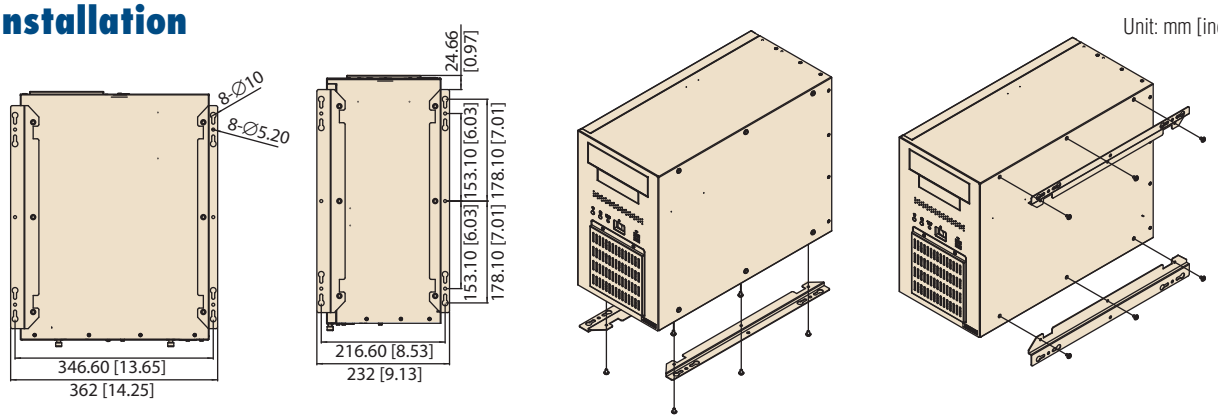
Dimensions

Unit: mm [inch]



Installation

Unit: mm [inch]



Ordering Information

Model name	Power Supply
Motherboard Version	
IPC-7132MB-00XE	Without power supply, with ATX switch
Backplane Version	
IPC-7132BP-00XE	Without power supply, with ATX switch

Power Supply Options

Part number	Watt	Input
PS8-300ATX-ZBE (ATX,PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX,PFC)	400W	AC 100 ~ 240 V (full range)

Backplane Options

Model	PICMG 1.3	PCIe	PCI-X	PCI
PCE-5B09-06A1E	PICMG 1.3	1 (PCIe x4)	-	6
PCE-5B09-04A1E	PICMG 1.3	3 (PCIe x4)	-	4

Optional Accessories

Part Number	Description
IDT-3120E	Mobile HDD tray for dual 2.5" SATA HDDs
1750006427	87.87 CFM, system fan 120 x 120 x 25.0 mm

IPC-7220

Desktop/wallmount Chassis for ATX/mATX Motherboard



Features

- Shockproof drive bay for two 5.25" ODDs and two 3.5" HDDs
- Lockable front door to prevent unauthorized access
- LED indicators for system fault detection
- Easy-to-maintain system fan and air filter
- Optional 80 plus PS/2 power supply

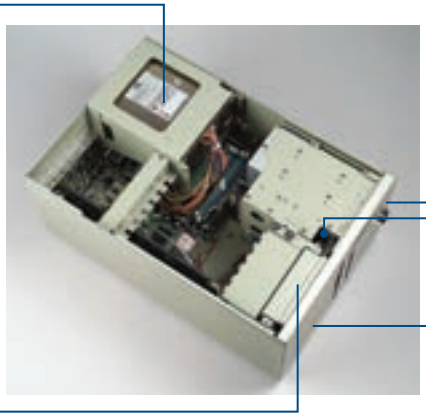
Quiet

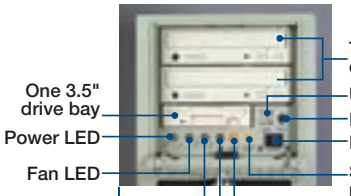
CE FCC RoHS

Specifications

Drive Bay		Front-accessible	Internal
	5.25"	2	-
	3.5"	1	1
Cooling	Fan	1 (12 cm / 85 CFM)	
	Air Filters	2 (one 7 x 12 cm and one 12 x 12 cm)	
Front I/O Interface	USB	2	
	PS/2	PS/2 keyboard and mouse, or PS/2 keyboard depends on the enclosed motherboard	
Miscellaneous	LED Indicators	Power, HDD, temperature and fan	
	Control	Power switch, system reset and alarm reset buttons	
	Rear Panel	Reserved Two 9-pin D-Sub openings, one LPT opening	
Environmental		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	200 x 320 x 480 mm (7.9" x 12.6" x 18.9")	
	Weight	14 kg (30.8 lb)	





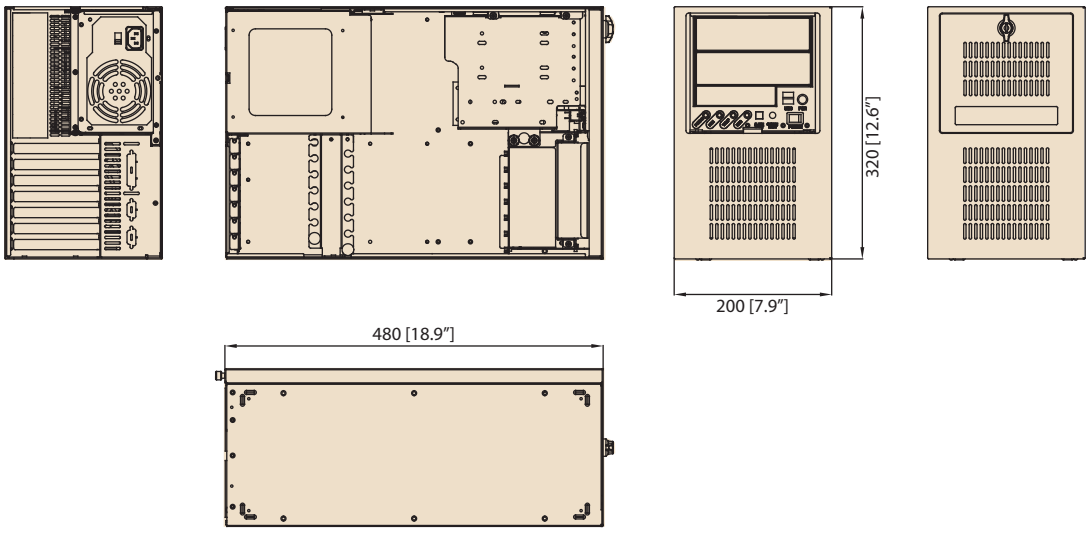






Dimensions

Unit: mm [inch]



Ordering Information

Model Name	Power Supply
IPC-7220-00XE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full-range)
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100 ~ 240 V (full-range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full-range)
RPS-400ATX-ZE (ATX, PFC) (1+1 redundant)	400W	AC 100 ~ 240 V (full-range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 2.5" or 3.5" SAS/SATA HDD trays

IPC-5120/7120

Desktop/Wallmount Chassis with front I/O Interfaces for ATX/mATX Motherboard



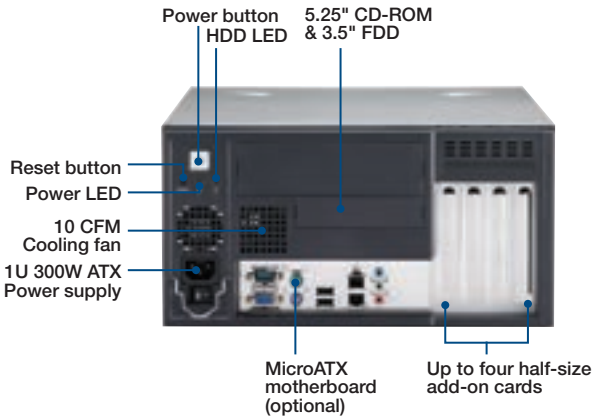
Features

- With front I/O interface and four expansion slots
- Shockproof drive bay for one 5.25" ODD and two 3.5" HDDs
- LED indicators for power status and HDD activity
- Support up to four half-size add-on cards
- Equipped with 1U 250W/300W ATX/PFC power supply

Specifications

Drive Bay		Front-accessible	Internal
	5.25"	1	-
	3.5"	1	1
Cooling	Fans	1 (12 cm / 85 CFM) + 1 (4 cm / 10 CFM)	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power status and HDD activity	
	Control	Power switch and system reset button	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	IPC-5120: 320 x 164 x 316.5 mm (12.6" x 6.5" x 12.5") IPC-7120: 380 x 164 x 316.5 mm (15" x 6.5" x 12.5")	
	Weight	IPC-5120: 8.0 kg (17.6 lb) IPC-7120: 9.0 kg (19.8 lb)	

Front View



Inside View



Easy-to-maintain fan filter



Shock-resistant drive bay for holding an internal 3.5" HDD



Plug ring-lock securely fastens the power cord

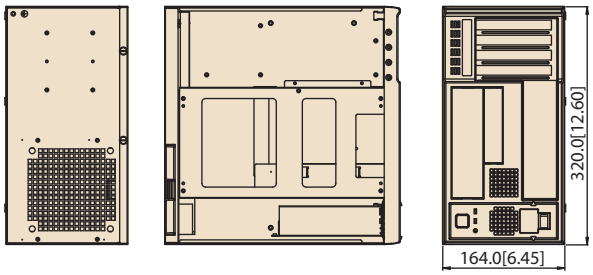


User-friendly mechanical design for installing an add-on card

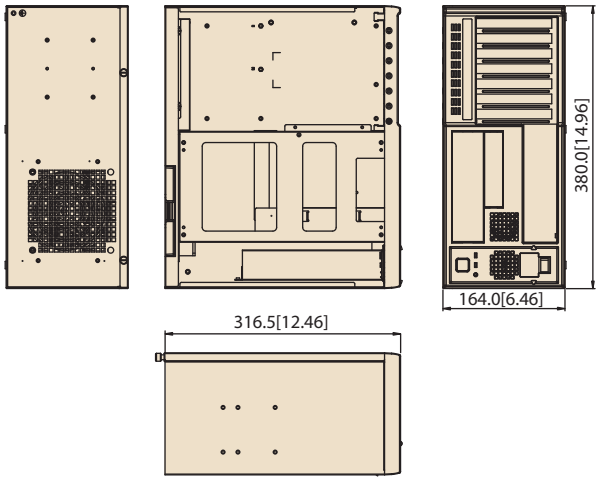
Dimensions

Unit: mm [inch]

IPC-5120



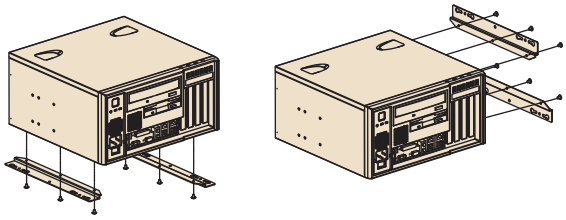
IPC-7120



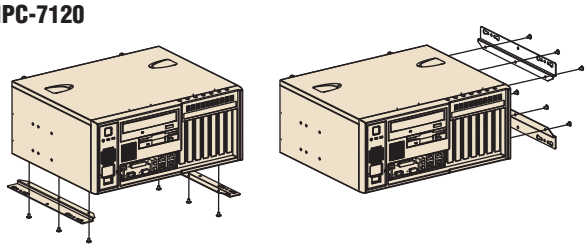
Installation

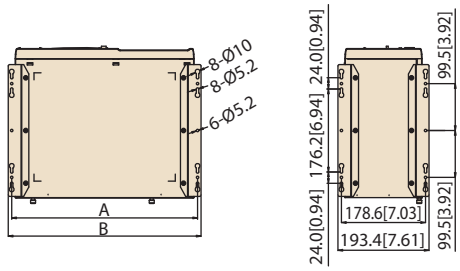
Unit: mm [inch]

IPC-5120



IPC-7120





Dimensions		
	IPC-5120	IPC-7120
A	334.6 [13.17]	394.6 [15.53]
B	350.0 [13.78]	410.0 [16.14]

Ordering Information

Part Number	Power Supply
IPC-5120-30ZBE	1757000229G
IPC-7120-30ZBE	1757000229G

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
1757000557 (ATX, PFC)	250W	AC100~240V (full-range)
1757000229G (ATX, PFC)	300W	AC100~240V (full-range)

IPC-100-60SE

1U Compact Fanless System with Intel® Atom™ N450 on Board



Features

- Elegant, ultra-compact fanless system
- Built-in Intel® Atom™ processor N450 1.66 GHz
- Comprehensive I/O: dual gigabit Ethernet, 8 USB, 3 COM, 1 VGA
- 1 PCI and 1 mini-PCIe expansion slots
- Open frame AC to +12 V_{DC} 60 W power supply
- Anti-vibration design for 2.5" HDD-bay to ensure maximum reliability

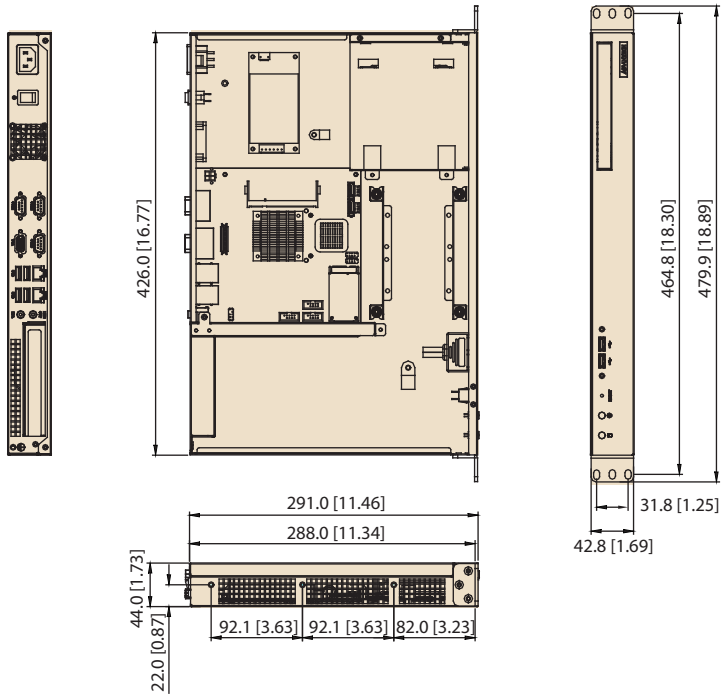
Specifications

Processor System	CPU	Intel Atom Processor N450 1.66 GHz	
	L2 Cache	512 KB	
	Chipset	ICH8M	
	BIOS	AMI 16 MB SPI	
Memory	Technology	Single Channel DDR2 667MHz	
	Max. Capacity	200-pin SODIMM x1 up to 2 GB	
Expansion Slot	PCI	1 (32-bit/33 MHz) via PCI riser card (P/N: 989KC1000E)	
	Mini-PCIe	1	
Graphics	Chipset	Embedded Gen3.5+ GFX Core	
	Display Memory	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to SXGA 1400 x 1050 @ 60 Hz	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel 82567V; GbE LAN2: Intel 82583V	
	Connector	2 x RJ-45 connectors	
Watchdog Timer	Output	System reset	
	Interval	Programmable, 1~255 sec/min	
Storage Interface	2.5" HDD Bay	1 (SATA)	
	slim ODD	1 (SATA)	
I/O Interface	USB	8 (4 on rear, 2 on front, 2 internal)	
	Serial	3 (1 of RS-232/422/485, 2 of RS-232)	
	Ethernet	2	
	Audio	2 (Mic-in, Line-out)	
	VGA	1	
Miscellaneous	LED Indicators	Power, HDD	
	Control	AT power switch (on rear), system reset button (on front)	
Environment		Operating	Non-operating
	Operating Temp.	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Operating Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5~500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	480 x 44 x 288 mm (19" x 1.7" x 11.4")	
	Net Weight	3.6 kg / 7.92 lb	

* The motherboard only supports 2 SATA connectors.
* If IPC-100 is operated in an environment without any air flow, the environmental temperature should be no higher than 25° C.

Dimensions

Unit: mm [inch]



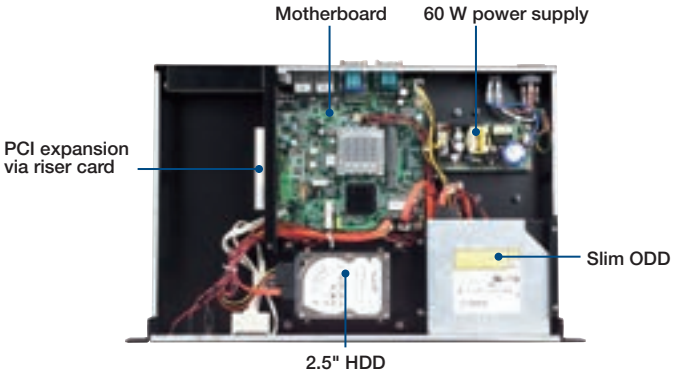
System Ordering Information

Part Number	CPU	Power supply	Expansion	Display	SATA	USB	COM	Audio
IPC-100-60SE	Intel Atom N450 1.66 GHz	AC to DC +12 V 60 W	1 x PCI (optional) 1 x Mini PCIe	VGA	2	8	3	2

Front View



Inside View



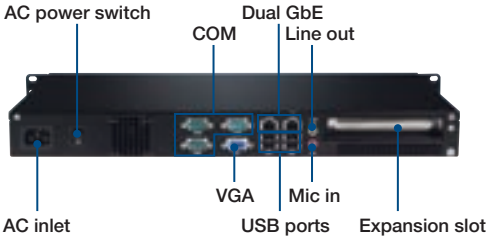
Packing List

Description	Quantity
IPC-100 system	x 1
SATA power cable for HDD	x 1
SATA signal cable for HDD & slim ODD	x 2
SATA power cable for slim ODD	x 1
Mounting bracket	x 2
User manual	x 1
Driver CD	x 1

Optional Accessories

Part Number	Description
989KC10000E	1U riser card for 1 PCI expansion

Rear View



ACP-1010/1320

1U Rackmount Chassis for Full-size SHB/SBC or ATX/MicroATX Motherboard with Dual SAS/SATA HDD Trays



Features

- Space-saving 1U rackmount chassis, ideal building block for business expansion
- Supports full-size SHB/SBC or ATX/MicroATX motherboards
- LED indicators for LAN connectivity, alarm notification of power supply, HDD activity, system fan, and in-chassis temperature
- ACP-1010: supports a slim ODD and two disk drives
- ACP-1320: supports dual mobile SAS / SATA HDD trays
- Supports up to 2 expansion slots in BP version, and 1 expansion slot via riser card in MB version
- Supports both 250W/300W ATX/PFC power supply
- Efficient cooling design prevents the system from over-heating

CE FCC RoHS

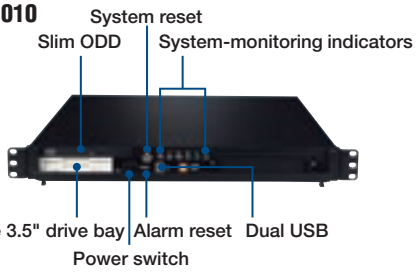
Specifications

Drive Bay		Front-accessible	Internal
	Slim Optical Disk Drive	1	-
	3.5"	1/2 SAS/SATA (mobile trays compatible with 2.5" HDD/SSD)	1 (2.5")
Cooling	Fan	BP: 4 (4 cm/24 CFM x 3 + 15 CFM x 1) MB: 2 (4 cm/24 CFM each)	
Front I/O Interface	USB	2	
Miscellaneous	Notification LEDs	System: Power, HDD, Temperature, Fan, LAN1 and LAN2	
	Control	Power switch, system reset & alarm reset button	
	Rear panel	One 9-pin D-Sub opening	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	0.5 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	480 x 44 x 497 mm (19" x 1.7" x 19.6") / 480 x 44 x 617 mm (19" x 1.7" x 24.3")	
	Weight	8 kg (17.6 lb) / 8.8 kg (19.4 lb)	

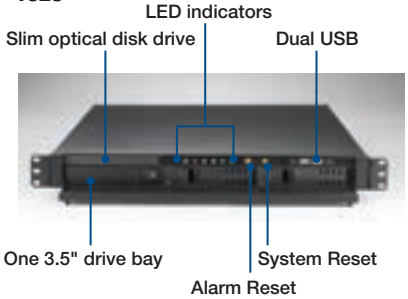
* This chassis supports up to Intel® Pentium® 4 84W, Core™2 Duo, Core™2 Quad 95W and Core i7-2600 95W processors. We suggest that the ACP-1010 should be operated under 35° C if it uses a Core™2 Quad or Core i7-2600 processor. This is due to the thermal and the power consumption of the SAS HDD being much higher than the SATA HDD while the system is operating.

Front View

ACP-1010



ACP-1320



Inside View



ACP-1010BP



ACP-1010MB

Rear View



ACP-1010BP/1320BP

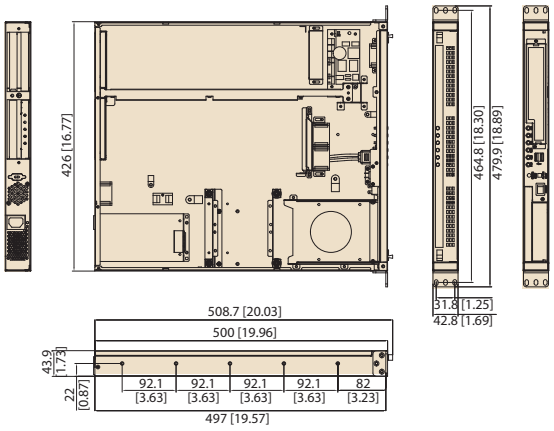


ACP-1010MB/1320MB

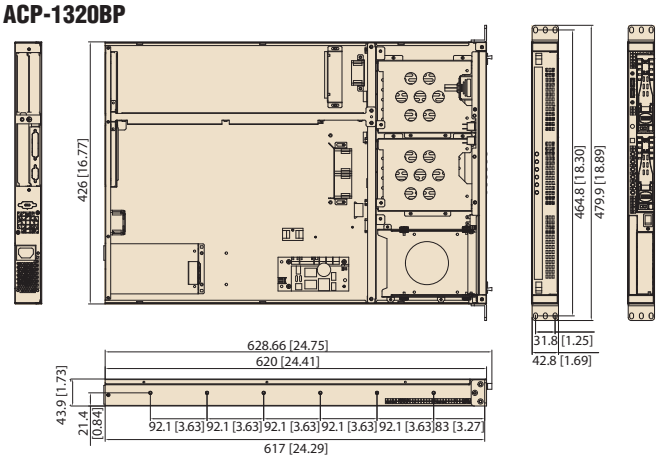
Dimensions

Unit: mm [inch]

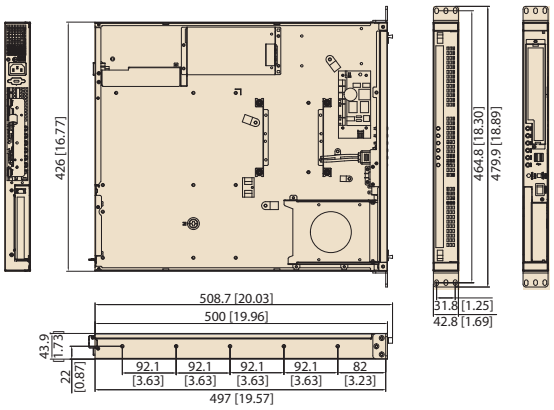
ACP-1010BP



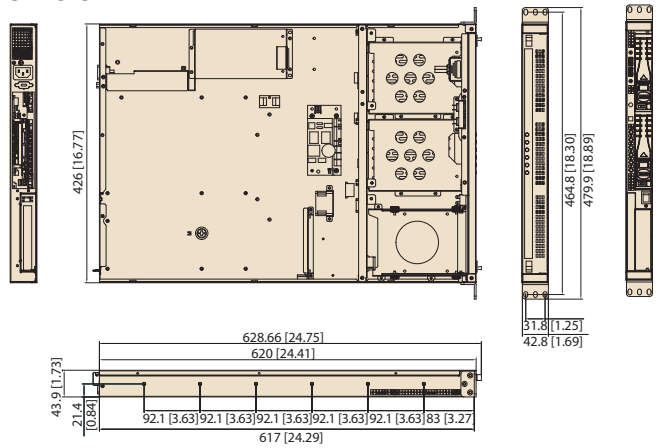
ACP-1320BP



ACP-1010MB



ACP-1320MB



Ordering Information

Part Number	Power Supply
Backplane Version	
ACP-1010BP-00XE	-
ACP-1320BP-00XE	-
Motherboard Version	
ACP-1010MB0-00XE	-
ACP-1320MB0-00XE	-

*ACP-1010MB/1320 MB does not support AIMB-763, 542, 562 and 564 because the height of the audio connector is over 1U.

Optional Accessories

Part Name	Description
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)
1960048353T000	I/O shield for AIMB-780/767/580/566
1960055954T000	I/O shield for AIMB-781/581
19Z0000406T000	I/O shield for ASMB-781/782/820
ACP-1320MB-FAN0E	ACP-1320 fan Kit for supporting ASMB

* Ordering 1 piece of each ACP-1320MB-FAN0E and ASMB rear I/O shield is mandatory for configuring ASMB with ACP-1320MB chassis.

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Name	Specifications	
	Watts	Input
BP: 1757001797 (ATX, PFC)	250W	AC 100 ~ 240 v (full-range)
MP: 1757001457 (ATX, PFC)		
BP: 1757000160G (ATX, PFC)	300W	AC 100 ~ 240 v (full-range)
MP: 1757000263 (ATX, PFC)		

Backplane Options

Part Name	Slot	CPU Card
PICMG 1.3		
PCE-5B03V-01A1E	One CPU, one PCIe x16, one PCI (32-bit/33 MHz)	PCE-5000 Series
PCE-5B03V-00A1E	One CPU, one PCIe x16, one PCIe x4	
PICMG 1.0		
989K610302E (PCA-6103P2V-0A2E)	One CPU, 2 PCI (32-bit/33 MHz)	PICMG 1.0 Full-Size SBC

Spare Parts

Part Name	Description
2130007889S000	Filter 170 x 32 x 5 mm for ACP-1010
9662132020E	Black mobile HDD tray

ACP-2000/ IPC-602

2U 6-Slot Rackmount Chassis with Front USB and PS/2 Interfaces



Features

- 2U rackmount chassis supports up to 6 cards
- Butterfly backplane design
- Front-accessible USB and PS/2 connectors
- 250W / 300W AC ATX and DC power supply options
- Two 40 CFM cooling fans with air filter
- Lockable front door prevents unauthorized access
- System alarm notification by front LED indicators (ACP-2000 only)

CE FCC RoHS

Specifications

Drive Bay		Front-accessible	Internal
	Slim Optical Disk Drive	1/-	-
	3.5"	2/1	-/1
	5.25"	-/1	-
Cooling	Fan	2 (8 cm / 47 CFM each) / 2 (8 cm / 40 CFM each)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
	PS/2	1	
Miscellaneous	LED Indicators	Power and HDD activity; fan and temperature for ACP-2000 only	
	Rear Panel	One 9-pin D-Sub opening	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	0.5 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 88 x 451 mm (19" x 3.5" x 17.8")	
	Weight	11.5 kg (25.3 lb) / 11.3 kg (24.9 lb)	

Front View

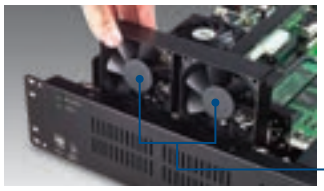
IPC-602



ACP-2000



Inside View



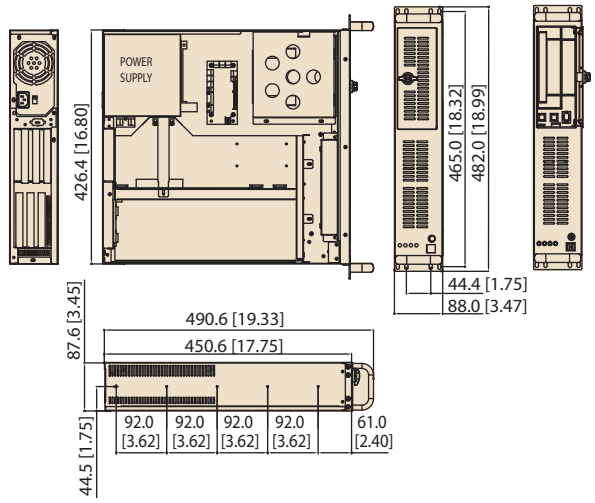




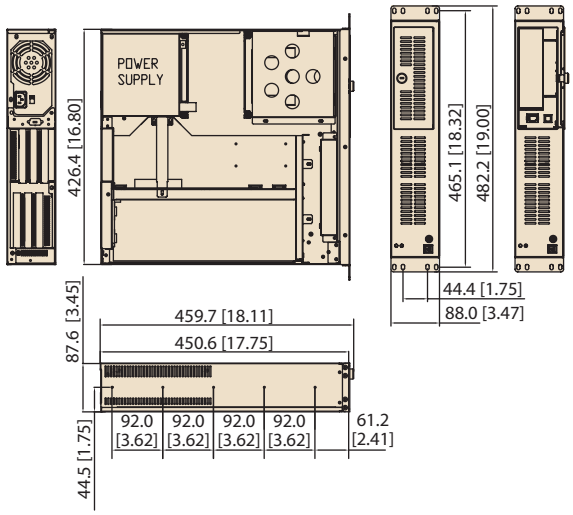
Dimensions

Unit: mm [inch]

ACP-2000



IPC-602



Ordering Information

Part Number	Power Supply	Backplane
PICMG 1.0		
ACP-2000P3-00XE	Without power supply, with ATX switch	989K610622E (PCA-6106P3V)
ACP-2000P4-00XE	Without power supply, with ATX switch	989K610512E (PCA-6105P4V)
IPC-602P3-00XBE	Without power supply, with ATX switch	989K610622E (PCA-6106P3V)
IPC-602P4-00XBE	Without power supply, with ATX switch	989K610512E (PCA-6105P4V)
PICMG 1.3		
ACP-2000EBP-00XE	Without power supply, with ATX switch	-
IPC-602EBP-00XBE	Without power supply, with ATX switch	-

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-250ATX-ZE (ATX, PFC) (IPC-602 only)	250W	AC 100 ~ 240 V (full range)
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS-300ATX-DC48E (ATX)	300W	DC -48 V
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant,ACP-2000 only)	300W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
1950000868T00B	P3 and X3 card cage
1950000869N002	P4 card cage
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays

Spare Parts

Part Number	Description
2130006189S000	Door filter 156 x 45 x 5 mm
1990001949	Fan filter 165 x 58 mm

ACP-2010MB/ 2320MB

2U Rackmount Chassis for ATX/ MicroATX Motherboard with Low-Profile Rear Bracket Option



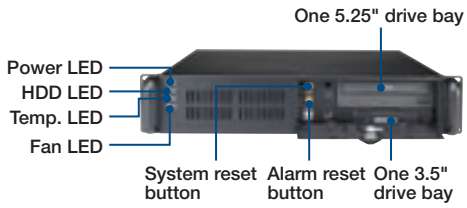
Features

- LED indicators and audible alarm notification for system fault detection
- Shock-resistant drive bays to hold one 5.25" and three 3.5" drives for ACP-2010MB (one front-accessible and two internal); one slim optical disk drive, two internal 3.5" drives and dual mobile SAS/SATA HDD trays for ACP-2320MB
- Various riser card options to support three full-size PCI or PCIe cards for expansion
- Supports 300W / 400W ATX PFC power supply
- Reusable and washable air filters

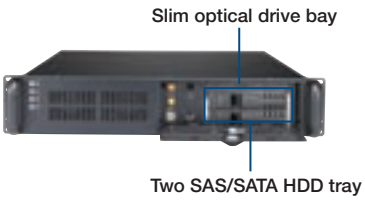
Specifications

Drive Bay		Front-accessible	Internal
	Slim Optical Disk Drive	- / 1	-
	5.25"	1 / 0	-
	3.5"	1 / 2 SAS/SATA HDD (mobile trays compatible with 2.5" HDD/SSD)	2 / 2
Cooling	Fan	2 (8 cm /47 CFM each) / 2 (8 cm /47 CFM each) + 1 (6 cm /28 CFM) for SAS/SATA storage unit	
	Air Filters	Yes	
Front I/O Interface	USB	2	
	PS/2	1	
Miscellaneous	LED Indicators	Power, HDD, temperature, fan	
	Rear Panel	Two 9-pin D-Sub openings	
Environment		Operating	Non-operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 88 x 480 mm (19" x 3.46" x 18.9")	
	Weight	10.7 kg (23.5 lb) / 11.7 kg (25.7 lb)	

Front View

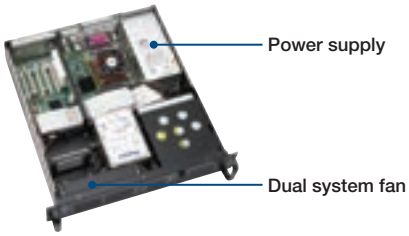


ACP-2010MB

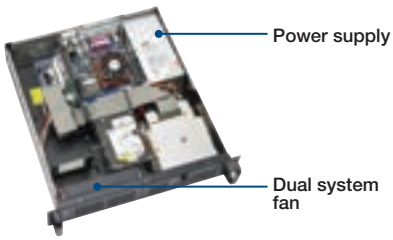


ACP-2320MB

Inside View



ACP-2010MB



ACP-2320MB

Rear View



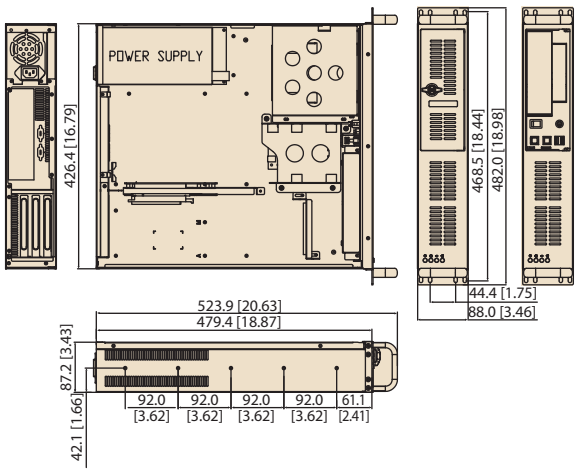
Rear I/O bracket for low profile add-on cards



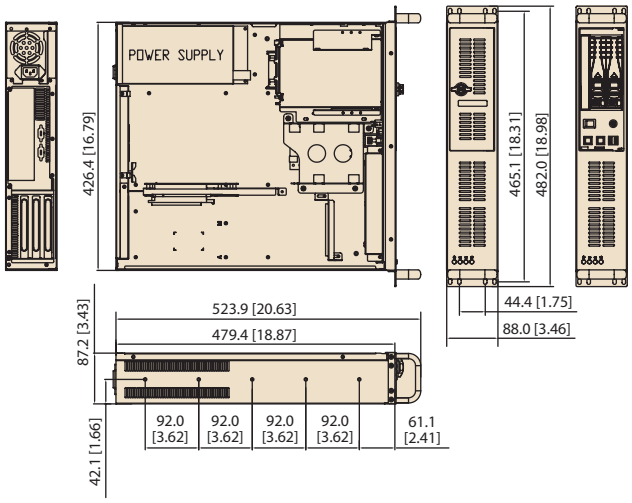
Dimensions

Unit: mm [inch]

ACP-2010MB



ACP-2320MB



Ordering Information

Part Number	Power Supply
ACP-2010MB0-00XBE	Without power supply, with ATX switch
ACP-2320MB0-00XBE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
1757000007G (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
1757000105G (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
1757001137 (ATX, PFC) (1+1 redundant)	250W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
Rear I/O panel kit for low-profile add-on cards	
1939000361	Screw (should purchase 7 pcs)
1960034816N000	I/O bracket (should purchase 7 pcs)
1960019475T201	Rear panel for low-profile
1950014302N001	Special bracket for riser card AIMB-RP3P8-12A1E
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays

Spare Parts

Part Number	Description
9662132020E	Black mobile HDD tray
1990007986S000	Door filter 156 x 45 x 5 mm
1990001949	Fan filter bracket 168 x 58 mm

IPC-603MB

2U 3-Slot Rackmount Chassis for ATX/MicroATX Motherboard with Front I/O



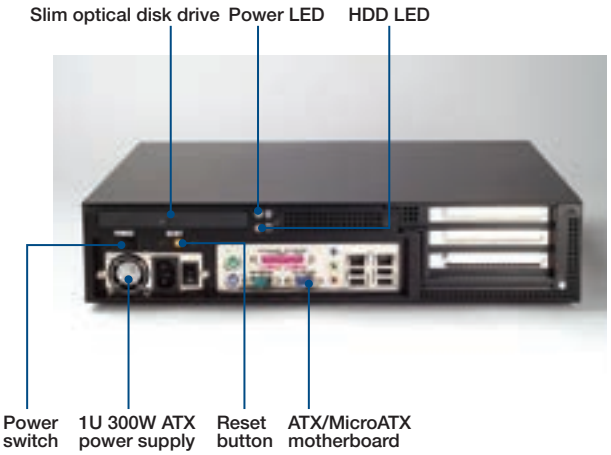
Features

- The best embedded computing system for machinery applications
- Streamlined in-chassis airflow design supporting LGA775 Intel® Pentium® 4 processor up to 3.8 GHz with suggested CPU cooler
- All I/O interfaces are in the front
- Shock resistant disk drive bay designed to hold one slim CD-ROM and one internal 3.5" HDD
- Equipped with 1U 300W ATX PFC power supply
- Easy-to-replace air filters

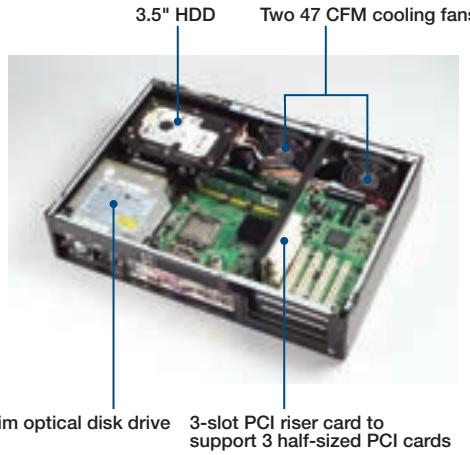
Specifications

Drive Bay		Front-accessible	Internal
	Slim Optical Disk Drive	1	-
	3.5"	-	1
Cooling	Fan	2 (8 cm/47 CFM each)	
	Air Filters	3 (85 x 80 mm)	
Miscellaneous	Notification LEDs	Power & HDD activity	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 88 x 308 mm (19" x 3.46" x 12.1")	
	Weight	6.4 kg (14.1 lb)	

Front View

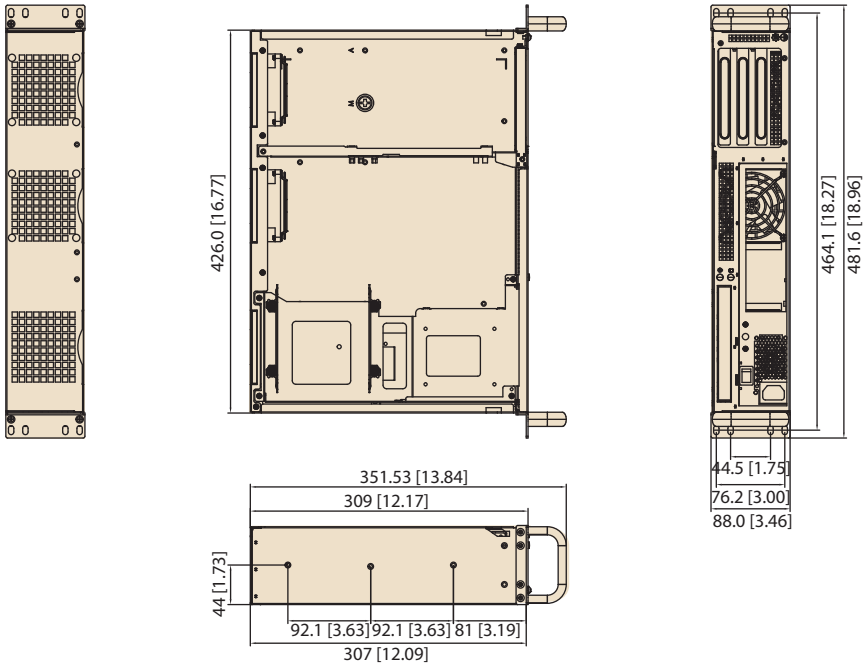


Inside View



Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
IPC-603MB0-30ZE	1757000160G (300W AC 100~240V full range)

Spare Parts

Part Number	Description
2130004795S000	Fan filter 80 x 85 x 5 mm

Optional Accessories

Part Number	Description
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)
1960022033T000	2U LGA775 P4 CPU cooler up to 3.4 GHz (84 W)

ACP-4000

4U Rackmount Chassis with Visual & Audible Alarm Notification



Features

- 4U rackmount chassis supports up to 15 add-on cards
- Shock-resistant disk drive bay design holds up to three 5.25" and one 3.5" disk drives
- Front-accessible USB and PS/2 interfaces for easy data transfer
- Dual 12 cm / 85 CFM ball-bearing fans provide optimized and streamlined airflow
- Front LED indicators and audible alarm notification for system fault detection
- Lockable front door prevents unauthorized access
- Supports single PS/2 and redundant ATX power supplies

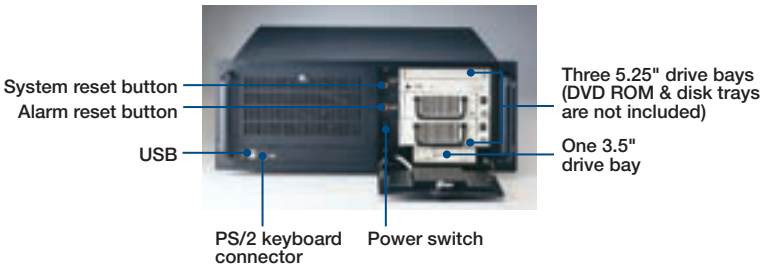
Quiet

CE FCC RoHS

Specifications

Drive Bay		Front-accessible	
	3.5"	1	
	5.25"	3	
Cooling	Fan	2 (12 cm / 85 CFM each)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
	PS/2	1	
Miscellaneous	LED Indicators	Power, HDD, temperature, fan, and power voltage status	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub & one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 479 mm (19" x 7" x 18.9")	
	Weight	15.2 kg (33.5 lb)	

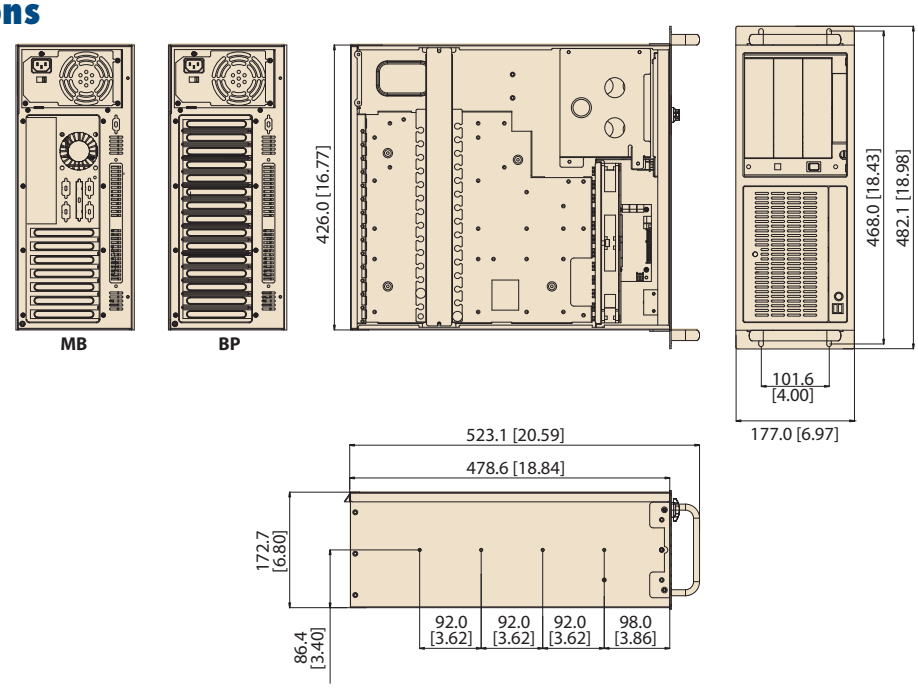
Front View





Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
Backplane Version	
ACP-4000BP-00XE	Without power supply, with ATX switch
ACP-4000BP-30BE	PS8-300ATX-ZBE
Motherboard Version	
ACP-4000MB-00XE	Without power supply, with ATX switch
ACP-4000MB-30BE	PS8-300ATX-ZBE

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS8-500ATX-ZE	500W	AC 100 ~ 240 V (full range)
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100 ~ 240 V (full range)
1757004393-01 (ATX, PFC) (1+1 redundant)	500W	AC 100 ~ 240 V (full range)
PS-300ATX-DC48E (ATX)	300W	DC -48 V

Optional Accessories

Part Number	Description
1700006915	ATX 24P/20P + 4P + 8P 60cm cable (connecting from power supply to alarm board)
1700006917	Two Mini DIN (connect to MB) / 6P (connect to front I/O board) PS2 KB/Mouse cable
IDT-3120E and 989K008733	Mobile rack for converting a 5.25" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

* If users use AIMB-763 or 3rd party motherboard, they need to purchase 1700006915 or 1700006916 for the front voltage LEDs to function normally. And they also need to purchase 1700006917 to make front PS/2 function normally.

* If users use ASMB-820 or ASMB-822, they need to purchase 1700006915 for the front voltage LEDs to function normally.

Spare Parts

Part Number	Description
2130006147S000	Door filter 97.6 x 36.6 x 5 mm
2130004803S000	Fan filter 115 x 195 x 5 mm

ACP-4010

4U Rackmount Chassis for ATX/CEB/EEB Motherboard or Full-size SHB/SBC with Dual System Support



Features

- Supports either an ATX/CEB/EEB single/dual processors motherboard or a PICMG backplane with up to 15 slots
- Supports one or two systems in a single chassis
- Supports up to two 5.25" and two 3.5" disk drives
- LED indicators and alarm notification for system fault detection and network connection
- Lockable front door prevents unauthorized access

Quiet

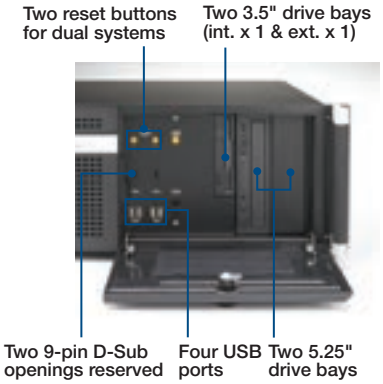
CE FCC RoHS

Specifications

Drive Bay		Front-accessible	Internal
	5.25"	2	-
	3.5"	1	1
Cooling	Fan	2 (12 cm /85 CFM each)	
	Air Filter	Yes	
Front I/O Interface	USB	4	
	9-pin D-Sub	2 (Reserved)	
Miscellaneous	LED Indicators	Power, HDD, temperature, fan, LAN1, and LAN2	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub and one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 479 mm (19" x 7.0" x 18.9")	
	Weight	16.6 kg (36.5 lb)	

*Installation of all 15 full-size cards will sacrifice the two 3.5"disk drive bays for ACP-4010.
*While an EEB motherboard is installed in the chassis, only one 3.5" and two 5.25" disk drive bays are available.

Front View

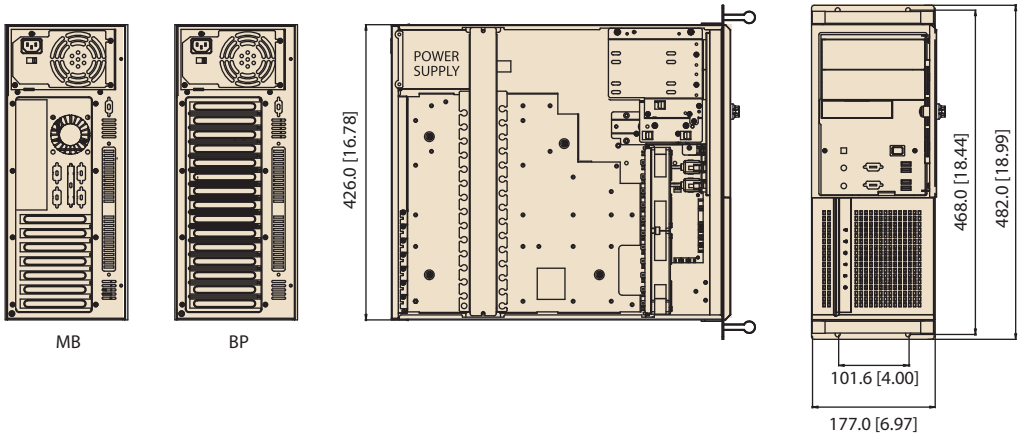


Inside View



Dimensions

Unit: mm [inch]



Ordering Information

Model Name	Power Supply
Backplane Version	
ACP-4010BP-00XE	Without power supply, with ATX switch
Motherboard Version	
ACP-4010MB-00XE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS8-700ATX-ZE	700W	AC 100 ~ 240 V (full range)
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100 ~ 240 V (full range)
1757004393-01 (ATX, PFC) (1+1 redundant)	500W	AC 100 ~ 240 V (full range)
1757004372-01 (ATX, PFC) (1+1 redundant)	800W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
1990001299	Fan filter 95 x 130 mm
1990001298	Door filter 150 x 68 mm

ACP-4320

Quiet 4U Rackmount Chassis Ready with Dual SAS/SATA HDD Trays



Features

- Supports either an ATX motherboard or a PICMG backplane with up to 15 slots
- Quiet Version provides low-noise solution
- ACP-4320 supports dual SAS/SATA HDD trays for data monitoring applications
- LED indicators and alarm notification for system fault detection and network connection
- Lockable front door prevents unauthorized access

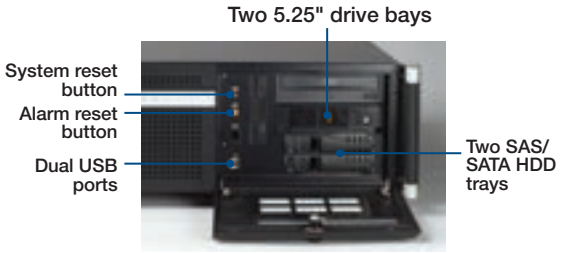
Quiet

CE FCC RoHS

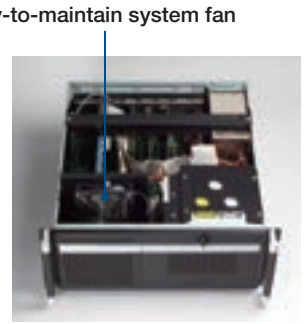
Specifications

Drive Bay		Front-accessible	Internal
	5.25"	2	-
	3.5"	2 SAS/SATA HDDs +1 (mobile trays compatible with 2.5" HDD/SSD)	-
Cooling	Fan	1 (12 cm /114 CFM) + 1 (6 cm /28 CFM)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
	9-pin D-Sub	-	
Miscellaneous	LED Indicators	Power, HDD, temperature, fan, LAN1, and LAN2	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub and one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 479 mm (19" x 7.0" x 18.9")	
	Weight	17.6 kg (38.7 lb)	

Front View

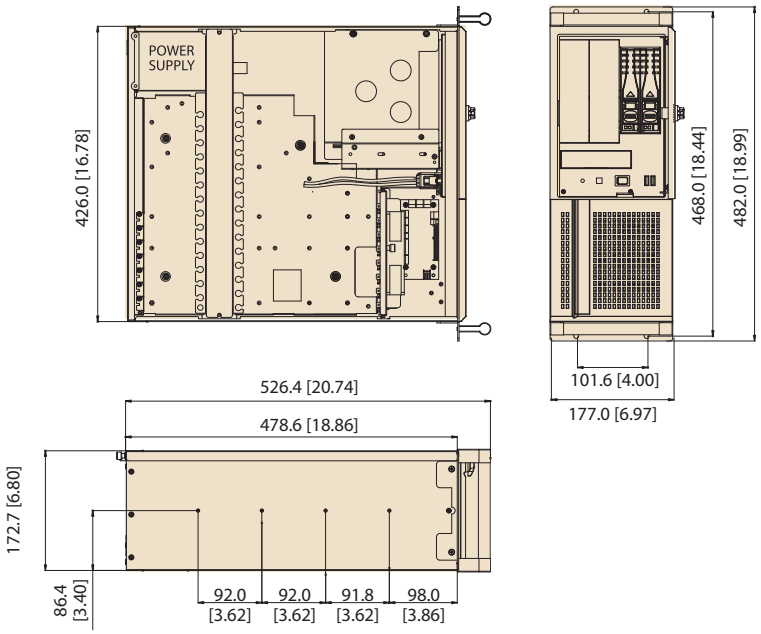


Inside View



Dimensions

Unit: mm [inch]



Ordering Information

Model Name	Power Supply
Backplane Version	
ACP-4320BP-00XE	Without power supply, with ATX switch
Motherboard Version	
ACP-4320MB-00XE	Without power supply, with ATX switch
Quite Version	
ACP-4320MB-00XQE	Barebone chassis with low-noise fans, without power supply, ready for motherboard AIMB-767/781/782/581

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS8-500ATX-ZE	500W	AC 100 ~ 240 V (full range)
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100 ~ 240 V (full range)
1757004393-01 (ATX, PFC) (1+1 redundant)	500W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
1990001299	Fan filter 95 x 130 mm
1990001298	Door filter 150 x 68 mm
9662132020E	Black 3.5" mobile HDD tray

ACP-4360

4U Rackmount Chassis with 6 Hot-Swap SAS / SATA Trays for RAID

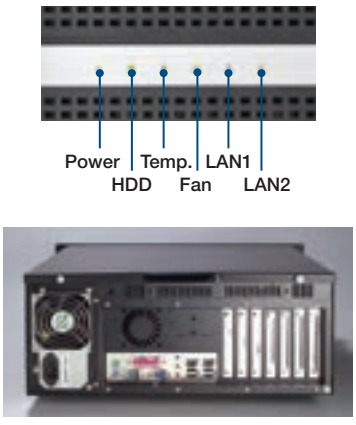


Features

- Supports up to 6 SAS/SATA HDDs, which can be hot-swappable if a SATA RAID card is used
- Supports either an ATX motherboard or a PICMG backplane up to 15 slots
- Supports one slim optical disk drive and one 3.5" FDD or internal HDD
- LED indicators for LAN connectivity and alarm notification for redundant power supply, HDD activity, system fan and in-chassis temperature
- Reusable, front-accessible filters for easy maintenance

Specifications

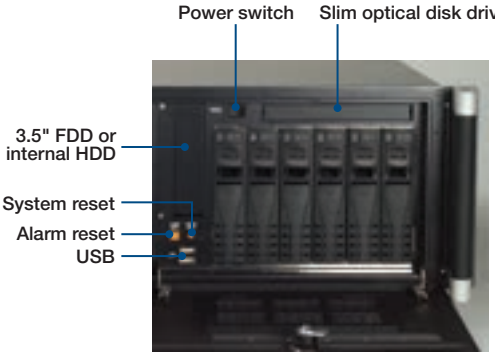
Drive Bay		Front-accessible	
	Slim Optical Drive (Front-accessible)	1	
	3.5"	6 SAS/SATA HDDs + 1 (mobile trays compatible with 2.5" HDD/SSD)	
Cooling	Fan	1 (12 cm / 114 CFM) + 2 (8 cm / 47 CFM each) for SAS/SATA storage unit	
	Air Filter	Yes	
Front I/O Interface	USB	2	
Miscellaneous	LED Indicators	System: Power, HDD (for IDE drives only), fan, temperature, LAN1 and LAN2 SAS/SATA HDD trays: HDD power and activity	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub and one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95%@ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 501 mm (19" x 7" x 19.8")	
	Weight	19.0 kg (41.8 lb)	



Rear view of ACP-4360MB



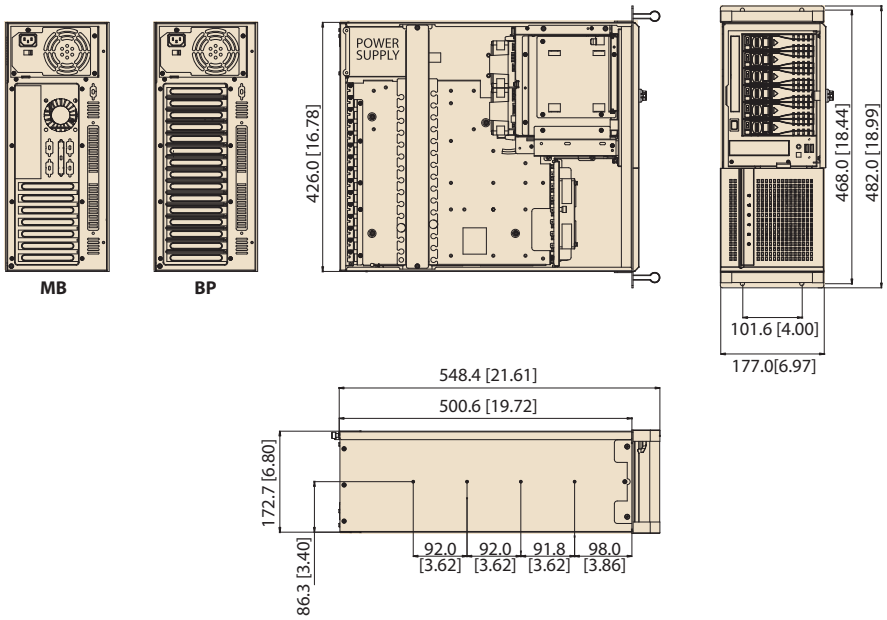
Easy-to-maintain system fan



Six hot-swappable SAS/SATA HDD trays

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
Backplane Version	
ACP-4360BP-00XBE	Without power supply, with ATX switch
Motherboard Version	
ACP-4360MB-00XBE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS8-500ATX-ZE (ATX, PFC)	500W	AC 100 ~ 240 V (full range)
PS8-700ATX-ZE (ATX, PFC)	700W	AC 100 ~ 240 V (full range)
1757004393-01 (ATX, PFC) (1+1 redundant)	500W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)
96RC-SAS-4P-PE-LS	Interface PCIe x8, 4-port SAS/SATA RAID card with 1 SAS SFF8087 connector
96RC-SAS-8P-PE-LS1	Interface PCIe x8, 8-port SAS/SATA RAID card with 2 SAS SFF8087 connectors
96CB-SAS-SATA-4P	Mini SAS to 4 SATA + SGPIO cable, 0.8 m

PS. When choosing either of above RAID cards, please must use 96CB-SAS-SATA-4P to ensure the LEDs on HDD trays function correctly.

Spare Parts

Part Number	Description
1990001299	Fan filter 95 x 130 mm
1990001298	Door filter 150 x 68 mm
9662700022E	Black 3.5" mobile HDD tray

IPC-510

Economical 4U Rackmount Chassis with Front USB and PS/2 Interfaces



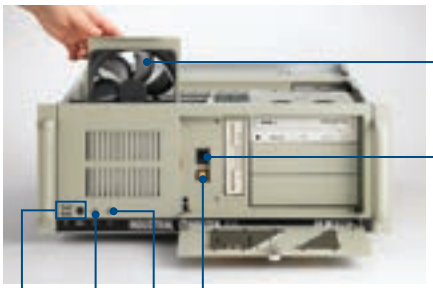
Features

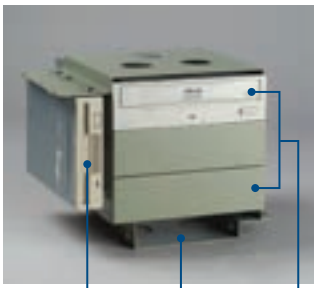
- The most cost-effective rackmount chassis
- Supports ATX PFC PS/2 single power supply
- Easy to install front-accessible drive bays to hold three 5.25" and two 3.5" drives (one front-accessible & one internal)
- Front-accessible USB & PS/2 interfaces
- Designed to withstand environmental extremes, such as shock, vibration and high temperature

CE FCC RoHS

Specifications

Drive Bay		Front-accessible	Internal
	5.25"	3	-
	3.5"	1	1
Cooling	Fan	1 (12 cm / 77 CFM)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
	PS/2	1	
Miscellaneous	LED Indicators	Power and HDD activity	
	Rear Panel	Backplane version: Two 9-pin D-Sub openings Motherboard version: One 9-pin D-Sub and one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	486 x 177 x 446 mm (19" x 7" x 17.6")	
	Weight	10.7 kg (23.5 lb)	



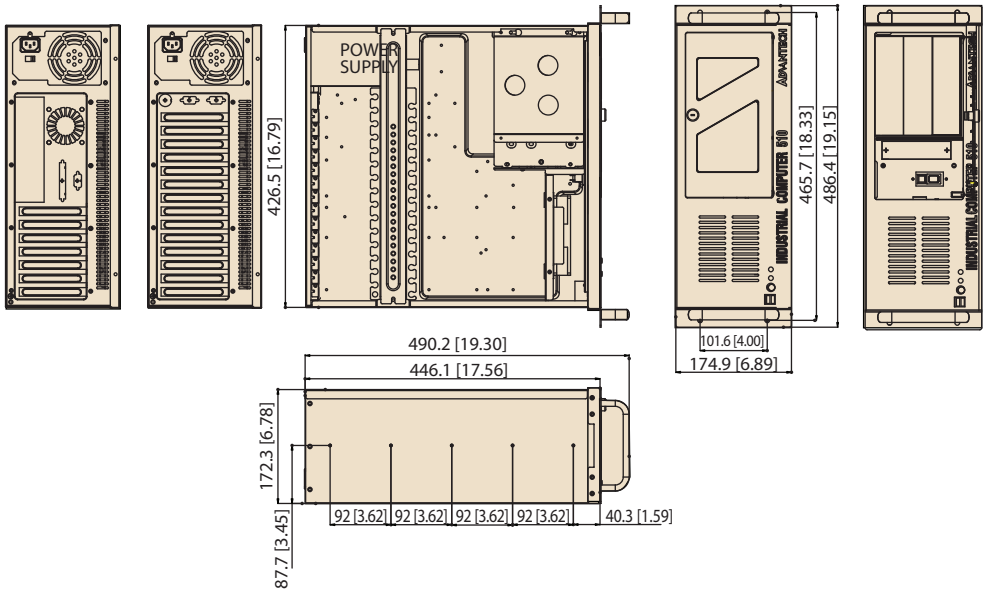




Motherboard can fit in 450 mm (17.7") depth

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
Backplane Version	
IPC-510BP-00XBE	Without power supply, with ATX switch
IPC-510BP-30CE	PS8-300ATX-ZBE
Motherboard Version	
IPC-510MB-00XBE	Without power supply, with ATX switch
IPC-510MB-30CE	PS8-300ATX-ZBE

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-250ATX-ZE (ATX, PFC)	250W	AC 100 ~ 240V (full-range)
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full-range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full-range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
2130006190S000	Fan filter 120 x 100 x 15 mm

IPC-610-F

Classic 4U 15-Slot Rackmount Chassis



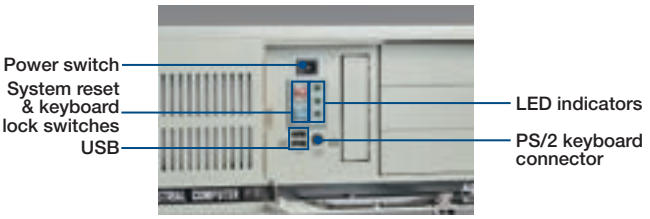
Features

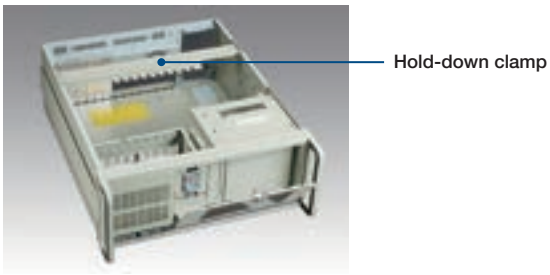
- 4U rackmount chassis supports up to 15 cards
- Shock-resistant disk drive bay design holds up to three 5.25" and two 3.5" (one front-accessible & one internal) disk drives
- Special hold-down clamp design with rubber cushions protects the cards from shock and vibration
- Power and HDD activity notification improves system availability
- Front-accessible air filter for easy system maintenance
- Lockable front door prevents unauthorized access
- 300W / 400W AC and 300W DC ATX power supply options

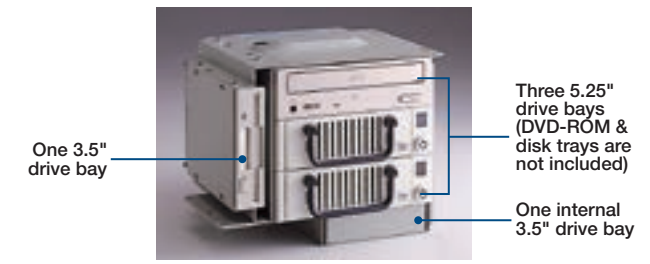
CE FCC RoHS

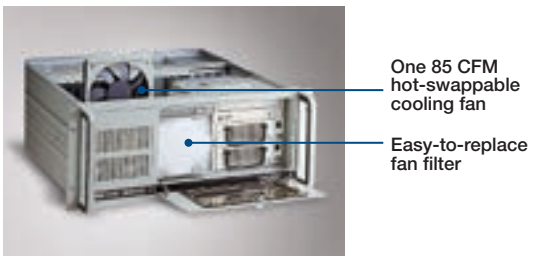
Specifications

Drive Bay		Front-accessible	Internal
	3.5"	1	1
	5.25"	3	-
Cooling	Fan	1 (12 cm / 85 CFM)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
	PS/2	1	
Miscellaneous	LED Indicators	Power, HDD, keyboard lock	
	Control	Power, system reset and keyboard lock switches	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub & one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	IPC-610BP: 482 x 177 x 449 mm (19" x 7" x 17.8") IPC-610MB: 482 x 177 x 499 mm (19" x 7" x 19.6")	
	Weight	16.2 kg (35.6 lb)	



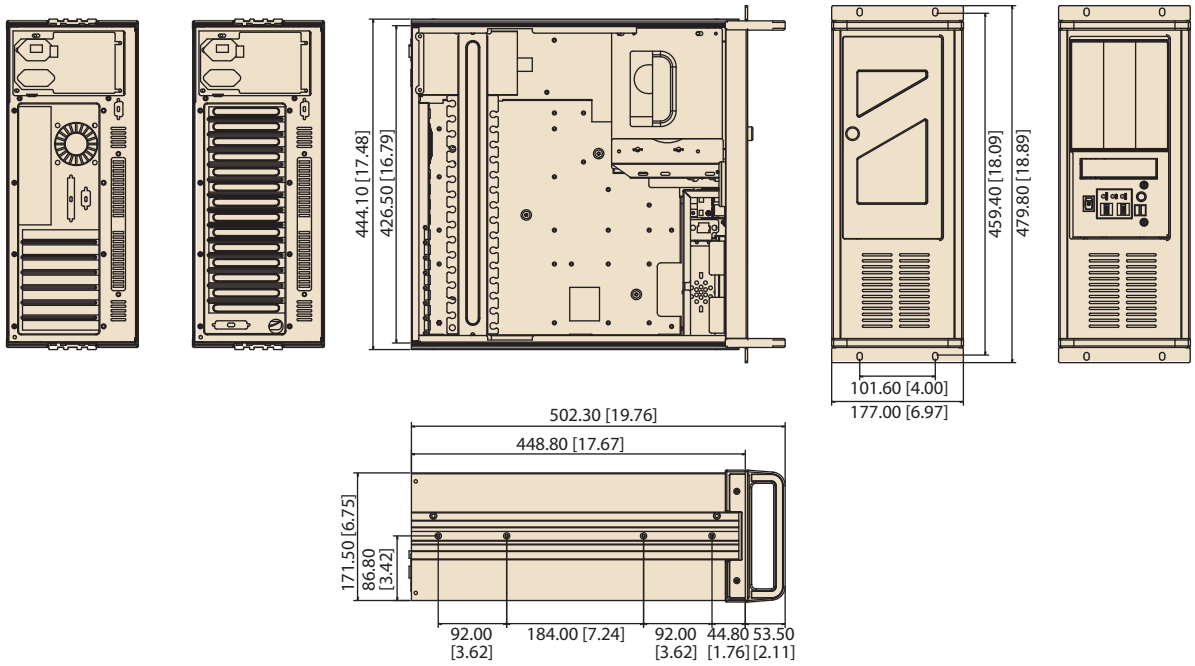






Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
Backplane Version	
IPC-610BP-00FEE	Without power supply, with ATX switch
IPC-610BP-30FEE	PS8-300ATX-ZBE
Motherboard Version	
IPC-610MB-00FEE	Without power supply, with ATX switch
IPC-610MB-30FEE	PS8-300ATX-ZBE

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS-300ATX-DC48E (ATX)	300W	DC-48 V
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
2130006190S000	Fan filter 120 x 100 x 15 mm

IPC-610-H

4U Rackmount Chassis with Visual Alarm Notification



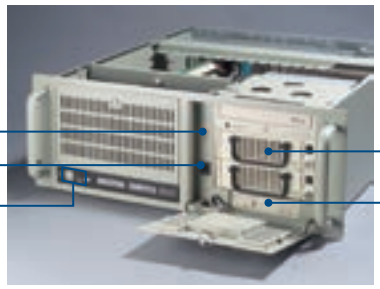
Features

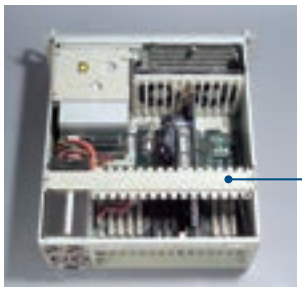
- 4U rackmount chassis supports up to 15 add-on cards
- Shock-resistant disk drive bay design holds up to three 5.25" and one 3.5" disk drives
- Front accessible USB & PS/2 interfaces for easy data transfer
- Dual front-accessible filtered cooling fans provide optimized and streamlined airflow
- Front LEDs indicate power status, and HDD activity
- Lockable front door prevents unauthorized access
- Supports single PS/2 and redundant ATX power supplies

CE FCC RoHS

Specifications

Drive Bay		Front-accessible	
	3.5"	1	
	5.25"	3	
Cooling	Fan	2 (12 cm / 85 CFM each)	
	Air Filter	Yes	
Front I/O Interface	USB	2	
	PS/2	1	
Miscellaneous	LED Indicators	Power, HDD, and power voltage status	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub & one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 479 mm (19" x 7" x 18.9")	
	Weight	15 kg (33 lb)	





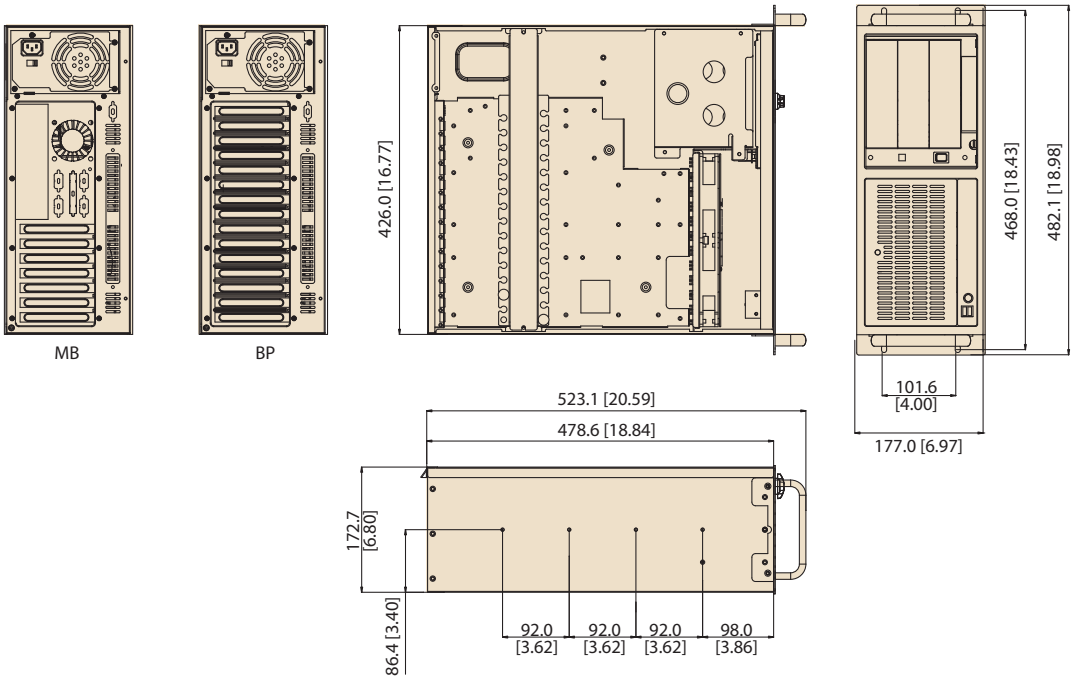




Rear view of IPC-610BP-H

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
Backplane Version	
IPC-610BP-00XHE	Without power supply, with ATX switch
IPC-610BP-30HBE	PS8-300ATX-ZBE
Motherboard Version	
IPC-610MB-00XHE	Without power supply, with ATX switch
IPC-610MB-30HBE	PS8-300ATX-ZBE

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100 ~ 240 V (full range)
PS-300ATX-DC48E (ATX)	300W	DC -48 V

Optional Accessories

Part Number	Description
1700006916	ATX 24P/20P + 4P + 15P 60cm (connecting from power supply to LED board)
1700006917	Two Mini DIN (connect to MB) / 6P (connect to front I/O board) PS2 KB/Mouse cable
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

* If users use AIMB-763 or 3rd party motherboard, they need to purchase 1700006915 or 1700006916 for the front voltage LEDs to function normally. And they also need to purchase 1700006917 to make front PS/2 function normally.

Spare Parts

Part Number	Description
2130006147S000	Door filter 97.6 x 36.6 x 5 mm
2130004803S000	Fan filter 115 x 195 x 5 mm

IPC-610-L/ IPC-611

4U 15-Slot Rackmount Chassis with Front-Accessible Fan



IPC-610-L

Features

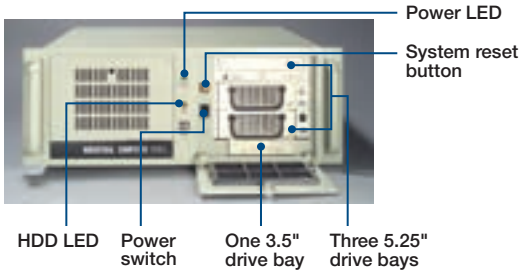
- Supports an ATX motherboard or a backplane with up to 15 slots
- Shock-resistant disk drive bay design holds up to three 5.25" and one 3.5" disk drives
- Special hold-down clamp design with rubber cushions protects the cards from shocks and vibrations
- Power and HDD activity notification improves system availability
- Front-accessible air filter for easy system maintenance
- Lockable front door prevents unauthorized access
- Flexible mechanical design supports both 300W single PS/2 and redundant ATX power supply

Specifications

Drive Bay		Front-accessible	
	3.5"	1	
	5.25"	3	
Cooling	Fan	1 (12 cm / 85 CFM)	
	Air Filter	Yes	
Miscellaneous	LED Indicators	Power and HDD activity	
	Control	Power switch and system reset button	
	Rear Panel	Backplane version: One 9-pin D-Sub opening Motherboard version: Five 9-pin D-Sub & one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85 % @ 40° C, non-condensing	10 ~ 95 % @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, 1/2 sine wave)	30 G
Physical Characteristics	Color / Logo	IPC-610-L: Beige / Advantech Logo; IPC-611: Black / No Logo	
	Dimensions (W x H x D)	482 x 177 x 480 mm (19" x 7" x 18.9")	
	Weight	14.5 kg (31.9 lb) / 14.2 kg (31.2 lb)	

Front View

IPC-610-L



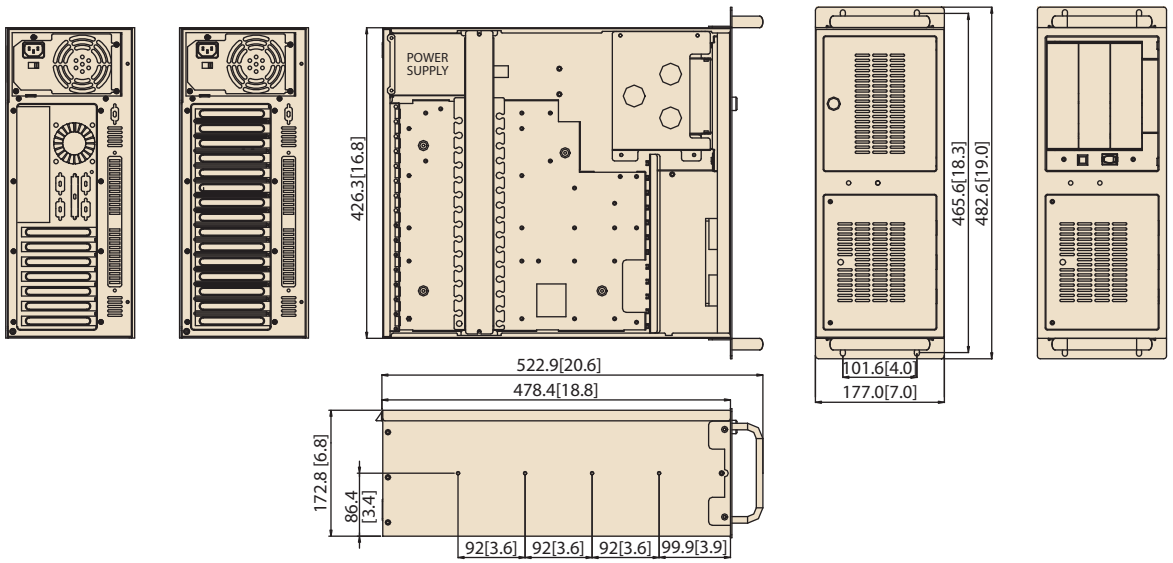


IPC-611



Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
Backplane Version	
IPC-610BP-00LBE	Without power supply, with ATX/AT switch
IPC-611BP-00XBE	Without power supply, with ATX switch
Motherboard Version	
IPC-610MB-00LBE	Without power supply, with ATX switch
IPC-611MB-00XBE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
PS8-250ATX-ZE (ATX, PFC)	250W	AC 100 ~ 240 V (full-range)
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240 V (full-range)
RPS-300ATX-ZE (ATX, PFC) (1+1 redundant)	300W	AC 100~240 V (full-range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
2130006149S000	Fan filter 127 x 127 x 5 mm
2130004802S000	Door filter 142 x 97 x 5 mm

IPC-619/IPC-619S

Compact 4U Rackmount Chassis for Motherboard & Full-Size/ Half-Size SHB/SBC



Features

IPC-619:

- Space-saving 4U rackmount chassis, with only 429 mm depth
- Supports either ATX/MicroATX motherboards or backplane up to 15 slots
- Shock-resistant drive bay design supports up to two 5.25" and one 3.5" disk drives
- Versatile 250W/300W/400W power supply options

IPC-619S:

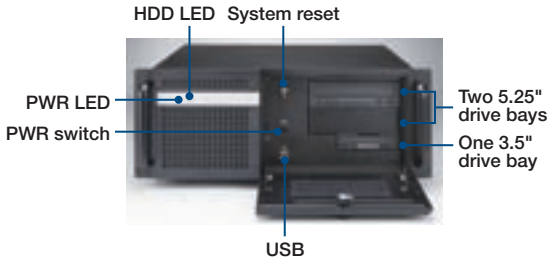
- Ultra compact 4U chassis for half-size SBC, with only 274 mm depth
- Supports up to 10-slot backplane
- Shock-resistant drive bays to hold one 5.25" and one 3.5" disk drives
- 250W and 300W ATX/PFC power supply options

Specifications

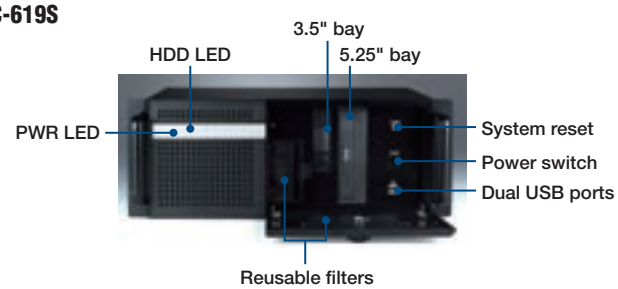
Drive Bay		Front-accessible	
	5.25"	2/1	
	3.5"	1/1	
Cooling	Fans	One (12 cm/85 CFM)	
	Air Filters	Yes	
I/O interfaces	USB	2 (front-accessible)	
Miscellaneous	Notification LEDs	PWR, HDD	
	Control	Power switch and system reset button	
	Rear Panel	BP version: One 9-pin D-Sub opening; MB version (IPC-619 only): Five 9-pin D-Sub & one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5-500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical	Dimensions (W x H x D)	482 x 177 x 430 mm (19" x 7" x 16.9")/482 x 177 x 275 mm (19" x 7" x 10.8")	
	Weight	15 kg (33 lb)/8 kg (17.6 lb)	

Front View

IPC-619

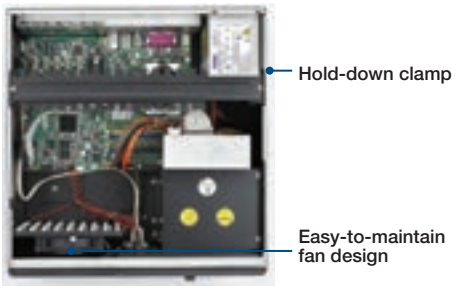


IPC-619S

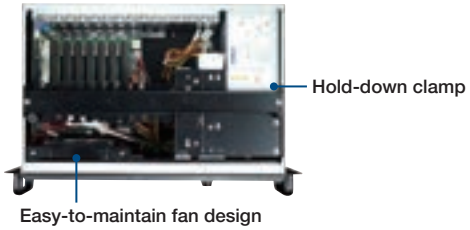


Inside View

IPC-619



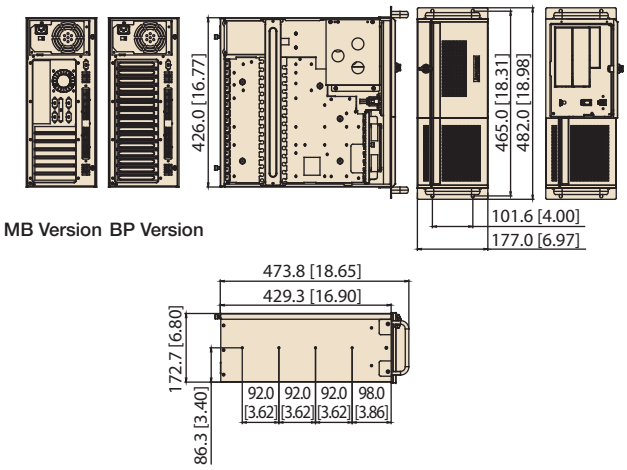
IPC-619S



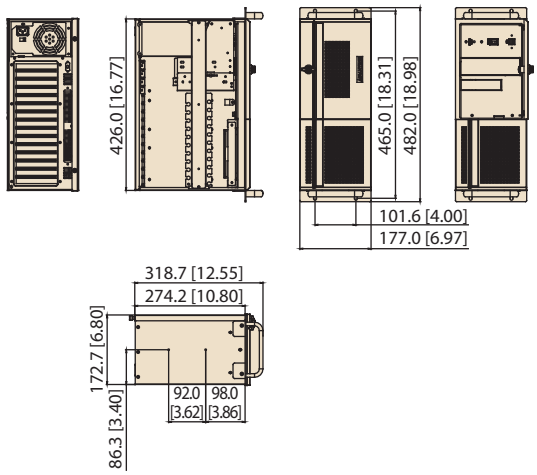
Dimensions

Unit: mm [inch]

IPC-619



IPC-619S



Ordering Information

Model Name	Power Supply
IPC-619	
Backplane Version	
IPC-619BP-00XE	Without power supply, with ATX switch
Motherboard Version	
IPC-619MB-00XE	Without power supply, with ATX switch
IPC-619S	
IPC-619SBP-00XE	Without power supply, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Name	Specifications	
	Watt	Input
P8-250ATX-ZE (ATX, PFC)	250W	AC 100 ~ 240V (full-range)
PS8-300ATX-ZBE (ATX, PFC)	300W	AC 100 ~ 240V (full-range)
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240V (full-range)

Optional Accessories

Part Name	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Half-size Backplane Options

Part Name	Slot	CPU Card
PCI-7110P3S6-00A1E	1 CPU, 3 PCI, 6 ISA	PCI-7020, PCI-7030, PCI-7031
PCA-6108P8-0A2E	1 CPU, 7 PCI	PCI-7020, PCI-7030, PCI-7031
PCA-6108E-0C2E	1 CPU, 7 ISA	PCA-6742, PCA-6743, PCA-6781

Spare Parts

Part Number	Description
1990001298	Door filter 150 x 68 mm
1990001299	Fan filter 95 x 130 mm
1750002121	Fan 120 x 120 x 25 mm

IPC-623

4U 20-Slot Rackmount Chassis with Multi-System and Front-Accessible Redundant Power Supply



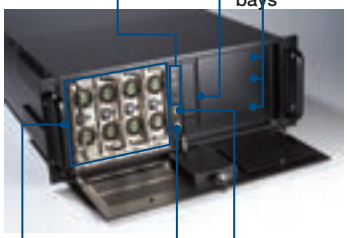
Features

- 4U rackmount chassis supports up to 4 multi-systems
- Front-accessible redundant power supply
- Shockproof disk drive bay design can hold up to three front-accessible 5.25" and one 3.5" disk drives, and one internal 3.5" HDD
- Three 12 cm / 114 CFM ball-bearing cooling fans
- Front LEDs and audible alarm notifications for system power status, fan operation, HDD status, and in-chassis temperature monitoring
- Dual top cover designed for easy maintenance
- Five easily replaceable air filters provide good airflow
- Redundant power supplies are all with dual AC inputs

CE FCC RoHS

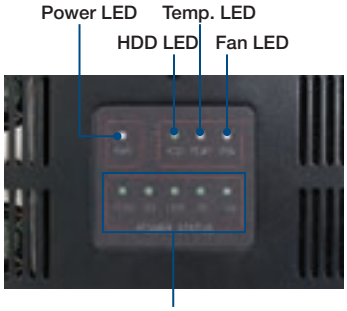
Specifications

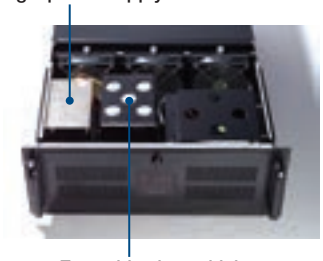
Drive Bay		Front-accessible	Internal
	3.5"	1	1
	5.25"	3	-
Cooling	Fan	3 (12 cm / 114 CFM each)	
	Air Filter	4 (200 x 45 mm) + 1 (128 x 95 mm)	
Miscellaneous	LED Indicators	Power, HDD, fan, temperature, and power voltage status	
	Control	Power switch, system reset (reserve 3 more for quad-system) and alarm reset buttons	
	Hold-down Clamp	Hold-down clamp with rubber pad underneath and accessory rubber cushions	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 657 mm (19" x 7" x 26")	
	Weight	26 kg (57 lb)	







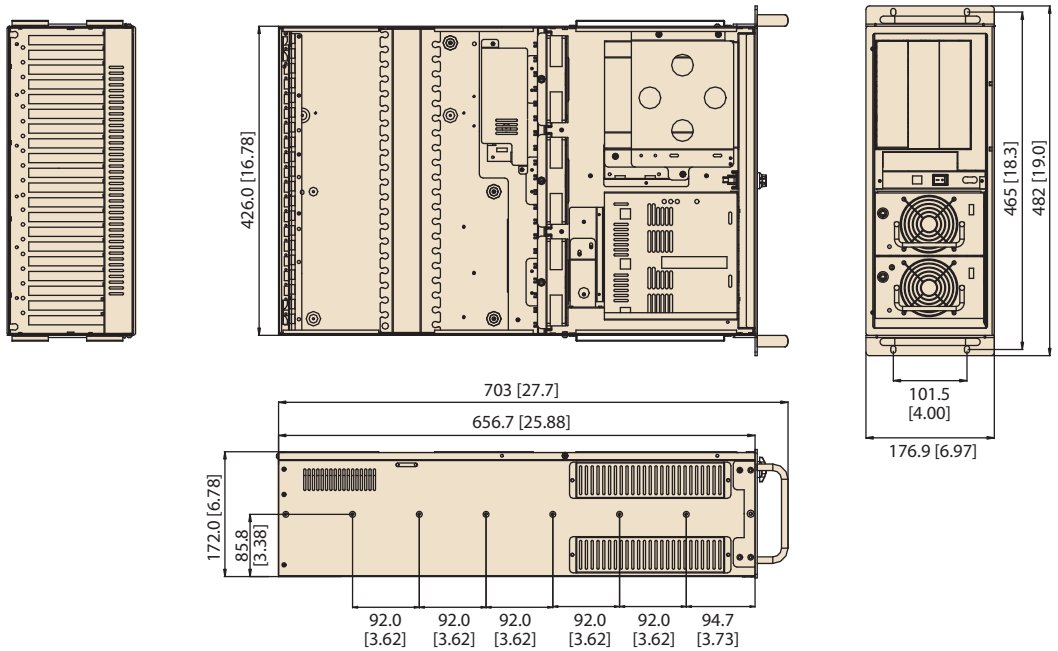






Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
IPC-623BP-00XBE	Barebone chassis for 500W single P/S
IPC-623BP-00RBE	Barebone chassis for 460W / 570W / 810W RPS, with ATX switch

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
1757000131G (single P/S)	400W (ATX, PFC)	AC 100 ~ 240 V (full range)
1757000133G (single P/S)	500W (ATX, PFC)	AC 115 ~ 240 V (full range)
1757001760 (1+1 redundant)	460W (ATX, PFC)	AC 100 ~ 240 V (full range)
1757001761 (2+1 redundant)	570W (ATX, PFC)	AC 115 ~ 230 V (full range)
1757001677 (3+1 redundant)	810W (ATX, PFC)	AC 115 ~ 230 V (full range)

Optional Accessories

Part Number	Description
IDT-3120E	Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
2130004799S000	Side filter 45 x 200 x 6 mm
2130004800S000	Door filter 130 x 95 x 6 mm

IPC-622

6U 20-Slot Rackmount Chassis Supporting Quad-System and Redundant Power Supply

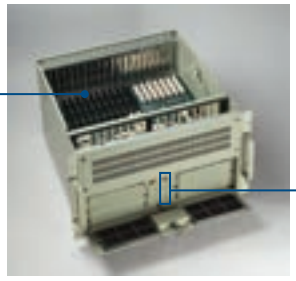


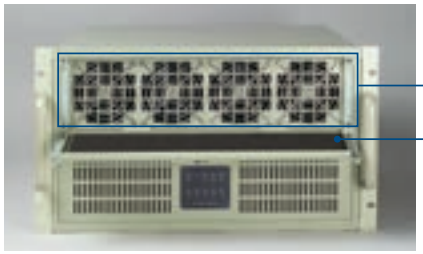
Features

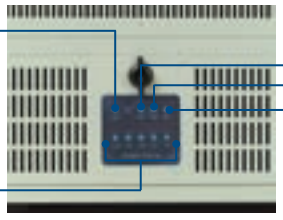
- 6U rackmount chassis supports up to 4 multi-systems
- LED indicators and audible alarm notification for system fault detection
- Four 9 cm / 53 CFM ball-bearing system fans for excellent cooling
- Various backplane options for up to 20 slots
- Lockable front door prevents unauthorized access
- Supports up to 4 sets of dual USB ports in the front
- Four reserved 9-pin D-sub openings on the rear panel

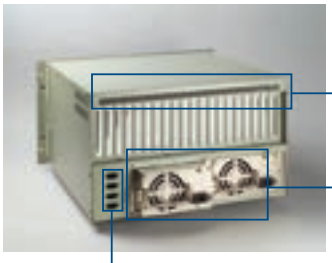
Specifications

Drive Bay		Front-accessible	Internal
	5.25"	4	-
	3.5"	-	2
Cooling	Fan	4 (9 cm / 58 CFM each)	
	Air Filter	Yes	
Front I/O Interface	USB	2 (default) and reserve up to 4 sets of dual USB ports in the front	
Miscellaneous	LED Indicators	Power, HDD, fan, temperature and power voltage status	
	Control	Power switch, system reset (reserve 3 more for quad-system) and alarm reset buttons	
	Rear Panel	Four 9-pin D-sub openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-20 ~ 60° C (-4 ~ 140° F)
	Humidity	10 ~ 85% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	30 G
Physical Characteristics	Dimensions (W x H x D)	482 x 266 x 464 mm (19" x 10.5" x 18.3")	
	Weight	30.0 kg (66 lb)	



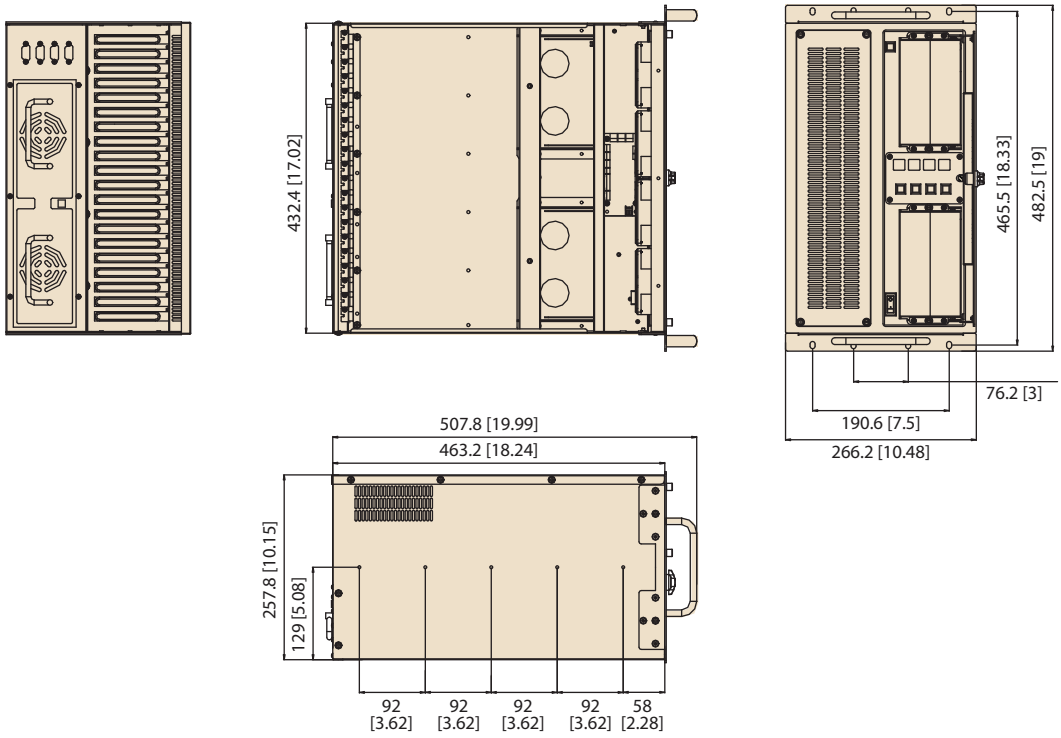






Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
IPC-622BP-00RCE	Without power supply, with ATX switch, rear bracket for single P/S included

Power Supply Options

(For detailed power supply specs, please refer to Chapter 13)

Part Number	Specifications	
	Watts	Input
1757000193G (single P/S)	400W (ATX, PFC)	AC 100 ~ 240 V (full range)
1757000162G (single P/S)	500W (ATX, PFC)	AC 115 ~ 240 V (full range)
1757001757 (1+1 redundant)	460W (ATX, PFC)	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
1700002444	Reset button with wire
1700007032	Dual USB connector with wire
IDT-5230E	Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

Spare Parts

Part Number	Description
2130004802S000	Door filter 142 x 97 x 5 mm
2130004804S000	Fan filter 382 x 93 x 5 mm

HPC-7242

2U Rackmount Chassis for ATX Motherboard with 4 SAS/SATA HDD Trays



Features

- Supports ATX motherboard in 2U rackmount chassis
- Shock-resistant disk drive bay holds four hot-swap 3.5" and 2.5" SAS/SATA disk trays for RAID 5/10 support, one slim optical disk drive, and two 2.5" internal drives
- Supports 80plus single and redundant power supply
- Front-accessible system fan without opening top cover for easy maintenance
- LED indicators and audible alarm notification for system fault detection
- Smart fan speed control for system fans
- Remote management (with SUSIAccess)

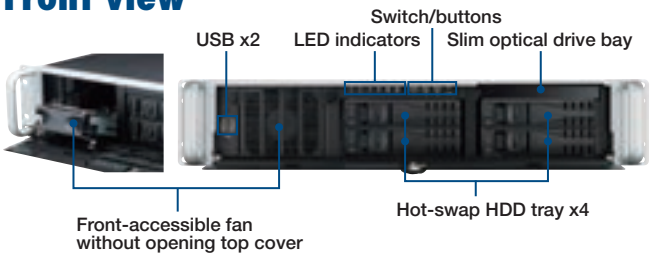
Quiet

CE FCC RoHS

Specifications

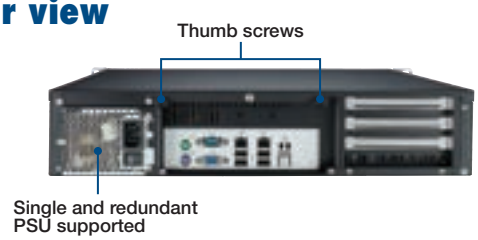
Drive Bay		Front-accessible	Internal
	Slim Optical Drive	1	-
	2.5" or 3.5"	4 SAS/SATA HDDs	2 (2.5")
Cooling	Fan	1 (8 cm/47CFM) + 2 (6 cm/28CFM) for SAS/SATA storage unit	
	Air Filter	Yes	
Front I/O Interface	USB	2	
Miscellaneous	LED Indicators	Power, HDD, temperature, fan, LAN1, and LAN2	
	Rear Panel	Two 9-pin D-Sub	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-40 ~ 70° C (-40 ~ 156° F)
	Humidity	10 ~ 95% @ 40° C, non-condensing	10 ~ 95% @ 60° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	
Physical Characteristics	Dimensions (W x H x D)	482 x 88 x 525 mm (19" x 3.46" x 20.67")	
	Weight	13.7 kg (30.12 lb)	

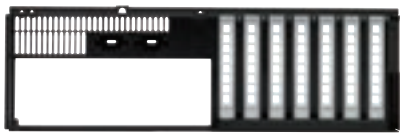
Front view



*Note: Motherboard and power supply are not included.

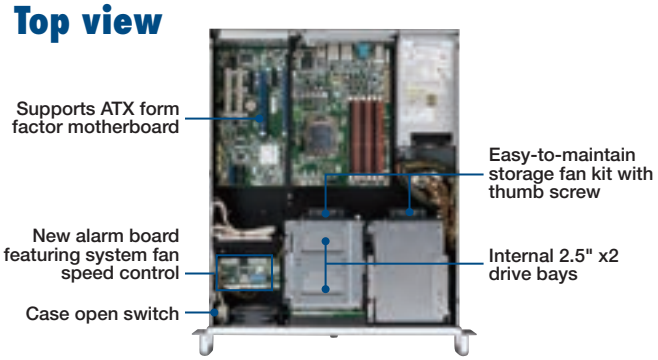
Rear view





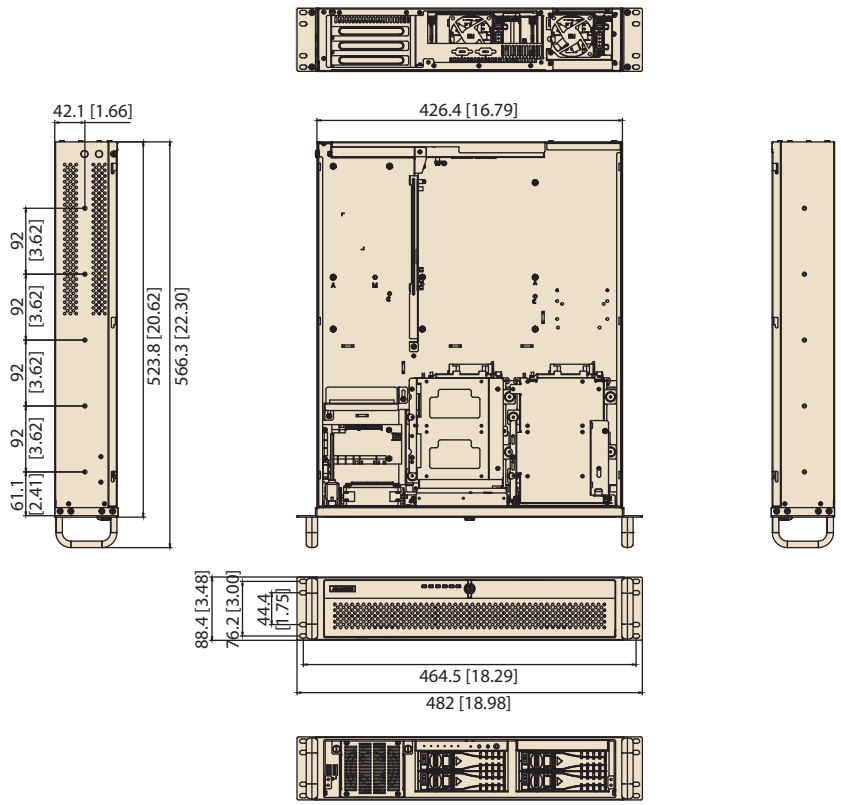
Rear I/O bracket for low profile add-on cards

Top view



Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
HPC-7242MB-00XE	Without power supply, with ATX switch

Power Supply Options

Part Number	Specifications	
	Watts	Input
1757004392-01 (ATX, PFC)	500W	AC 100 ~ 240 V (full range)
1757004476-01 (1+1 redundant)	700W	AC 100 ~ 240 V (full range)

Spare Parts

Part Number	Description
9662132020E	Black mobile HDD tray
1990021407T000	Door filter

Optional Accessories

Part Number	Description
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)
1950014302N001	Special bracket for riser card AIMB-RP3P8-12A1E
Rear I/O panel kit for low-profile add-on cards	
1939000361	Screw (should purchase 7 pcs)
1960034816N000	I/O bracket (should purchase 7 pcs)
1960019475T201	Rear panel for low-profile

HPC-7442

4U Rackmount/Tower Chassis for EATX/ATX Motherboard with Up to 8 SAS/SATA HDD Trays



Features

- Supports EATX/ATX motherboard
- Shock-resistant disk drive bay holds four hot-swap 3.5" and 2.5" SAS/SATA disk trays, one slim optical disk drive, and one 3.5" internal drive
- With installation of optional storage upgrade kit, eight hot-swap HDD trays provide high storage capacity
- Supports 80plus single and redundant power supply
- Front-accessible system fan without opening top cover for easy maintenance
- LED indicators and audible alarm notification for system fault detection
- Smart fan speed control for system fans
- Remote management (with SUSIAccess)

Quiet

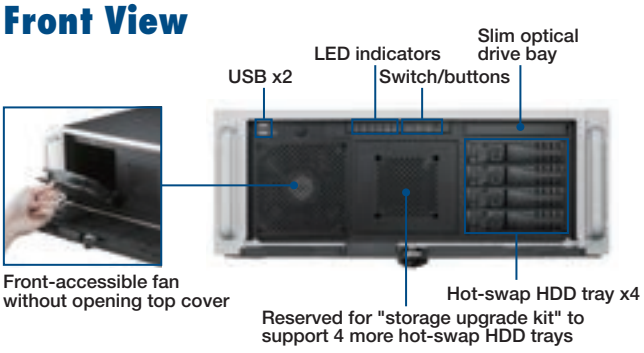
CE FCC RoHS

Specifications

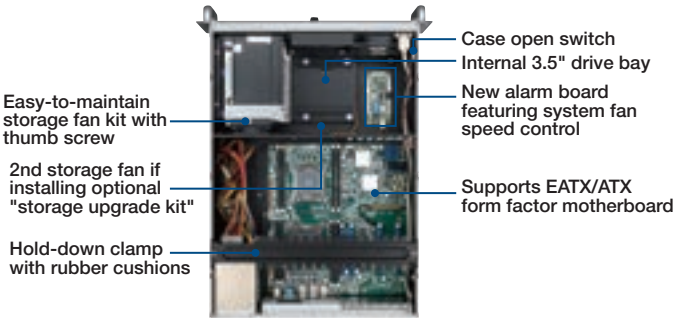
Drive Bay		Front-accessible	Internal
	Slim Optical Drive	1	-
	2.5" or 3.5"*	4 SAS/SATA HDDs (can upgrade to 8)	1 (3.5")
Cooling	Fan*	1 (12 cm /114 CFM) + 1 (8 cm/55 CFM) for SAS/SATA storage unit	
	Air Filter	Yes	
Front I/O Interface	USB	2	
Miscellaneous	LED Indicators	Power, HDD, temperature, fan, LAN1, and LAN2	
	Rear Panel	Five 9-pin D-Sub and one 68-pin SCSI openings	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40° C (32 ~ 104° F)	-40 ~ 70° C (-40 ~ 156° F)
	Humidity	10 ~ 95% @ 40° C, non-condensing	10 ~ 95% @ 60° C, non-condensing
	Vibration (5 ~ 500 Hz)	1 Grms	2 G
	Shock	10 G (with 11 ms duration, half sine wave)	
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 600 mm (19" x 7.0" x 23.6")	
	Weight	18.5 kg (40.68 lb)	

* While adding the optional "storage upgrade kit", the chassis will support four more front-accessible SAS/SATA HDDs and one more (8cm/55CFM)fan for SAS/SATA storage unit.

Front View



Inside View



Upgrade Feature



HPC-7442 default sku (supports 4 hot-swap HDD trays)

+

Storage upgrade kit (optional, 9680014979)

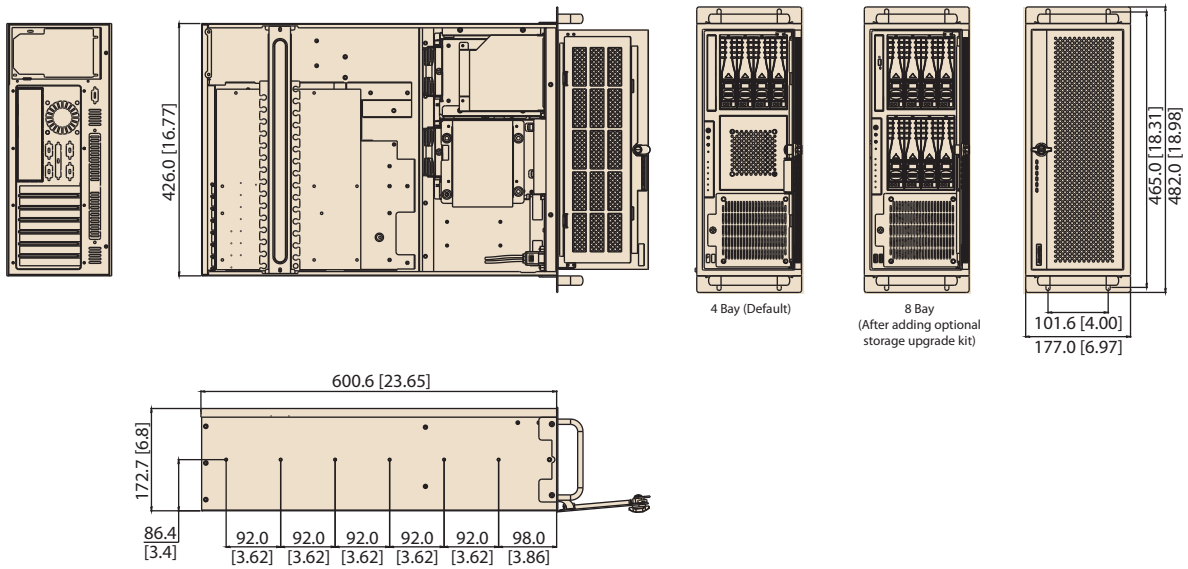
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HPC-7442 8-bay sku (supports 8 hot-swap HDD trays)

*Note: Motherboard and power supply are not included.

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Power Supply
HPC-7442MB-00XE	Without power supply, with ATX switch

Power Supply Options

Part Number	Specifications	
	Watts	Input
PS8-400ATX-ZE (ATX, PFC)	400W	AC 100 ~ 240 V (full range)
PS8-500ATX-ZE (ATX, PFC)	500W	AC 100 ~ 240 V (full range)
PS8-700ATX-ZE (ATX, PFC)	700W	AC 100 ~ 240 V (full range)
1757004393-01 (1+1 redundant)	500W	AC 100 ~ 240 V (full range)
1757004588-01 (1+1 redundant)	750W	AC 100 ~ 240 V (full range)

Optional Accessories

Part Number	Description
9680014979	Storage Upgrade Kit (including 4-bay HDD cage, four hot-swap HDD trays, 4-bay HDD backplanes, one cooling fan)
96CB-SATAPOWER-6P1	SATA power wire 6-pin to big 4-pin (for slim ODD)

Spare Parts

Part Number	Description
9662132020E	Black mobile HDD tray
1990021256T000	Door filter

High Performance Server-grade IPC

For Non-stop 24/7 Mission Critical Applications



ADVANTECH

Enabling an Intelligent Planet

Advantech Server-grade IPC provides customers with a complete solution and value-added services rather than just a regular server product. Designed to give system integrators solutions for high-end applications such as medical imaging, automated optical inspection (AOI), surveillance DVR/NVR, and military simulators, Advantech Server-grade IPC features massive computing performance, hot swap & redundancy, and rich storage capacity.

- **Automated Optical Inspection (AOI)**
  For high speed image capture and analysis, and high memory consumption systems.
- **Digital Surveillance**
  Provides huge storage, multiple I/O expansion, high reliability and high I/O speed data access.
- **Medical Imaging**
  For X-ray, CT, and ultra sound scanning, with longevity support and strict revision control.



HPC-7242

2U Rackmount Chassis with Up to 4 SAS/SATA HDD Trays



HPC-7442

4U Rackmount/Tower Chassis for ATX/CEB/EEB Motherboard with Up to 8 SAS/SATA HDD Trays



ASMB-922I

Dual LGA 2011 Intel® Xeon® E5-2600 EATX Server Board with DDR3, 3 PCIe x16 + 1 PCIe x8 (Gen 3.0), PME support

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Tel: 886-2-27927818
Email: IPC@advantech.com.tw

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Server-grade IPCs

Selection Guide		*10-2*
Industrial Server Boards		
ASMB-584	LGA 1150 Intel® Xeon® E3 V3 Micro ATX Server Board with 2 PCIe x16 slots (x8 link), 1 PCIe x4, 1 PCI, USB 3.0, PCIe Gen III, Dual LANs	*10-4*
ASMB-781	LGA 1155 Intel® Xeon® E3 ATX Server Board with 1 PCIe x16 or 2 PCIe x8, Quad LANs	*10-6*
ASMB-782	LGA 1155 Intel® Xeon® E3 V2 ATX Server Board with 2 PCIe x16 slots (x8 link), 2 PCIe x4, USB 3.0, PCIe Gen III, Quad LANs	*10-8*
ASMB-784	LGA 1150 Intel® Xeon® E3 V3 ATX Server Board with 2 PCIe x16 slots (x8 link) or 1 PCIe x16 slot (x16 link), 3 PCI, USB 3.0, PCIe Gen III, Quad/Dual LANs	*10-10*
ASMB-920IR	Dual LGA 2011 Intel® Xeon® E5 EATX Server Board with DDR3, 2 PCIe x16 (Gen 3.0), PME Expansion Module, SAS RAID	*10-12*
ASMB-820I	LGA 1356 Intel® Xeon® E5 ATX Server Board with DDR3, 1 PCIe x16 and 1 PCIe x8	*10-14*
ASMB-822I	Intel® LGA2011 Xeon® E5 ATX Server Board with 6 x DDR3, 5 x PCIe x16 slot (Gen 3.0), USB 3.0, IPMI	*10-16*
ASMB-922I	Dual LGA 2011 Intel® Xeon® E5-2600 EATX Server Board with DDR3, 3 PCIe x16 + 1 PCIe x8 (Gen 3.0), PME support	*10-18*
PME Expansion Cards	Various Selections Supporting PCI, PCI-X, PCIe x1/x4/x8/x16	*10-20*
ASMB Riser Card		*10-21*

To view all of Advantech's Industrial Servers, please visit www.advantech.com/products.



Server-grade IPCs

Industrial Server Boards

NEW






Model Name		ASMB-310IR	ASMB-584	ASMB-781	ASMB-782
Form Factor		CEB	Micro ATX	ATX	ATX
Processor System	CPU	Intel Xeon E5600/E5500 Series	Intel Xeon E3 V3 and 4th Gen. Core i5 Series	Intel Xeon E3/E3 V2 / 2nd and 3rd Gen. Core i3 Series	Intel Xeon E3/E3 V2/ 2nd and 3rd Gen. Core i3 Series
	Socket	2 x socket 1366	1 x socket 1150	1 x socket 1155	1 x socket 1155
	Max. Speed	2.53 GHz	3.5 GHz	3.5 GHz	3.4 GHz/3.5 GHz/3.3 GHz/ 3.3 GHz
	Front Side Bus	QPI 6.4 GT/s	-	-	-
	L3 Cache	12 MB	8 MB	8 MB/8 MB/3 MB/3 MB	8 MB/8 MB/3 MB/3 MB
	Chipset	Intel 5520, Intel ICH10R	Intel C226	Intel C206	Intel C216
	BIOS	AMI 32 Mbit, SPI	AMI 128Mbitm, SPI	AMI 64 Mbit, SPI	AMI 64 Mbit, SPI
Expansion Slot	PCI	-	1	3	3
	PCIe x16	2 (auto switch to x8)	-	1 (auto switch to two x8)	-
	PCIe x8	2	2 (x16 slot with x8 link)	2 (auto switch to one x16)	2 (x16 slot with x8 link)
	PCIe x4	1 (2 on ASMB-310 SKU)	1	1	2
	PCIe x1	-	-	1	-
Memory	Technology	DDR3 Non-ECC/ECC/REG 800/1066/1333 MHz	DDR3 ECC/non-ECC Unbuffer 1066/1333/1600 MHz	DDR3 ECC/Non-ECC Unbuffer 1066/1333/1600 MHz	DDR3 ECC/non-ECC Unbuffer 1066/1333/1600 MHz
	Max. Capacity	96 GB Non-ECC/ECC/REG DIMM	32 GB ECC/Non-ECC UDIMM	32 GB ECC/Non-ECC UDIMM	32 GB ECC/Non-ECC UDIMM
	Socket	6 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM
Graphics	Controller	AST2050	Intel GT2-HD Graphics	AST2300/1300 (G4/G2)	Intel HD Graphics
	VRAM	DDR2 64 MB	1 GB maximum shared memory with 2 GB and above system memory installed	DDR3 64 MB	1 GB maximum shared memory with 2 GB and above system memory installed
	LCD	-	-	-	-
	TV-Out	-	-	-	-
	HDMI	-	-	-	-
	DVI	-	1	-	Yes (pin header)
	Dual Display	-	Yes	-	Yes (pin header for DVI)
Ethernet	Interface	10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet
	Controller	1 x Intel 82574L, 1 x Intel 82567LM 1 x Mgmt LAN (ASMB-310IR SKU)	1 x Intel I217-LM, 1 x Intel I210-AT	1 x Intel 82579LM, 1 x Intel 82574L Intel 82580DB (G4)	1 x Intel 82579LM + 3 x Intel 82574L (G4 SKU only)
	Connector	RJ-45 x 3 (1 x Mgmt LAN)	RJ-45 x 2 (G2 SKU) / RJ-45 x1 (VG SKU)	RJ-45 x 4 (G4 SKU) / x 2 (G2 SKU)	RJ-45 x 4 (G4 SKU)/ RJ-45 x 2 (G2 SKU)
TPM		Optional	Optional	Optional	Optional
SATA	Max. Data Transfer Rate	300 MB/s	600 MB/s	300MB/s for SATA2 600 MB/s for SATA3	300MB/s for SATA2 600 MB/s for SATA3
	Channel	6	6	4 for SATA2, 2 for SATA3	4 for SATA2, 2 for SATA3
SAS	Max. Data Transfer Rate	6 Gb/s	-	-	-
	Channel	8	-	-	-
Rear I/O	VGA/DVI/HDMI/DP	1 / - / - / -	1 / 1 / - / 2	1 / - / - / -	1 /- / - / -
	Ethernet	2	2 for G2 SKU and 1 for VG SKU	4 for G4 SKU and 2 for G2 SKU	4 for G4 SKU and 2 for G2 SKU
	USB	6	4 (2 USB 3.0; 2 USB 2.0)	4	4 (2 USB 3.0 ; 2 USB 2.0)
	Audio	-	Mic-in, Line-out	-	-
	Parallel	-	-	-	-
	Serial	1 (RS-232)	-	1 (RS-232)	1 (RS-232)
	PS/2	2	-	2	2
Internal Connector	DVI	-	-	-	Yes (pin header)
	USB	5 (USB 2.0)	9 (2 USB 3.0; 6 USB 2.0; 1 USB 2.0 Type A)	8 (6 USB 2.0, 2 USB 2.0 Type-A)	10 (2 USB 3.0; 6 USB 2.0; 2 USB 2.0 Type-A)
	Serial	1	2	1	1
	Parallel	-	1	1	1
	SATA	6	6	6	6
	SAS	8 (ASMB-310IR only)	-	-	-
	Compact Flash	-	-	-	-
	GPIO	-	8 bit GPIO	1 (SATA SGPIO)	1 (SATA SGPIO)
Watchdog Timer	Output	-	System reset	System reset	System reset
	Interval	-	Programmable 1~255 sec	Programmable, 1 ~ 255 sec	Programmable, 1 ~ 255 sec
Page		-	10-4	10-6	10-8

NEW







NEW



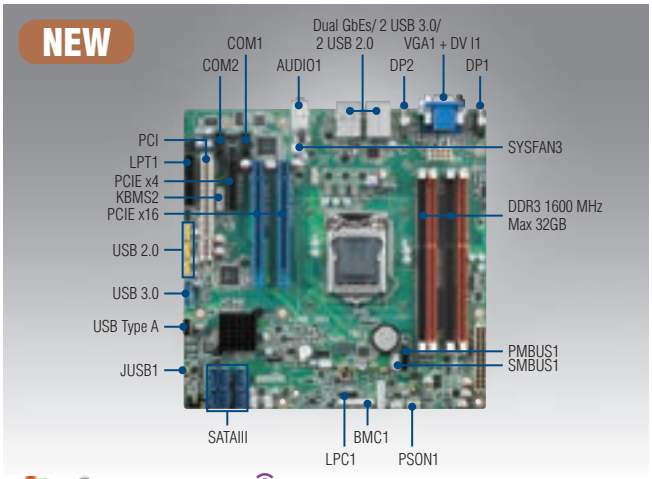
NEW



ASMB-784	ASMB-920IR	ASMB-820I	ASMB-822I	ASMB-922I
ATX	EATX	ATX	ATX	EATX
Intel Xeon E3 V3 and 4th Gen. Core i5 Series	Intel Xeon E5-2600 Series	Intel Xeon E5-2400 Series	Intel Xeon E5-2600 Series	Intel Xeon E5-2600 Series
1 x socket 1150	2 x socket 2011	1 x socket 1356	1 x socket 2011	2 x socket 2011
3.5 GHz	2.1 GHz	2.2 GHz	2.1 GHz	2.1 GHz
-	QPI 8 GT/s	-	-	QPI 8 GT/s
8MB	20 MB	15 MB	20 MB	20 MB
Intel C226	Intel C602J	Intel C602J	Intel C602J	Intel C602J
AMI 128Mbitm, SPI	AMI 64 Mbit, SPI	AMI 64 Mbit, SPI	AMI 64 Mbit, SPI	AMI 64 Mbit, SPI
3	-	2	1	-
1 (switchable to two x8)	3 (1 for PME)	1	-	4 (1 for PME)
2 (switchable to one x16)	-	1	5	1
-	-	1	1	-
2	-	1	-	-
DDR3 ECC/non-ECC Unbuffer 1066/1333/1600 MHz	DDR3 Reg/ECC/non-ECC Unbuffer 1066/1333/1600 MHz	DDR3 Reg/ECC/non-ECC Unbuffer 1066/1333/1600 MHz	DDR3 Reg/ECC/non-ECC Unbuffer 1066/1333/1600 MHz	DDR3 Reg/ECC/non-ECC Unbuffer 1066/1333/1600 MHz
32 GB ECC/Non-ECC UDIMM	128 GB/Non-ECC/ECC/REG DIMM	96 GB/Non-ECC/ECC/REG DIMM	96 GB/Non-ECC/ECC/REG DIMM	128 GB/Non-ECC/ECC/REG DIMM
4 x 240-pin DIMM	8 x 240-pin DIMM	6 x 240-pin DIMM	6 x 240-pin DIMM	8 x 240-pin DIMM
Intel GT2-HD Graphics	AST1300/AST2300	AST1300/AST2300	AST1300/AST2300	AST1300/AST2300
1 GB maximum shared memory with 2 GB and above system memory installed	DDR3 64 MB	DDR3 64 MB	DDR3 64MB	DDR3 64MB
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
2	-	-	-	-
Yes	-	-	-	-
10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet	10/100/1000 Mbps Gigabit Ethernet
1 x Intel I217-LM + 3 x Intel I210-AT (G4 SKU only)	1 x Intel 82579LM + 1 x Intel 82574L 1 x Realtek 8201EL (ASMB-920IR SKU only)	1 x Intel 82579LM + 1 x Intel 82574L 1 x Realtek 8201EL (ASMB-820I SKU only)	1 x Intel 82579LM + 1 x Intel I210AT 1 x Realtek 8201EL (ASMB-822I SKU only)	1 x Intel 82579LM + 1 x Intel I210AT 1 x Realtek 8201EL (ASMB-922I SKU only)
RJ-45 x 4 (G4 SKU) / RJ-45 x2 (G2 SKU)	RJ-45 x 3 (1 for IPMI function)	RJ-45 x 3 (1 for IPMI function)	RJ-45 x 3 (1 for IPMI function)	RJ-45 x 3 (1 for IPMI function)
Optional	Optional	Optional	optional	optional
600 MB/s	300MB/s for SATA2 600 MB/s for SATA3	300MB/s for SATA2 600 MB/s for SATA3	300MB/s for SATA2 600 MB/s for SATA3	300MB/s for SATA2 600 MB/s for SATA3
6	4 for SATA2, 2 for SATA3	4 for SATA2, 2 for SATA3	4 for SATA2, 2 for SATA3	4 for SATA2, 2 for SATA3
-	6 Gb/s	-	-	-
-	8	-	-	-
1 / 2 / - / -	1 / - / - / -	1 / - / - / -	1 / - / - / -	1 / - / - / -
4 for G4 SKU and 2 for G2 SKU	2	2	2	2
4 (2 USB 3.0; 2 USB 2.0)	4	4	6(2 x USB 3.0)	4 (2 x USB 3.0)
-	-	-	-	-
-	-	-	-	-
1 (RS-232)	1 (RS-232)	1 (RS-232)	1(RS-232)	1 (RS-232)
1	2	2	2	2
-	-	-	-	-
9 (2 USB 3.0; 6 USB 2.0; 1 USB 2.0 Type A)	7 (6 USB 2.0, 1 USB 2.0 Type-A)	8 (6 USB 2.0, 2 USB 2.0 Type-A)	8 (6 USB 2.0, 2 USB 2.0 Type-A)	9 (8 USB 2.0, 1 USB 2.0 Type-A)
1	1	1	1	1
1	-	-	1	-
6	6	6	6	6
-	8(ASMB-920IR only)	-	-	-
-	-	-	-	-
8 bit GPIO	2 (1*SATA SGPIO + 1*SAS SGPIO)	1 (SATA SGPIO)	1 (SATA SGPIO)	1 (SATA SGPIO)
System reset	System reset	System reset	System reset	System reset
Programmable 1~255 sec	Programmable, 1 ~ 255 sec	Programmable, 1 ~ 255 sec	y-->Programmable, 1 ~ 255 sec	Programmable, 1 ~ 255 sec
10-10	10-12	10-14	10-16	10-18

ASMB-584

LGA 1150 Intel® Xeon® E3 V3 Micro ATX Server Board with 2 PCIe x16 slots (x8 link), 1 PCIe x4, 1 PCI, USB 3.0, PCIe Gen III, Dual LANs



Features

- Supports LGA 1150 Intel® Xeon® E3 V3 processors
- Two PCIe x16 slots (x8 link), one PCIe x4 and one PCI slots
- DDR3 1600 MHz ECC UDIMM up to 32GB
- Rackmount optimized placement with positive air flow design
- Support Intel vPro, AMT 9.0, IPMI (optional) and Embedded software APIs and utilities

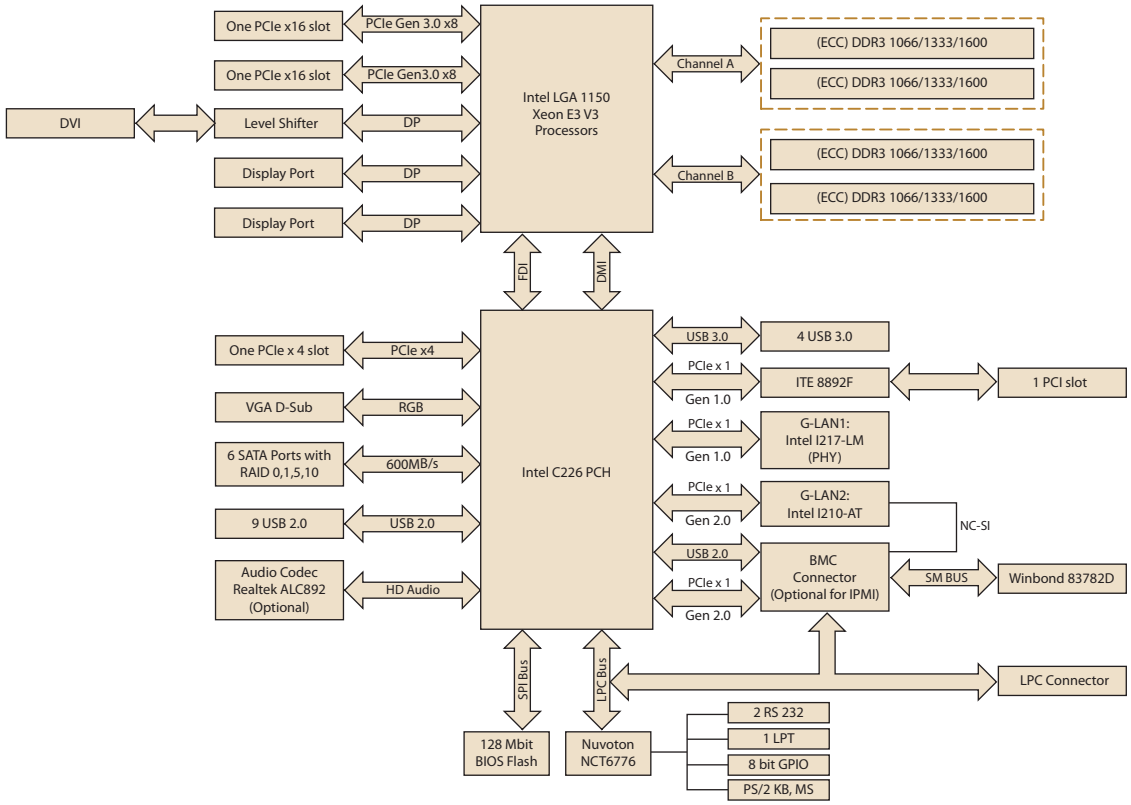
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		Micro ATX form factor					
Processor System	CPU	Xeon E3-1275 v3	Xeon E3-1225 v3	Xeon E3-1268 v3	Core i7-4770S	Core i5-4570TE	Core i3-4330
	Cores	4	4	4	4	2	2
	Speed (GHz)	3.5	3.2	2.3	3.1	2.7	3.5
	L3 Cache	8 MB	8 MB	8 MB	8 MB	4 MB	3 MB
	Socket	LGA 1150					
	Chipset	Intel C226 chipset					
	BIOS	AMI 128 Mbit SPI (UEFI)					
Memory	Technology	Dual Channel DDR3 ECC/Non-ECC 1066/1333/1600 MHz					
	Max. Capacity	32 GB					
	Socket	4 x 240-pin DIMM					
	Memory size	1 GB, 2 GB, 4 GB, 8 GB					
Expansion Slots	PCI 32-bit/33 MHz	1 slots					
	PCIe x 4 (Gen2) 2.0 GB/s	1 slots					
	PCIe x8 (Gen3) 8 GB/s	2 slots (x16 slot with x8 link)					
Graphics	Controller	Intel HD Graphics					
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed					
Storage	SATA controller	Intel C226: 6 SATA3 6 Gb/s ports with Intel Matrix Storage support (for Windows only)					
	SAS controller	-					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel I217-LM; GbE LAN2: Intel I210-AT					
	Connector	RJ-45 x 2					
Internal Connectors	Printer Port connector	1					
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector					
	USB connector	2 USB 3.0; 7 USB 2.0 (1 x USB Type-A)					
	Fan header	5 x 4pin					
	SMBus	2					
	Chassis intruder	1					
	Front LAN LED	1					
	Serial port header	2 (RS-232)					
	Audio Connector	1 (ALC 892)					
	PS/2 KB/Mouse	1					
Rear I/O Connectors	External serial port	-					
	External USB port	4 (2 USB 3.0 and 2 USB 2.0)					
	VGA port	1					
	DVI	1					
	Display Port	2					
	RJ-45	2					
	PS/2 KB/mouse	-					
	Audio	2 (Mic-in, Line-out)					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 ~ 255 sec					
Power Requirement	Power On	Intel LGA1150 2.6GHz; DDR3 4G x4					
		3.3 V	5 V	12 V	12V_8P	5 Vsb	-12 V
		3.7 A	2.22 A	0.07 A	3.77 A	0.12 A	0.02 A
Environment		Operating			Non-operating		
	Temperature	0 ~ 60° C (32 ~ 140° F) Depends on CPU speed and cooler solution			-40 ~ 85° C (-40 ~ 185° F)		
	Humidity	0% ~ 90%			5% ~ 95% (Non-condensing)		
Physical Characteristics	Dimensions	244 x 244 mm (9.6" x 9.6")					

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	DVI	Display Port	IPMI
ASMB-584G2-00A1E	C226	DDR3 ECC UNB/Non-ECC	2	1	2	Optional Module
ASMB-584VG-00A1E	C226	DDR3 ECC UNB/Non-ECC	1	1	N/A	N/A

Packing List

Part Number	Description	Quantity
2066S58400	Driver CD	x 1
2006S58410	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
19Z0000470T000	I/O shield	x 1

Bracket View



ASMB-584G2-00A1E



ASMB-584VG-00A1E

Optional Accessories

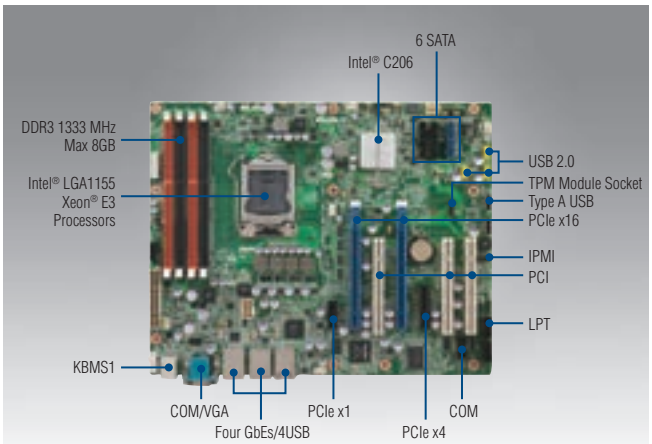
Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1960047669N001	LGA 1150/1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA 1150/1155/1156 CPU cooler for 2U and wallmount chassis
1960052651N001	LGA 1150/1155/1156 CPU cooler for 2U and wallmount chassis
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701090401	COM port cable with bracket
1700020277-01	Dual port USB 3.0 cable with bracket
AIMB-AUDIO-HDA1E	HD Audio-Card
IPMI-1000-00A1E	IPMI 2.0 Module
1960049408N001	LGA 1150/1155/1156 1U CPU Cooler and supports up to 73W processor
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

Note 1: It's a must to install PCA-TPM-00A1E for enabling Intel vPro feature.

Note 2: Purchasing ASMB-584's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-584.

ASMB-781

LGA 1155 Intel® Xeon® E3 ATX Server Board with 1 PCIe x16 or 2 PCIe x8, Quad LANs



Features

- ATX server board with 2nd Core i processor, quad LANs and high thermal performance
- LGA 1155 Intel® Xeon® E3 and 2nd Core™ i3 / Pentium processors
- DDR3 1600 MHz ECC UDIMM up to 32GB
- One Gen 2.0 PCIe x16 or two PCIe x8 slots
- Quad LANs with teaming function
- Rackmount optimized placement for thermal green design
- Supports IPMI, Embedded software APIs and utilities

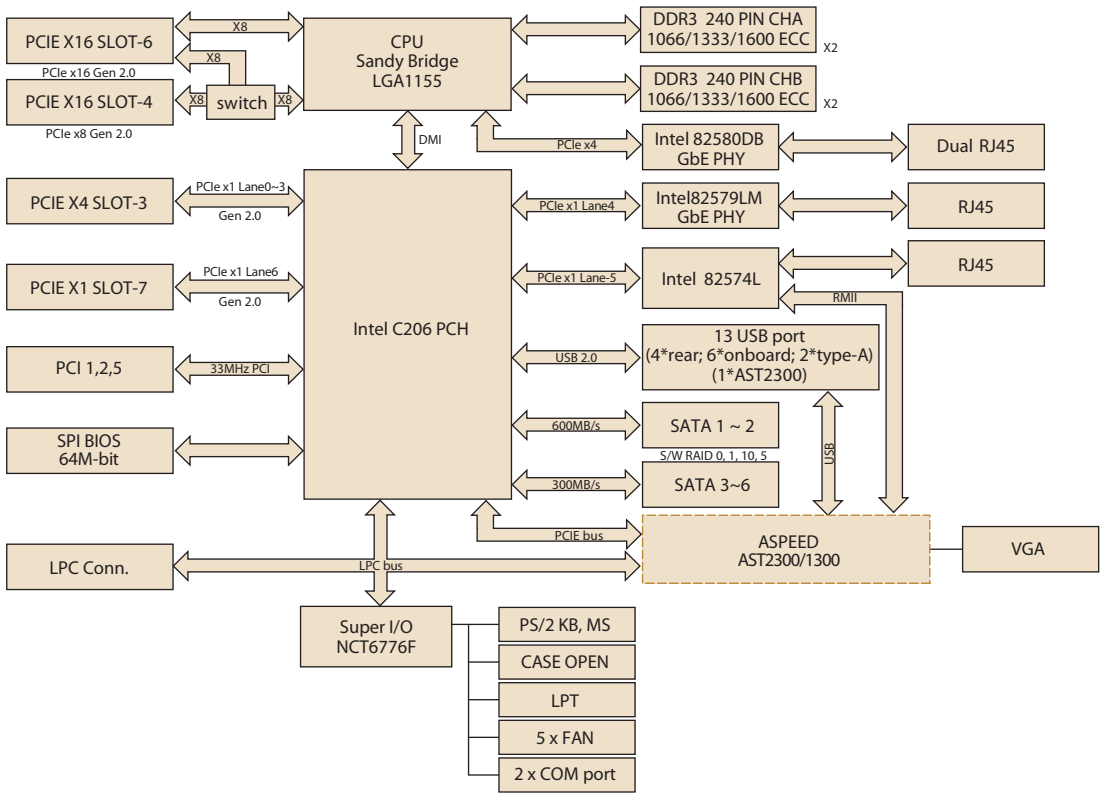
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		ATX form factor						
Processor System	CPU	Xeon E3-1275	Xeon E3-1225	Xeon E3-1275V2	XEON E3-1225V2	Core i3-2120	Pentium G850	Celeron G540
	Cores/Thread	4/8	4/4	4/8	4/4	2/4	2/2	2/2
	Speed	3.4	3.1	3.5	3.2	3.3	2.9	2.5
	L3 Cache	8 MB	6 MB	8 MB	8 MB	3 MB	3 MB	2 MB
	Socket	LGA 1155						
	Chipset	Intel C206 chipset						
	BIOS	AMI 64 Mbit SPI (UEFI)						
Memory	Technology	Dual Channel DDR3 ECC/Non-ECC 1066/1333/1600 MHz (1600 only supported by Xeon E3 V2)						
	Max. Capacity	32 GB						
	Socket	4 x 240-pin DIMM						
	Memory size	1 GB, 2 GB, 4 GB, 8 GB						
Expansion Slots	PCI 32-bit/33 MHz	3 slots						
	PCIe x 1 500 MB/s per direction	1 slot						
	PCIe x 4 2.0 GB/s per direction	1 slot						
	PCIe x16 8 GB/s per direction	2 slot(Auto switch to x8 link if slot 4 is occupied)						
Graphics	Controller	AST2300/1300						
	VRAM	DDR3 512 Mbit (64 MB)						
Storage	SATA controller	Intel C206: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)						
	SAS controller	-						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	GbE LAN1: Intel 82579LM; GbE LAN2: Intel 82574L; GbE LAN3/4: Intel 82580DB (Optional)						
	Connector	RJ-45 x 4 for G4 version						
Internal Connectors	Parallel connector	1						
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector						
	USB connector	3 (supports 6 USB port), 2* Type-A						
	Fan header	5 x 4pin						
	SMBus	1						
	Chassis intruder	1						
	Front LAN LED	2						
	Serial port header	1 (RS-232)						
Rear I/O Connectors	External serial port	1 (RS-232), COM1 don't support wake on modem						
	External USB port	4						
	VGA port	1						
	RJ-45	2 for G2 version, 4 for G4 version						
	PS/2 KB/mouse	2						
Watchdog Timer	Output	System reset						
	Interval	Programmable 1 ~ 255 sec						
Power Requirement	Power On	3.3 V	5 V	12 V	12V_8P	5 Vsb	-V12	
		2.74 A	1.12 A	0.08 A	4.86 A	1.81 A	0.01 A	
Environment		Operating			Non-operating			
	Temperature	0 ~ 60° C (32 ~ 140° F) Depends on CPU speed and cooler solution			-40 ~ 85° C (-40 ~ 185° F)			
	Humidity	0% ~ 90%			5% ~ 95% (Non-condensing)			
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")						

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	IPMI	Graphic
ASMB-781G2-00A1E	C206	DDR3 ECC UNB/ Non-ECC UNB	2	-	AST1300
ASMB-781G4-00A1E	C206	DDR3 ECC UNB/ Non-ECC UNB	4	Yes	AST2300

Packing List

Part Number	Description	Quantity
2066078100	Driver CD	x 1
2006078110	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960052312T000	I/O shield	x 1

Bracket View



ASMB-781G4-00A1E



ASMB-781G2-00A1E

Optional Accessories

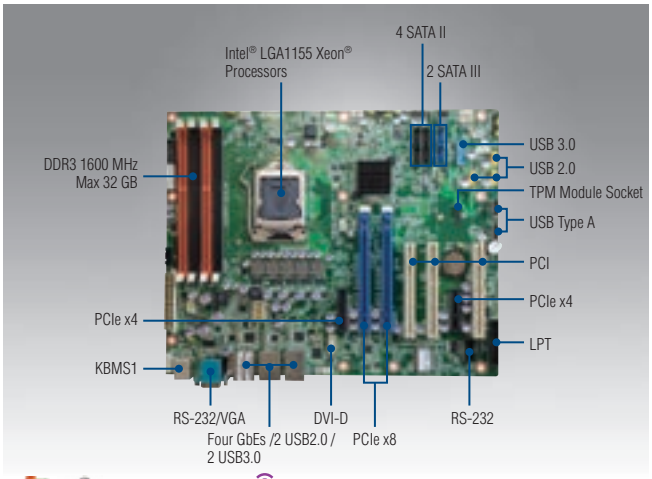
Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1960047669N001	LGA 1155/1156 CPU cooler for 4U and wallmount chassis
1960052651N001	LGA 1155/1156 CPU cooler for 2U and rackmount chassis
1960047831N001	LGA 1155/1156 CPU cooler for 2U and rackmount chassis
1960049408N001	LGA 1155/1156 1U CPU Cooler and supports up to 73W processor
1700008809	Printer port cable kit
1701090401	COM port cable with bracket
PCA-AUDIO-HDA1E	HD Audio-card
19Z0000406T000	I/O shield for ACP-1320 chassis
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

Note 1: Please order 1 piece of each 1960049408N001 and 19Z0000406T000 for configuring ASMB-781 with ACP-1320 chassis.

Note 2: Purchasing ASMB-781's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-781.

ASMB-782

LGA 1155 Intel® Xeon® E3 V2 ATX Server Board with 2 PCIe x16 slots (x8 link), 2 PCIe x4, USB 3.0, PCIe Gen III, Quad LANs



Features

- ATX server board with Intel® 3rd gen core i processor, quad LANs
- LGA 1155 Intel® Xeon® E3 / E3 v2 / 2nd and 3rd Core™ i3 / Pentium processors
- DDR3 1600 MHz ECC UDIMM up to 32GB
- Two PCIe x16 slots (x8 link) and two PCIe x4 slots
- Quad LANs with teaming function
- Four USB 3.0 ports

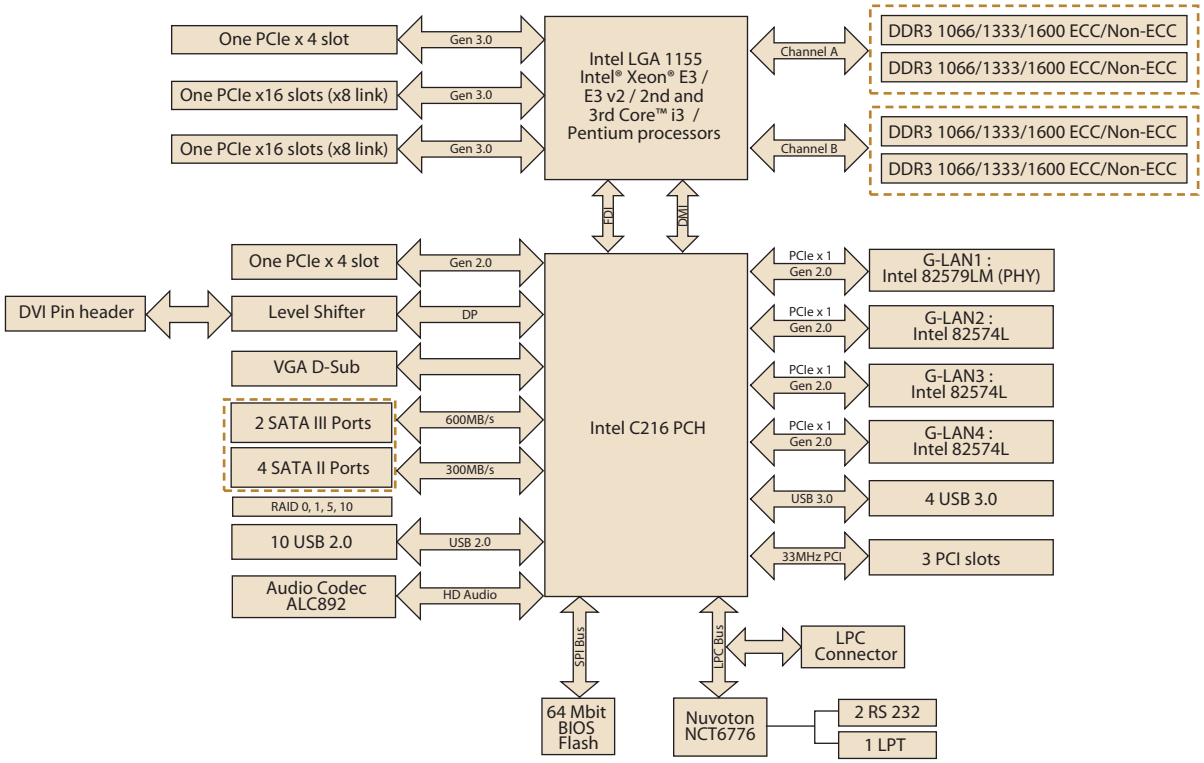
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		ATX form factor						
Processor System	CPU	Xeon E3-12xxV2	Core i3-3220	Pentium G2120	Xeon E3-12xx	Core i3-2120	Pentium G850	Celeron G540
	Cores	4	2	2	4	2	2	2
	Speed	3.5	3.3	3.1	3.4	3.3	2.9	2.5
	L3 Cache	8 MB	3 MB	3 MB	8 MB	3 MB	3 MB	2 MB
	Socket	LGA 1155						
	Chipset	Intel C216 chipset						
	BIOS	AMI 64 Mbit SPI (UEFI)						
Memory	Technology	Dual Channel DDR3 ECC/Non-ECC 1066/1333/1600 MHz (1600 only supported by Xeon E3 V2, Core i3 3xxx and Pentium G2xxx series processors)						
	Max. Capacity	32 GB						
	Socket	4 x 240-pin DIMM						
	Memory size	1 GB, 2 GB, 4 GB, 8 GB						
Expansion Slots	PCI 32-bit/33 MHz	3 slots						
	PCIe x 4 (Gen2) 2.0 GB/s per direction	1 slots						
	PCIe x 4 (Gen2) 2.0 GB/s per direction	1 slots						
	PCIe x8 (Gen3) 8 GB/s per direction	2 slots (x16 slots with x8 link)						
Graphics	Controller	Intel HD Graphics 2500/P3000/P4000						
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed						
Storage	SATA controller	Intel C216: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)						
	SAS controller	-						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	GbE LAN1: Intel 82579LM; GbE LAN2/3/4: Intel 82574L						
	Connector	RJ-45 x 4 for G4 version						
Internal Connectors	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector						
	USB connector	2 USB 3.0; 8 USB 2.0(2 x USB Type-A)						
	Fan header	5 x 4pin						
	SMBus	2						
	Chassis intruder	1						
	Front LAN LED	2						
	Serial port header	1 (RS-232)						
	Audio Connector	1 (Realtek ALC 892)						
	DVI Connector	1 for optional DVI-D output						
Rear I/O Connectors	External serial port	1 (RS-232)						
	External USB port	4 (2 USB 3.0 and 2 USB 2.0)						
	VGA port	1						
	RJ-45	2 for G2 version, 4 for G4 version						
	PS/2 KB/mouse	2						
Watchdog Timer	Output	System reset						
	Interval	Programmable 1 ~ 255 sec						
Power Requirement	Power On	3.3V	5V	12V	12V_8P	5 Vsb	-V12	
		4.69A	1.39A	0.4A	3.01A	1.95A	0.01A	
Environment		Operating			Non-operating			
	Temperature	0 ~ 60° C (32 ~ 140° F) Depends on CPU speed and cooler solution			-40 ~ 85° C (-40 ~ 185° F)			
	Humidity	0% ~ 90%			5% ~ 95% (Non-condensing)			
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")						

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	USB 3.0
ASMB-782G2-00A1E	C216	DDR3 ECC UNB/ Non-ECC	2	4
ASMB-782G4-00A1E	C216	DDR3 ECC UNB/ Non-ECC	4	4

Packing List

Part Number	Description	Quantity
2066S78200	Driver CD	x 1
2006S78210	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960052312T000	I/O shield	x 1

Bracket View



ASMB-782G4-00A1E



ASMB-782G2-00A1E

Optional Accessories

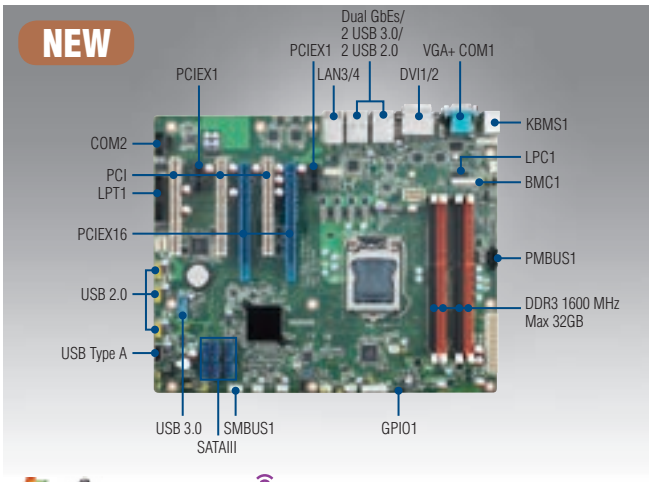
Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1960047669N001	LGA 1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA 1155/1156 CPU cooler for 2U and wallmount chassis
1960052651N001	LGA 1155/1156 CPU cooler for 2U and wallmount chassis
1700008809	Printer port cable kit
1701090401	COM port cable with bracket
1700008822	DVI cable wtih bracket
1700020277-01	Dual port USB 3.0 cable with bracket
AIMB-AUDIO-HDA1E	HD Audio-Card
1960049408N001	LGA 1155/1156 1U CPU Cooler and supports up to 73W processor
19Z0000406T000	I/O shield for ACP-1320 chassis
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

Note 1: Please order 1 piece of each 1960049408N001 and 19Z0000406T000 for configuring ASMB-782 with ACP-1320 chassis.

Note 2: Purchasing ASMB-782's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-782.

ASMB-784

LGA 1150 Intel® Xeon® E3 V3 ATX Server Board with 2 PCIe x16 slots (x8 link) or 1 PCIe x16 slot (x16 link), 3 PCI, USB 3.0, PCIe Gen III, Quad/Dual LANs



Features

- Supports LGA 1150 Intel® Xeon® E3-1200 v3 and 4th Generation Core i7/i5/i3 processors
- One Gen 3.0 PCIe x16 link or two PCIe x16 slots with x8 link, two PCIe x1 and three PCI slots
- DDR3 1600 MHz ECC/Non-ECC UDIMM up to 32GB
- Rackmount optimized placement with positive air flow design
- Support Intel vPro, AMT 9.0, IPMI (optional) and Embedded sofeware APIs and utilities

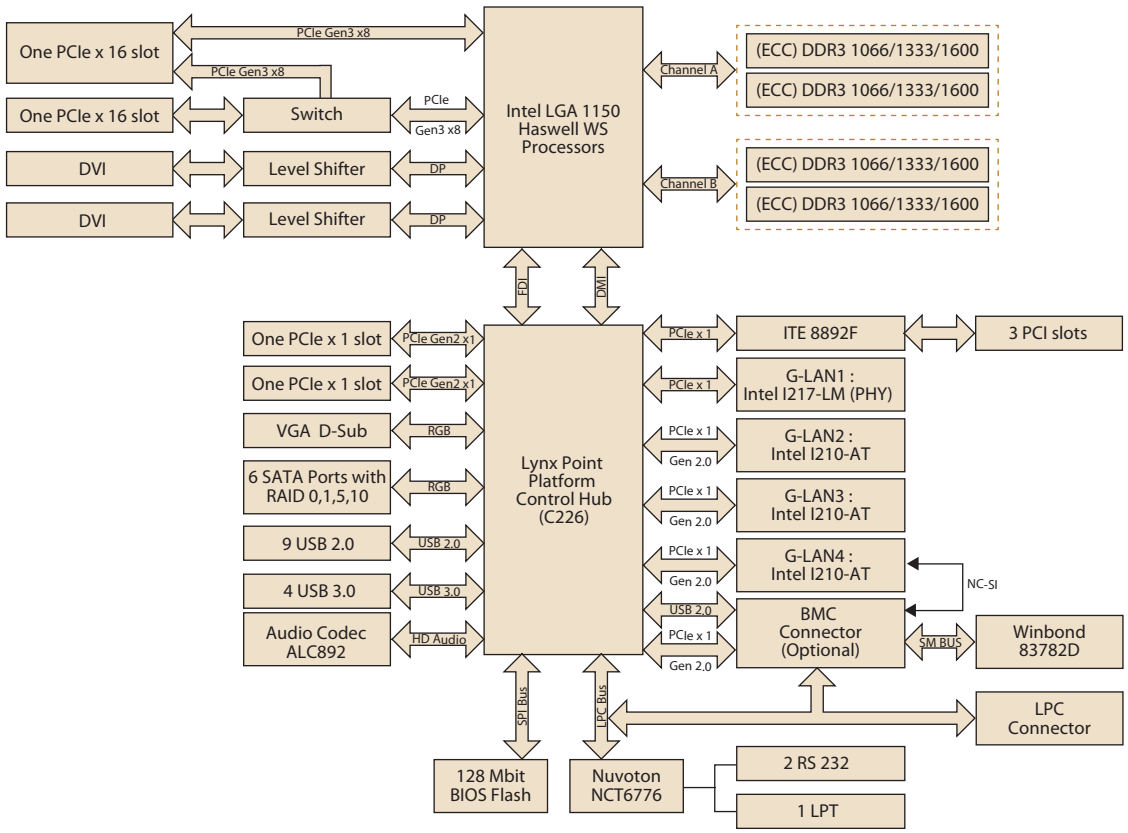
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		ATX form factor					
Processor System	CPU	Xeon E3-1275 v3	Xeon E3-1225 v3	Xeon E3-1268 v3	Core i7-4770S	Core i5-4570TE	Core i3-4330
	Cores	4	4	4	4	2	2
	Speed	3.5	3.2	2.3	3.1	2.7	3.5
	L3 Cache	8 MB	8 MB	8 MB	8 MB	4 MB	3 MB
	Socket	LGA 1150					
	Chipset	Intel C226 chipset					
	BIOS	AMI 128 Mbit SPI (UEFI)					
Memory	Technology	Dual Channel DDR3 ECC/Non-ECC 1066/1333/1600 MHz (ECC function enable depends on processor supporting)					
	Max. Capacity	32 GB					
	Socket	4 x 240-pin DIMM					
	Memory size	1 GB, 2 GB, 4 GB, 8 GB					
Expansion Slots	PCI 32-bit/33 MHz	3 slots					
	PCIe x 1 (Gen2)	2 slots					
	PCIe x16 (Gen3)	2 slots (One PCIe x16 link at PCIEX16_SLOT6 or switching one x16 link to two x8 links when PCIEx16_SLOT4 is occupied with jumper setting)					
Graphics	Controller	Intel HD Graphics					
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed					
Storage	SATA controller	Intel C226: 6 SATA3 6 Gb/s ports with Intel Matrix Storage support (for Windows only)					
	SAS controller	-					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel I217-LM; GbE 2~4: Intel I210-AT					
	Connector	RJ-45 x 2 for G2 version; RJ-45 x 4 for G4 version					
Internal Connectors	Printer Port connector	1					
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector					
	USB connector	2 USB 3.0; 7 USB 2.0 (1 x USB Type-A)					
	Fan header	5 x 4pin					
	SMBus	2					
	Chassis intruder	1					
	Front LAN LED	2					
	Serial port header	1 (RS-232)					
	Audio Connector	1 (ALC 892)					
	PS/2 KB/Mouse	1					
Rear I/O Connectors	External serial port	1					
	External USB port	4 (2 USB 3.0 and 2 USB 2.0)					
	VGA port	1					
	DVI	2					
	Display Port	-					
	RJ-45	2 for G2 version. 4 for G4 version					
	PS/2 KB/mouse	2					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 ~ 255 sec					
Power Requirement	Power On	Intel Xeon E3-1275v3 3.5GHz; DDR3 8G x4					
		3.3 V	5 V	12 V	12V_8P	5 Vsb	-12 V
		1.17A	2.30A	0.06A	4.33A	0.16A	0.01A
Environment		Operating			Non-operating		
	Temperature	0 ~ 60° C (32 ~ 140° F) Depends on CPU speed and cooler solution			-40 ~ 85° C (-40 ~ 185° F)		
	Humidity	0% ~ 90%		5% ~ 95% (Non-condensing)			
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")					

Block Diagram



Ordering Information

Part Number	Chipset	LAN	USB 3.0	DVI	SATAIII	IPMI
ASMB-784G2-00A1E	C226	2	4	2	6	Optional
ASMB-784G4-00A1E	C226	4	4	2	6	Optional

Packing List

Part Number	Description	Quantity
2066S78400	Driver CD	x 1
2006S78410	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
19Z0000502T000	I/O shield	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1960047669N001	LGA 1150/1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA 1150/1155/1156 CPU cooler for 2U and wallmount chassis
1960052651N001	LGA 1150/1155/1156 CPU cooler for 2U and wallmount chassis
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701090401	COM port cable with bracket
1700020277-01	Dual port USB 3.0 cable with bracket
AIMB-AUDIO-HDA1E	HD Audio-Card
1960049408N001	LGA 1150/1155/1156 1U CPU Cooler and supports up to 73W processor
IPMI-1000-00A1E	IPMI 2.0 Module
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

Note 1: It's a must to install PCA-TPM-00A1E for enabling Intel vPro feature.

Note 2: Purchasing ASMB-784's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-784.

Bracket View



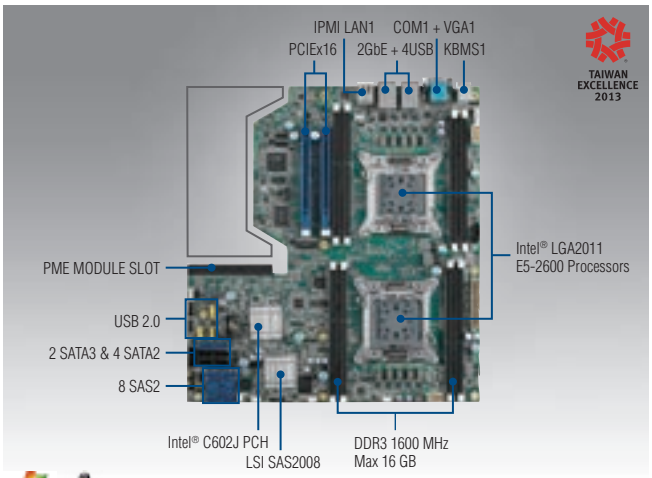
ASMB-784G4-00A1E



ASMB-784G2-00A1E

ASMB-920IR

Dual LGA 2011 Intel® Xeon® E5 EATX Server Board with DDR3, 2 PCIe x16 (Gen 3.0), PME Expansion Module, SAS RAID



Features

- EATX Server Board with dual Xeon® E5 processor, PME flexible expansion and 128GB memory capacity
- Dual LGA 2011 Intel® Xeon® E5 2600 processors
- DDR3 1333MHz RDIMM up to 128GB
- Two Gen 3.0 PCIe x16 slots and PME expansion by PCIe x16 connector
- 8 SAS ports, 6 SATA ports, totally 14 storage ports
- 0~40° C ambient operation temperature range

Note: ASMB-920 must be with 2 CPUs to enable PME function, ASMB-920 with 1 CPU can not enable PME.

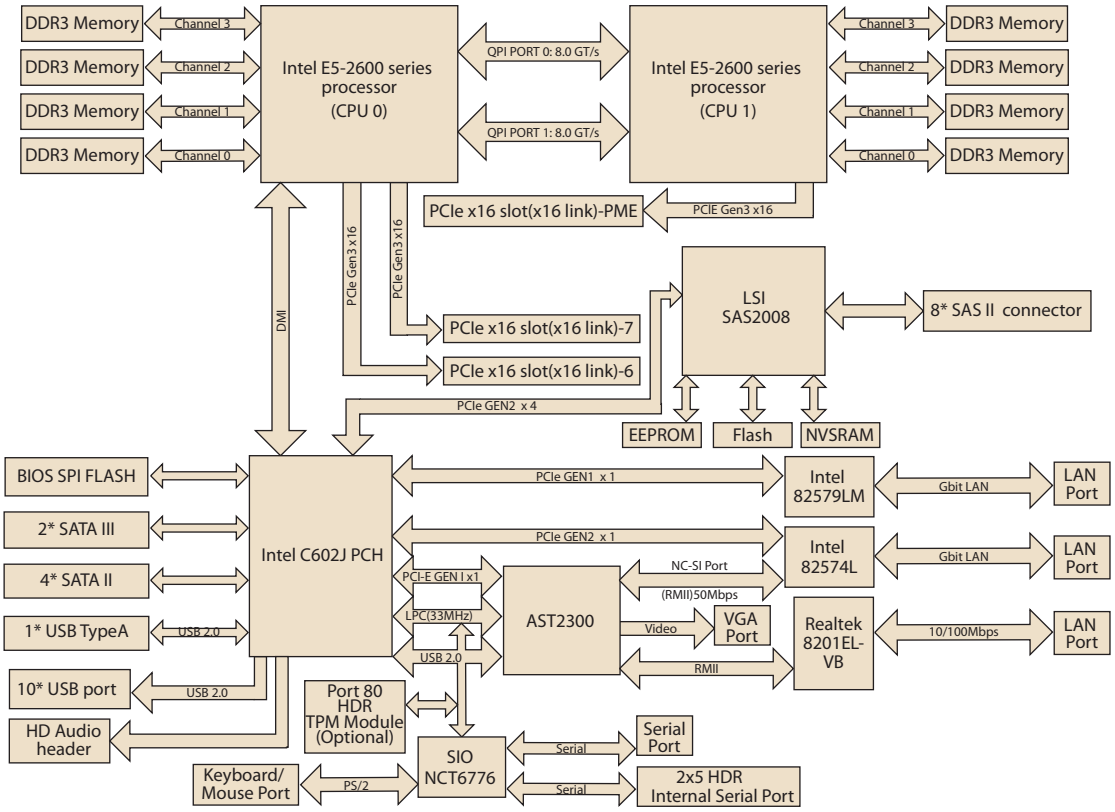
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		Extended ATX form factor				
Processor System	Socket	Intel LGA 2011				
	CPU type	Intel Xeon E5-2600 dual processor (CPU cooler should be purchased separately and TDP up to 95W)				
Core Logic	Chipset	Intel C602J chipset				
Memory	Total slots	8 (Quad Channel)				
	Capacity	Maximum 128 GB ECC RDIMM				
	Memory type	DDR3 ECC-REG/ECC/Non-ECC 1600/1333/1066 MHz DIMM				
	Memory size	1 GB, 2 GB, 4 GB, 8 GB, 16 GB				
Expansion Slots	Total PCI/PCI-X/PCIe slots	5				
	Slot location 1	Fit to PME daughter board				
	Slot location 2	Fit to PME daughter board				
	Slot location 3	Fit to PME daughter board				
	Slot location 4	-				
	Slot location 5	-				
	Slot location 6	1 x PCIe x16				
	Slot location 7	1 x PCIe x16				
Graphics	VGA	Aspeed AST2300 64 MB				
Storage	SATA controller	Intel C602J: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
	SAS controller	LSI SAS2008 Controller (Supports RAID 0, 1, 1E)				
Networking	GbE LAN	1 x Intel 82579LM + 1 x Intel 82574L				
Onboard I/O Connectors	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector				
	USB connector	3 (supports 6 USB port), 1* Type-A				
	Fan header	5 x 4pin				
	SMBus	1				
	Chassis intruder	1				
	Front LAN LED	2				
	Audio Header	1				
	Serial port header	1				
Rear I/O Connectors	External serial port	1				
	External USB port	4				
	VGA port	1				
	RJ-45	3 (1 port dedicated for IPMI function)				
	PS/2 KB/mouse	1				
Management Solution	Software	-				
	Out of band remote management	Yes				
Monitoring	CPU temperature	Yes				
	System Monitoring	Yes				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirement	Power On	3.3V	5V	12V	5Vsb	-12V
		13.69A	8.77A	55.48A	2A	0.5A
Environment		Operating		Non-operating		
	Temperature	0 ~ 40° C, depends on CPU speed and cooler solution		-40 ~ 85° C		
	Humidity	0% ~ 90%		5% ~ 95% (Non condensing)		
Physical Characteristics	Dimensions	304.8 x 330.2 mm (12" x 13")				

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	SAS
ASMB-920-00A1E	C602J	DDR3 ECC/Un-ECC	2	-	-
ASMB-920IR-00A1E	C602J	DDR3 ECC/Un-ECC	2	Yes	Yes

Bracket View



ASMB-920IR-00A1E



ASMB-920-00A1E

Packing List

Part Number	Description	Quantity
2062920I00	Driver CD	x 1
2002920I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960052312T000	I/O shield	x 1

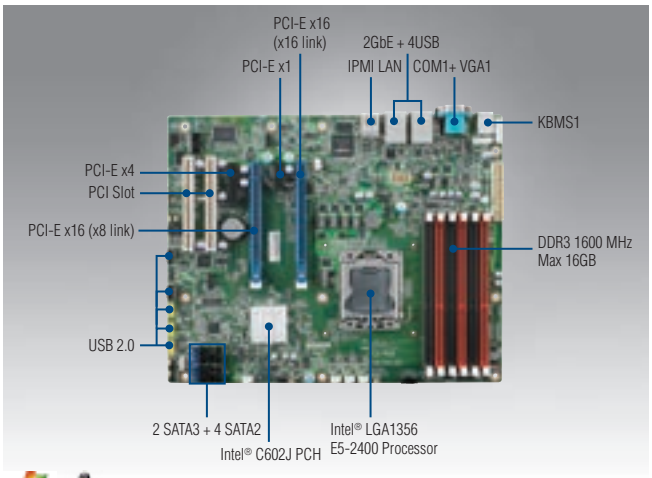
Optional Accessories

Part Number	Description
ASMB-FF3P8-12A1E	PME card with 1 PCIe x8 slot and 1 PCIe x4 slot and 1 PCI slot
ASMB-FF3PX-12A1E	PME card with 2 PCI-X and 1 PCI slots
ASMB-FF20F-02A1E	PME card with 2 PCIe x16 slots
ASMB-FF208-02A1E	PME card with 2 PCIe x 8 slots
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00A1E	TPM Module
1960055362N001	LGA2011 CPU cooler for 2U/4U chassis
1960057226N001	LGA2011 CPU heatsink for 1U chassis
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1701090401	COM port cable with bracket

Note: ASMB-920 must be with 2 CPUs to enable PME function, ASMB-920 with 1 CPU can not enable PME.

ASMB-820I

LGA 1356 Intel® Xeon® E5 ATX Server Board with DDR3, 1 PCIe x16 and 1 PCIe x8



Features

- ATX server board with next generation Intel® processor and max. 96 GB memory capacity
- LGA 1356 Intel® Xeon® E5-2400 processors
- DDR3 1600 MHz RIMM up to 96GB
- One gen-3.0 PCIe x16 and one PCIe x8 slots

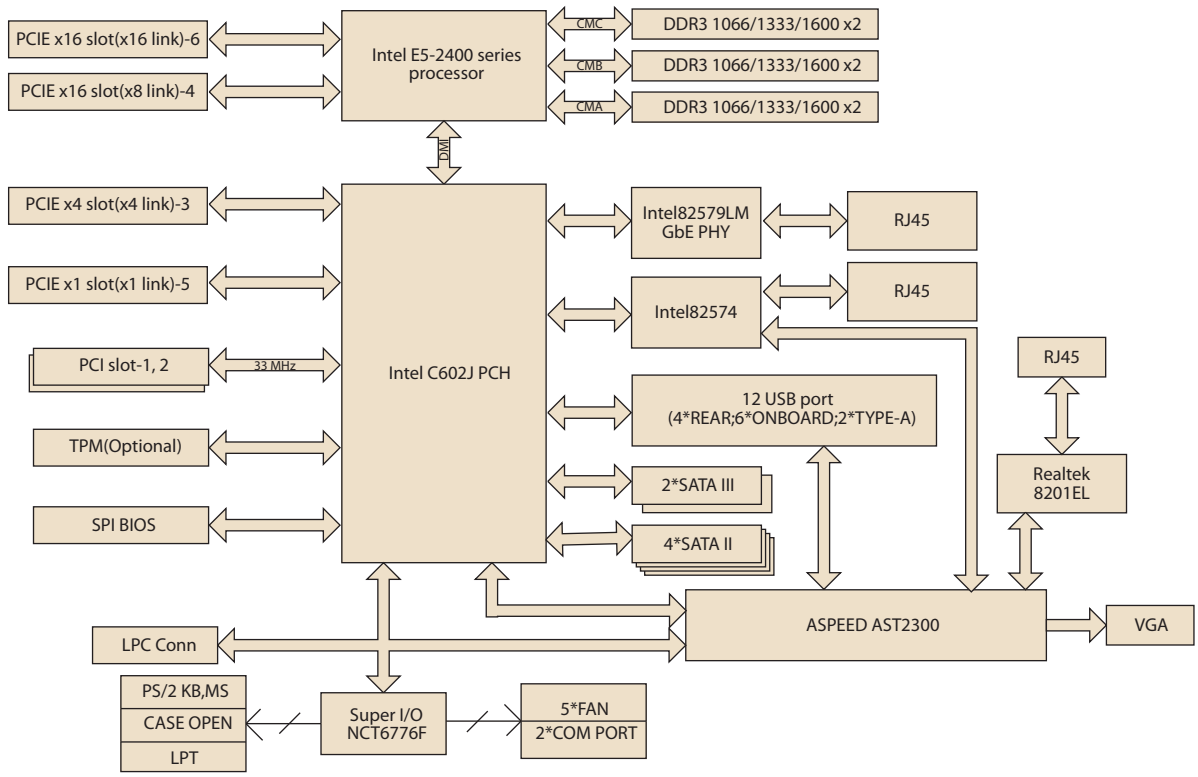
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		ATX form factor				
Processor System	CPU	Intel Xeon E5-2400 processor (CPU cooler should be purchased separately and TDP up to 95W)				
	Socket	LGA1356				
Core Logic	Chipset	Intel C602J				
Memory	Technology	3 Channel DDR3 1066/1333/1600, support Non-ECC, ECC UNB, ECC-REG DIMM				
	Max. Capacity	96 GB				
	Socket	6 x 240-pin DIMM				
Expansion Slot	Slot location 1	PCI				
	Slot location 2	PCI				
	Slot location 3	PCIe x4 (Gen2)				
	Slot location 4	PCIe x16 slot (Gen2 x8 link)				
	Slot location 5	PCIe x1 (Gen2)				
	Slot location 6	PCIe x16 (Gen3)				
Graphics	Controller	AST2300/ AST1300 64 MB				
Networking	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82574L, GbE LAN3: Realtek 8201EL (Dedicated for IPMI function)				
	Connector	RJ-45 x 3				
Storage	SATA controller	Intel C602J: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
	SAS controller	-				
Onboard I/O Connectors	USB	8 (2 Type A)				
	Serial	1 (RS-232)				
	IDE	-				
	SATA	6 (SATA II x4 and SATA III x2)				
	Parallel	-				
	IrDA	-				
	DIO	8 bit GPIO				
Rear I/O	VGA	1				
	Ethernet	3 (1 Dedicated for IPMI function)				
	USB	4				
	Serial	1 (RS-232)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Management Solution	Software	-				
	Out of band remote management	Yes				
Monitoring	CPU temperature	Yes				
	System Monitoring	Yes				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirement	Power On	3.3 V	5 V	12 V	5 Vsb	-12 V
		24.75A	16.77A	35.06A	2A	0.1A
Environment		Operating			Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI
ASMB-820I-00A1E	C602J	DDR3 Non-ECC, ECC UNB, ECC-REG	3 (1 dedicated for IPMI)	Yes
ASMB-820-00A1E	C602J	DDR3 Non-ECC, ECC UNB, ECC-REG	2	None

Packing List

Part Number	Description	Quantity
2066820I00	Driver CD	x 1
2006820I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960052312T000	I/O shield	x 1

Bracket View



ASMB-820I-00A1E



ASMB-820-00A1E

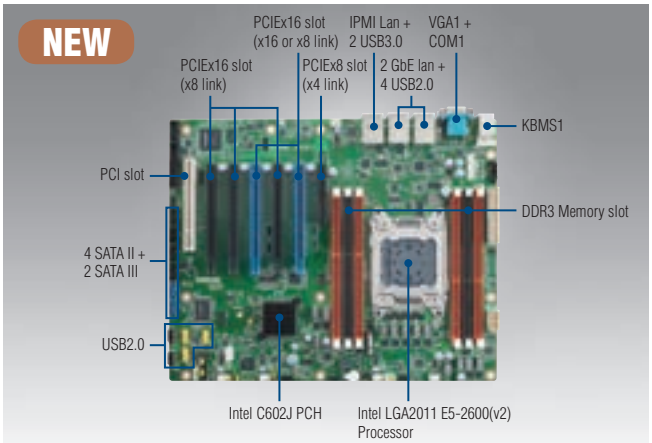
Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00A1E	TPM Module
1960055362N011	LGA1356 CPU cooler for 2U/4U chassis
1960057212N001	LGA1356 CPU heatsink for 1U chassis
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1701090401	COM port cable with bracket
1960057212N001	LGA1356 1U CPU Cooler
19Z0000406T000	Rear I/O shield for ACP-1320 chassis

Note: Please order 1 piece each of 1960057212N001 and 19Z0000406T000 for configuring ASMB-820 with ACP-1320 chassis.

ASMB-822I

Intel® LGA2011 Xeon® E5 ATX Server Board with 6 x DDR3, 5 x PCIe x16 slot (Gen 3.0), USB 3.0, IPMI



Features

- ATX Server Board with Intel Xeon® E5-2600(v2) processor
- DDR3 1333 MHz RDIMM up to 96 GB
- 5 x Gen 3.0 PCIe x16 slots
- 0 ~ 60° C ambient operation temperature range

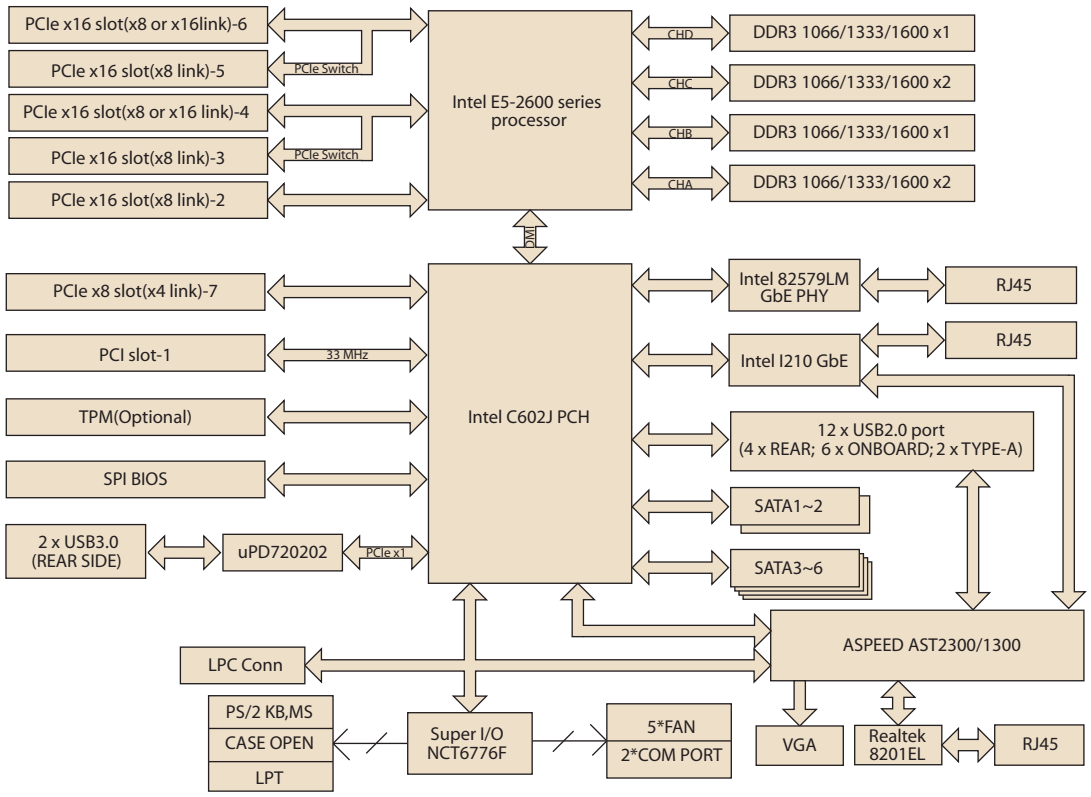
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		ATX form factor				
Processor System	Socket	Intel LGA 2011				
	CPU type	Intel Xeon E5-2600(v2) Series (TDP up to 95W) Intel Xeon E5-1600 Series (conditional support, please contact to Advantech application engineer)				
Core Logic	Chipset	Intel C602J chipset				
Memory	Total slots	6				
	Capacity	Maximum 96 GB ECC RDIMM				
	Memory type	DDR3 ECC-REG/ECC/Non-ECC 1600/1333/1066 MHz DIMM				
	Memory size	1 GB, 2 GB, 4 GB, 8 GB, 16 GB				
Expansion Slots	Total PCI/PCI-X/PCIe slots	7				
	Slot location 1	PCI				
	Slot location 2	PCIe x16 slot (Gen3 x8 link)				
	Slot location 3	PCIe x16 slot (Gen3 x8 link)				
	Slot location 4	PCIe x16 slot (Gen3 x8 or x16 link)				
	Slot location 5	PCIe x16 slot (Gen3 x8 link)				
	Slot location 6	PCIe x16 slot (Gen3 x8 or x16 link)				
	Slot location 7	PCIe x8 slot (Gen2 x4 link)				
Graphics	VGA	Aspeed AST2300/1300 64 MB				
Storage	SATA controller	Intel C602J: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
	SAS controller	-				
Networking	GbE LAN	1 x Intel 82579LM + 1 x Intel I210				
Onboard I/O Connectors	LPT connector	1				
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector				
	USB connector	3 (supports 6 x USB2.0 port), 2 x Type-A				
	Fan header	5 x 4pin				
	SMBus	1				
	Chassis intruder	1				
	Front LAN LED	2				
	Audio Header	1				
	Serial port header	1				
Rear I/O Connectors	External serial port	1				
	External USB port	6 (2 x USB 3.0)				
	VGA port	1				
	RJ-45	3 (1 port dedicated for IPMI function)				
	PS/2 KB/mouse	1				
Management Solution	Software	-				
	Out of band remote management	Yes				
Monitoring	CPU temperature	Yes				
	System Monitoring	Yes				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirement	Power On	3.3 V	5 V	12 V	5 Vsb	-12 V
		13.69 A	7.77 A	33.48 A	2 A	0.5 A
Environment		Operating		Non-operating		
	Temperature	0 ~ 60° C, depends on CPU speed and cooler solution		-40 ~ 85° C		
	Humidity	0% ~ 90%		5% ~ 95% (Non condensing)		
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	IPMI	Graphic
ASMB-822-00A2E	C602J	DDR3 Non-ECC/ ECC/REG	2	-	AST1300
ASMB-822I-00A2E	C602J	DDR3 Non-ECC/ ECC/REG	2	Yes	AST2300

Bracket View



ASMB-822I-00A2E



ASMB-822-00A2E

Packing List

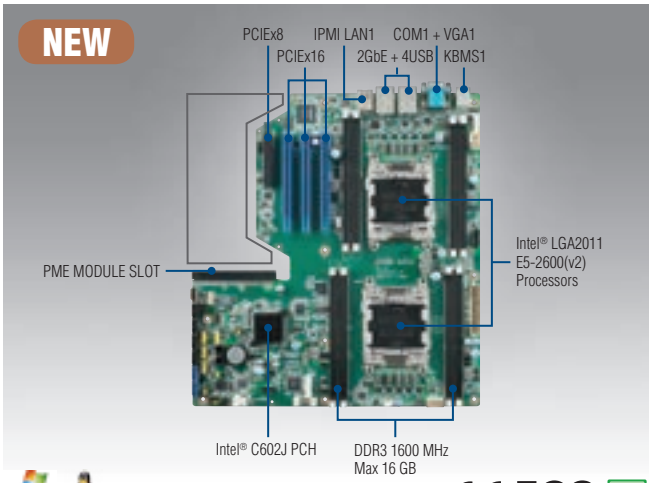
Part Number	Description	Quantity
2062822I00	Driver CD	x 1
2002822I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960048321T010	I/O shield	x 1
ASMB-BMC-00A1E	BMC module (only included in ASMB-822I SKU)	x 1

Optional Accessories

Part Number	Description
1960060221N001	LGA 2011 CPU heatsink for 1U chassis
1960058073N001	LGA 2011 CPU cooler for 2U/4U chassis
ASMB-RF3X8-21A1E	2U Riser Card (2 x PCI-X + 1 x PCIe x8)
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00A1E	TPM Module by LPC
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1701260305	COM + Printer Port Cable Kit

ASMB-922I

Dual LGA 2011 Intel® Xeon® E5-2600 EATX Server Board with DDR3, 3 PCIe x16 + 1 PCIe x8 (Gen 3.0), PME support



Features

- EATX Server Board with dual Xeon® E5-2600(v2) processor, PME flexible expansion and 128GB memory capacity
- DDR3 1600MHz RDIMM up to 128GB
- Three PCIe x16 slot(Gen3.0) + one PCIe x8 slot(Gen3.0) slots and PME expansion slot
- 0~40° C ambient operation temperature range

Note: ASMB-922I could enable PME slot when processor is installed in CPU0 socket.

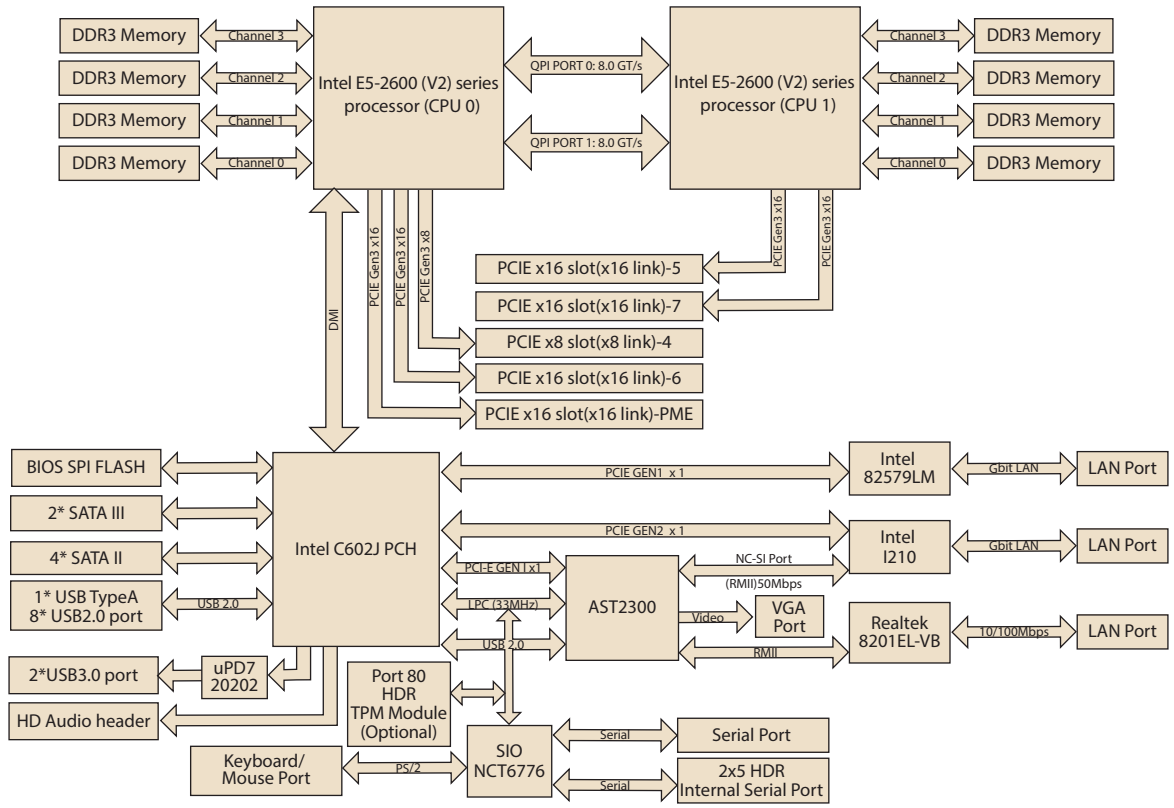
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Form Factor		Extended ATX form factor				
Processor System	Socket	Intel LGA 2011				
	CPU type	Intel Xeon E5-2600(v2) dual processor (CPU cooler should be purchased separately and TDP up to 95W)				
Core Logic	Chipset	Intel C602J chipset				
Memory	Total slots	8 (Quad Channel)				
	Capacity	Maximum 128 GB ECC RDIMM				
	Memory type	DDR3 ECC-REG/ECC/Non-ECC 1600/1333/1066 MHz DIMM				
	Memory size	1 GB, 2 GB, 4 GB, 8 GB, 16 GB				
Expansion Slots	Total PCI/PCI-X/PCIe slots	7				
	Slot location 1	Fit to PME daughter board				
	Slot location 2	Fit to PME daughter board				
	Slot location 3	Fit to PME daughter board				
	Slot location 4	1 x PCIe x8 slot (x8 link), signal from CPU0				
	Slot location 5	1 x PCIe x16 slot (x16 link), signal from CPU1				
	Slot location 6	1 x PCIe x16 slot (x16 link), signal from CPU0				
	Slot location 7	1 x PCIe x16 slot (x16 link), signal from CPU1				
Graphics	VGA	Aspeed AST2300 64 MB				
Storage	SATA controller	Intel C602J: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
	SAS controller	-				
Networking	GbE LAN	1 x Intel 82579LM + 1 x Intel 82574L				
Onboard I/O Connectors	Floppy connector	-				
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector				
	USB connector	4 (supports 6 USB port), 1* Type-A				
	Fan header	5 x 4pin				
	SMBus	1				
	Chassis intruder	1				
	Front LAN LED	2				
	Audio Header	1				
	Serial port header	1				
Rear I/O Connectors	External serial port	1				
	External USB port	4 (2*USB2.0 + 2*USB3.0)				
	VGA port	1				
	RJ-45	3 (1 port dedicated for IPMI function)				
	PS/2 KB/mouse	1				
Management Solution	Software	-				
	Out of band remote management	Yes				
Monitoring	CPU temperature	Yes				
	System Monitoring	Yes				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec/min				
Power Requirement	Power On	3.3V	5V	12V	5Vsb	-12V
		19.69A	7.77A	58.66A	2A	0.5A
Environment		Operating		Non-operating		
	Temperature	0 ~ 40° C, depends on CPU speed and cooler solution		-40 ~ 85° C		
	Humidity	0% ~ 90%		5% ~ 95% (Non condensing)		
Physical Characteristics	Dimensions	304.8 x 330.2 mm (12" x 13")				

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	VGA Chip
ASMB-922-00A1E	C602J	DDR3 Non-ECC/ ECC/REG	2	-	AST 1300
ASMB-922I-00A1E	C602J	DDR3 Non-ECC/ ECC/REG	2	Yes	AST 2300

Packing List

Part Number	Description	Quantity
2066922I00	Driver CD	x 1
2006922I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960052312T000	I/O shield	x 1

Bracket View



ASMB-922I-00A1E



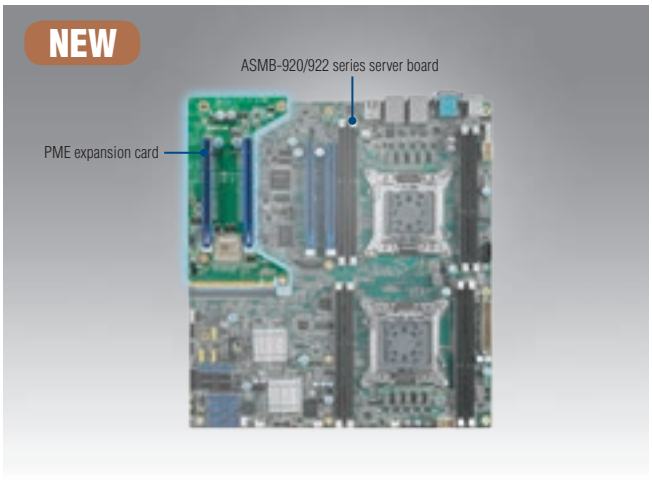
ASMB-922-00A1E

Optional Accessories

Part Number	Description
ASMB-FF3P8-12A1E	PME card with 1 PCIe x8 slot and 1 PCIe x4 slot and 1 PCI slot
ASMB-FF3PX-12A1E	PME card with 2 PCI-X and 1 PCI slots
ASMB-FF20F-02A1E	PME card with 2 PCIe x16 slots
ASMB-FF208-02A1E	PME card with 2 PCIe x 8 slots
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00A1E	TPM Module
1960058073N001	LGA2011 CPU cooler for 2U/4U chassis
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1701090401	COM port cable with bracket

PME Expansion Cards

Various Selections Supporting PCI, PCI-X, PCIe x1/x4/x8/x16



Features

- Auto-configued by BIOS
- ASMB-920/922 series plus PME forms a standard EATX motherboard compatible with EATX chassis
- Multiple options for all demands

Note:
1. To enable PME function, it must to install processor both into CPU0 & CPU1 socket of ASMB-920/920IR.
2. To enable PME function, it need to install a processor into CPU0 socket of ASMB-922/922I.

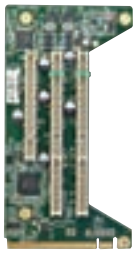
Introduction

Advantech's PME (Powerful Modular Expansion) design allows versatile expansion module options to the ASMB-920/922 series motherboard. PME expansion cards are an economical, effective solution for a range of applications, providing function expansion for a range of PCIe modules. In addition to meeting standard industrial specifications, Advantech's PME modules fit just about anywhere. They are easy to assemble and provide a simple upgrade path.

Specifications

Model Name		ASMB-FF3PX	ASMB-FF20F	ASMB-FF208	ASMB-FF3P8
Expansion Slots	Total PCI/PCI-X/PCIe slots	3	2	2	3
	Slot location 1	PCI 33/66 MHz	PCIe x16 (Gen3 x16 link)	PCIe x16 (Gen1 x8 link)	PCI 33/66 MHz
	Slot location 2	PCI-X 100 MHz	-	-	PCIe x8 (Gen2 x4 link)
	Slot location 3	PCI-X 100 MHz	PCIe x16 (Gen3 x16 link)	PCIe x16 (Gen1 x8 link)	PCIe x8 (Gen2 x8 link)
Fit Motherboard		ASMB-920/922 series	ASMB-920/922 series	ASMB-920/922 series	ASMB-920/922 series
Environment		Operating		Non-operating	
	Temperature	System: 0 ~ 40° C Board: 0 ~ 60° C		-40 ~ 85° C	
	Humidity	0% ~ 90%		5% ~ 95% (Non condensing)	
Physical Characteristics	Dimensions	110 mm x 193 mm	110 mm x 193 mm	110 mm x 193 mm	110 mm x 193 mm

Front View



ASMB-FF3PX-12A1E



ASMB-FF20F-02A1E



ASMB-FF208-02A1E



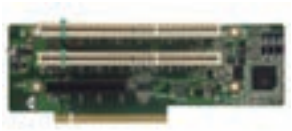
ASMB-FF3P8-12A1E

Ordering Information

Part Number	Description
ASMB-FF3PX-12A1E	PME card with 2 PCI-X and 1 PCI slots
ASMB-FF20F-02A1E	PME card with 2 PCIe x16 slots (x16 link)
ASMB-FF3P8-12A1E	PME card with 1 PCIe x8 slot(x8 link) and 1 PCIe x8 slot(x4 link) and 1 PCI slot
ASMB-FF208-02A1E	PME card with 2 PCIe x16 slots (x8 link)

Note:
1. To enable PME function, it must to install processor both into CPU0 & CPU1 socket of ASMB-920/920IR.
2. To enable PME function, it need to install a processor into CPU0 socket of ASMB-922/922I.

ASMB Riser Card





Selection Guide

Model Name		ASMB-RF3X8-21A1E	ASMB-RF348-21A1E
Interface		PCIe x16	PCIe x16 for slot 6
Expansion Slots	Spec.	2 * PCI-X 64bit 133/100MHz + 1 * PCIe x8	1 * PCIe x8 +2 * PCIe x4
	Top Slot	3.3V PCI-X 64bit 133/100MHz	PCIe x16 (x8 link)
	Middle Slot	3.3V PCI-X 64bit 133/100MHz	PCIe x8 (x4 link)
	Bottom Slot	PCIe x8 slot (x8 link)	PCIe x8 (x4 link)
Chassis	2U	HPC-7280 ACP-2010MB/2320MB HPC-7242MB	HPC-7280 ACP-2010MB/2320MB HPC-7242MB
Motherboard	ASMB-310	YES	*△ (Note1)
	ASMB-584	X	*△ (Note3)
	ASMB-781	YES	*△ (Note1)
	ASMB-782	X	*△ (Note2)
	ASMB-820	YES	YES
	ASMB-822	YES	YES
	ASMB-920	YES	YES
	ASMB-922	YES	YES

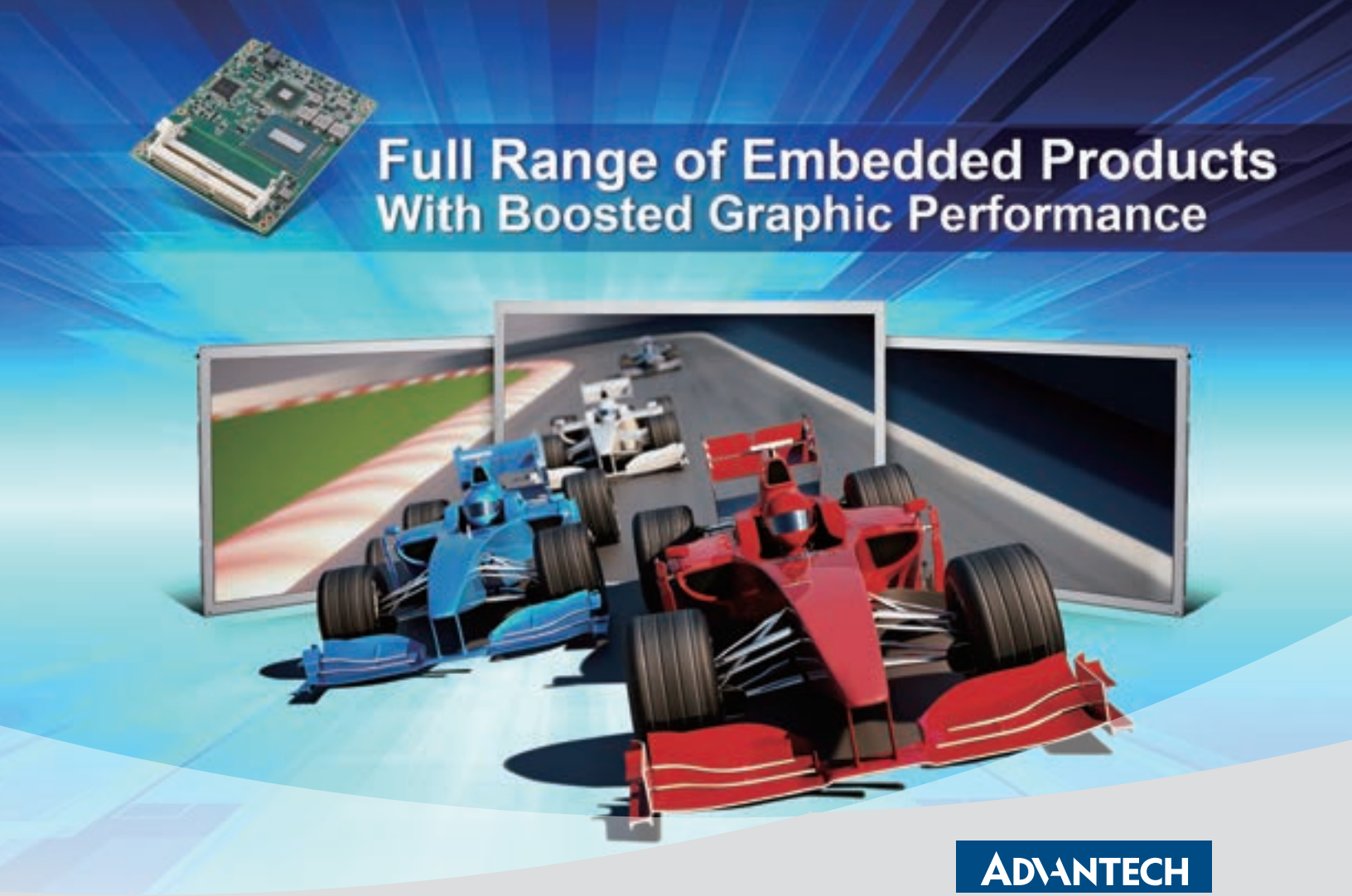
Yes: Fully compatible

△: Conditional Compatible

*△ Note 1: PCIe x16 slot of ASMB-781 & ASMB-310 motherboard can split as x8 x8 mode. When install ASMB-RF348-21A1E riser card, it supports one PCIe x4 (bottom slot) and one PCIe x8 (top slot). The middle of PCIe x4 of riser card doesn't work.

*△ Note 2: PCIe x16 slot of ASMB-782 motherboard is x8 link only. When install ASMB-RF348-21A1E riser card, it only supports one PCI-E x4 slot (bottom).

*△ Note 3: PCIe x16 slot of ASMB-584 motherboard is x8 link and can split as x4 x4 mode. When install ASMB-RF348-21A1E riser card, it supports two PCIe x4 (bottom and middle slot) and the top of PCIe x8 slot doesn't work.



ADVANTECH

Enabling an Intelligent Planet

New Embedded Platforms with 4th Generation Intel® Core™ and Xeon® Processors

Advantech introduces a full selection of embedded platforms with 4th Generation Intel® Core™ and Xeon® Processors delivering up to 13% CPU performance increase, 24% better graphics capability, and better security and power efficiency compared with previous generations. These new intelligent platforms are designed for a variety of market segments including video surveillance, digital signage, medical, industrial automation, gaming, network and telecom, and more.

COM Express Basic



SOM-5894 QM87

3 independent displays supporting LVDS, VGA, HDMI, DVI, DisplayPort

Mini-ITX



AIMB-274 Q87

3 independent displays supporting CRT, DP++, HDMI, LVDS/eDP

MircoATX



AIMB-584 Q87

3 independent displays supporting CRT, DVI, DP, LVDS/eDP

ATX



AIMB-784 Q87

3 independent displays supporting VGA, 2 DVI, DP ports

MicroATX



ASMB-584 C226

3 independent displays supporting VGA, DVI, 2 DP ports

ATX



ASMB-784 C226

3 independent displays supporting VGA, 2 DVI, DP ports

PICMG 1.3 SHB



PCE-5128 Q87

3rd independent display supporting VGA and 2 DVI ports

PICMG 1.3 SHB



PCE-7128 C226

3rd independent display supporting VGA and 2 DVI ports

CompactPCI Blade



MIC-3396 QM87

3 independent displays supporting HDMI1.4,DVI, VGA, DP, eDP

VPX Blade



MIC-6311 QM87

3 independent displays supporting HDMI1.4, DVI, VGA, DP, eDP

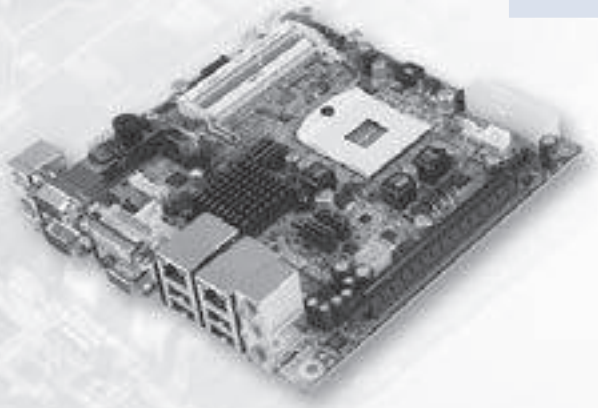
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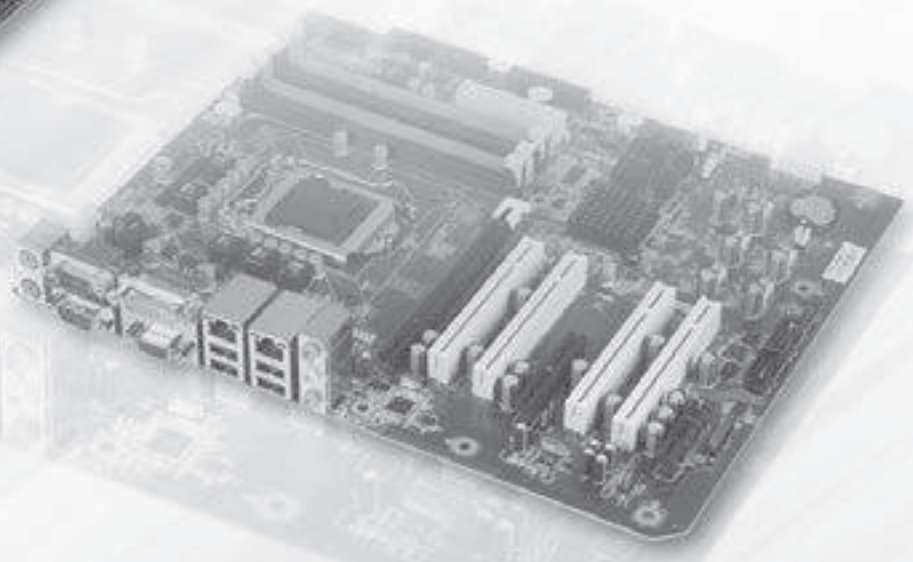
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To view all of Advantech's Industrial Motherboards, please visit www.advantech.com/products.







Mini-ITX Motherboards

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Selection Guide

Model Name		AIMB-214	AIMB-273
Form Factor		Mini-ITX	Mini-ITX
Processor System	CPU	Intel Atom D2550/N2600	Intel Core i7/i5/i3/Celeron
	Socket	FCBGA	µFC-PGA 988 Socket
	Max. Speed	1.86/1.6 GHz	2.3 GHz/2.5 GHz/2.2 GHz/1.6 GHz
	Front Side Bus	-	-
	L2 Cache	512 KB/1 MB	6 MB/3 MB/3MB/2 MB
	Chipset	Intel NM10	Intel QM77
	BIOS	AMI EFI 16 Mbit, SPI	AMI EFI 64 Mbit, SPI
Expansion Slot	PCI	1	-
	MINI PCI	-	-
	PCIe	Mini-PCIe, 1 slot	Mini-PCIe, 1 slot, PCIe x16, 1 slot
Memory	Technology	Single channel DDR3 1066 MHz	Dual channel DDR3 1333/1600 MHz
	Max. Capacity	2/4 GB	16 GB
	Socket	1 x 204-pin SODIMM	2 x 204-pin SODIMMs
Graphics	Controller	Embedded Gen3.5+ GFX Core, 400/640-MHz render clock frequency for D2550/N2600	Intel HD Graphics
	VRAM	Shared system memory up to 224 MB SDRAM	1 GB maximum shared memory with 2 GB and above system memory installed
	LCD	LVDS 1: Dual channel 48-bit LVDS LVDS 2: Single channel 18/24-bit LVDS	Dual channel 36/48-bit LVDS
	TV-Out	-	-
	DP	-	2
	HDMI	1	1
	DVI	-	-
	Dual Display	CRT + LVDS, CRT + HDMI, HDMI+LVDS supports extended mode and clone mode	DP+LVDS+HDMI, DP+DP+HDMI, DP+DP+LVDS, DP+CRT+HDMI
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel 82574L, LAN2: Intel 82583V	LAN1: Intel 82579LM, LAN2: Intel 82583V
	Connector	RJ-45 x 2	RJ-45 x 2
TPM		Optional	Optional
SATA	Max Data Transfer Rate	300 MB/s	600 MB/s, 300MB/s
	Channel	2	2, 2
EIDE	Mode	-	-
	Channel	-	-
Rear I/O	VGA/DVI/HDMI	1/-/1	1/-/1
	Ethernet	2	2
	USB	2	4
	Audio	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out
	Parallel	-	-
	Serial	2 (1 x RS-232; 1 x RS-232/422/485)	-
	PS/2	1	2
Internal Connector	LVDS & Inverter	1	1
	TV-Out	-	-
	DVI	-	-
	USB	4	4
	Serial	4 (4 x RS-232, supplies 5 V & 12 V)	2 (RS-232)
	Parallel	-	-
	IDE	-	-
	SATA	2	2 x SATA II, 2 x SATA III
	CompactFlash	Cfast x 1	CFast x 1
	GPIO	8-bit GPIO	8-bit GPIO
Watchdog Timer	Output	System reset	System reset
	Interval	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min
Page		11-6	11-8

MicroATX Motherboards

Selection Guide








Model Name		AIMB-567	AIMB-501 KIOSK	AIMB-580	AIMB-581	AIMB-582	AIMB-584
Form Factor		MicroATX	MicroATX	MicroATX	MicroATX	MicroATX	MicroATX
Processor System	CPU	Intel Core 2 Quad/ Core 2Duo/Pentium Dual-Core/Celeron	Intel Core i7/i5/i3/ Pentium/Celeron	Intel Xeon/ Core i7/i5/ i3/Pentium	Intel Xeon/Core i7/i5/ i3/Pentium	Intel Xeon/ Core i7/i5/ i3/Pentium	Intel Xeon/Core i7/i5/ i3/Pentium
	Socket	LGA775	LGA1155	LGA1156	LGA1155	LGA1155	LGA1150
	Max. Speed	2.66/3.16/2.6/2.0 GHz	3.4/3.1/3.3/2.9/2.5 GHz	2.93/2.66/3.3/3.06/ 2.8 GHz	3.4 GHz/3.1 GHz/ 3.3 GHz	3.4/3.1/3.3/2.9/3.4/3.1/ 3.3 GHz	3.5/3.2/2.3/3.1/2.3/ 2.9/2.7/2.4 GHz
	Front Side Bus	1333/1066/800 MHz	-	-	-	-	-
	L2 Cache	6 MB/6 MB/6 MB/ 512 KB	8 MB/6 MB/3 MB/ 3 MB/2 MB	8 MB/8 MB/4 MB/ 4 MB/3 MB	L3: 8 MB/6MB/3 MB	8 MB/6 MB/3 MB/ 3 MB/8 MB/6 MB/ 3 MB	8MB/8MB/8MB/8MB /8MB/6MB/4MB/3M B/3MB
	Chipset	Intel G41 + ICH7R/ ICH7	Intel H61	Intel Q57/3450	Intel Q67/C206	Intel Q77/C216	Intel Q87/C226
	BIOS	AMI 16 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI
Expansion Slot	PCI	2	2	2	2	2	2
	PCIe x16	1 (Gen 2)	1	1	1 (Gen 2)	1 (Gen 3)	1(Gen 3)
	PCIe x4	1 (G2)	-	1	1 (Gen 2)	1 (Gen 2)	1(Gen 2)
	PCIe x1	1 (VG)	1	-	-	-	-
Memory	Technology	Dual channel DDR3 1066/1333 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3 800/1066/1333 MHz SDRAM	Dual channel DDR3 1066/1333 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM
	Max. Capacity	4 GB	16 GB	16 GB	32 GB	32 GB	32 GB
	Socket	4 x 240-pin DIMM	2 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM
Graphics	Controller	Intel GMA X4500	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
	VRAM	Shared system memory up to 352 MB	Shared system memory up to 1 GB	Shared system memory up to 1 GB	Shared system memory up to 1 GB	Shared system memory up to 1 GB	Shared system memory up to 1 GB
	LCD	-	Dual channel 48-bit LVDS	-	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS
	DVI-D	1	1	1	2	1	1
	Dual Display	CRT+DVI	CRT1+LVDS, CRT1+DVI, CRT1+CRT2 (G2)	CRT+DVI	CRT+LVDS, CRT+DVI, LVDS+DVI	CRT+DP, CRT (or DP)+LVDS (or eDP), CRT (or DP)+DVI, LVDS (or eDP)+DVI	CRT+DP, CRT (or DP)+LVDS (or eDP), CRT (or DP)+DVI, LVDS (or eDP)+DVI
	Triple Display	-	-	-	-	CRT+DVI+DP, CRT+LVDS (or eDP+DP), CRT+LVDS (or eDP)+DVI, DP+LVDS (or eDP)+DVI	CRT+DVI+DP, CRT+LVDS (or eDP+DP), CRT+LVDS (or eDP) +DVI, DP+LVDS (or eDP) +DVI
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel 82583V LAN2: Intel 82583V	LAN1: Realtek RTL8111E LAN2: Realtek RTL8111E	LAN1: Intel 82578DM LAN2: Intel 82583V	LAN1: Intel 82579LM LAN2: Intel 82583V	LAN1: Intel 82579LM LAN2: Intel 82583V	LAN1: Intel i218LM LAN2: Intel i211
	Connector	RJ-45 x2	RJ-45 x2	RJ-45 x2	RJ-45 x2	RJ-45 x2	RJ45 x 2
TPM		-	Optional	Optional	Optional	Optional	Optional
SATA	Max Data Transfer Rate	300 MB/s	300 MB/s	300 MB/s	300 MB/s 600 MB/s	300 MB/s 600 MB/s	600 MB/s
	Channel	4 (SW RAID)	4	6 (SW RAID)	4 (SW RAID)/2	4 (SW RAID) / 2	6(SW RAID)
EIDE	Mode	ATA 100/66/33	-	-	-	-	-
	Channel	1	-	-	-	-	-
SSD	CompactFlash	-	-	-	-	-	-
I/O Interface	VGA	1	2(G2)/1(L)	1	1	1	1
	USB	8	10 (USB 2.0)/ 8 (USB2.0), 2 (USB 3.0)	10	10 (USB 2.0) 2 (USB 3.0)	8 (USB 2.0) 4 (USB 3.0)	8 (USB 2.0) 4 (USB 3.0)
	Serial	4 (3 x RS-232, 1 x RS-232/422/485)	10 (8 x RS-232, 2 x RS-232/422/485)	4 (3 x RS-232, 1 x RS-232/422/485)	6 (5 x RS-232, 1 x RS-232/422/485)	6 (5 x RS-232, 1 x RS-232/422/485)	6 (5 x RS-232, 1 x RS-232/422/485)
	Parallel	1	1	1	1	1	1
	FDD	-	-	1	-	-	-
	PS/2	2	2	2	2	2	2
	Ethernet (GbE)	2	2	2	2	2	2
	eSATA	-	-	-	-	-	-
	IEEE 1394	-	-	-	-	-	-
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
	GPIO	8-bit	8-bit	-	8-bit	8-bit	8-bit
Watchdog Timer	Output	System reset	System reset	System reset	System reset	System reset	System reset
	Interval	Programmable 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min	Programmable, 1 ~ 255 sec/min
Page		online	11-10	online	online	11-12	11-14

ATX Motherboards





Selection Guide

Model Name		AIMB-767	AIMB-769	AIMB-780
Processor System	CPU	Intel Core 2 Quad/Core 2 Duo/ Pentium dual-core/Celeron	Intel Core 2 Quad/Core 2 Duo/ Pentium dual-core/Celeron	Intel Core i7/i5/i3/Pentium/Xeon
	Socket	LGA775	LGA775	LGA1156
	Max. Speed	3.0 GHz/3.16 GHz/ 2.93 GHz/2.2 GHz	3.0 GHz/3.16 GHz/ 2.93 GHz/2.2 GHz	2.93 GHz/2.93 GHz/3.60 GHz/ 3.06 GHz/2.8 GHz
	Front Side Bus	1333/1066/800 MHz	1333/1066/800 MHz	-
	Cache	L2: 12 MB/6 MB/8 MB/512 KB	L2: 12 MB/6 MB/8 MB/512 KB	L3: 8 MB/4 MB/4 MB/3 MB/8 MB
	Chipset	Intel G41 + ICH7R	Intel G41 + ICH7	Q57 for QG2 version; 3450 for WG2 version
	BIOS	AMI 16 Mbit, SPI	AMI 16 Mbit, SPI	AMI 64 Mbit SPI
Expansion Slot	PCIe x16	1	1	1 (Gen2)
	PCIe x4	1	-	1
	PCIe x1	-	1	1
	PCI	5	5	4
Memory	Technology	Dual channel DDR3 800/1066 MHz	Dual channel DDR3 800/1066 MHz	Dual Channel DDR3 800/1066/1333
	Max. Capacity	8 GB	8 GB	16 GB
	Socket	2 x 240-pin DIMM	2 x 240-pin DIMM	4 x 240-pin DIMM
Graphics	Controller	Intel GMA X4500	Intel GMA X4500	Intel HD Graphics
	VRAM	Shared system memory up to 352 MB	Shared system memory up to 352 MB	Shared system memory up to 1 GB
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	Dual Intel 82583V	GbE LAN: Realtek RTL8111DL	GbE LAN1: Intel 82578DM, GbE LAN2: Intel 82583V
SATA	Max. Date Transfer Rate	300 MB/s	300 MB/s	300 MB/s
	Channel	4 (SW RAID)	4	6 (SW RAID)
EIDE	Mode	-	-	-
	Channel	-	-	-
I/O Interface	VGA	1	1	1
	DVI	1	-	1
	USB	8	8	14
	Serial	4	2	4
	Parallel	1	-	1
	FDD	1	1	1
	PS/2	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)
	Ethernet (GbE)	2	1	2
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
Watchdog Timer	Output	System reset	System reset	System reset
	Interval	Programmable, 1 ~ 255 sec	Programmable, 1 ~ 255 sec	Programmable, 1 ~ 255 sec
Page		11-16	11-18	online

NEW NEW






AIMB-781	AIMB-782	AIMB-701	AIMB-784
2nd Gen Intel Core i7/i5/i3/ Pentium	2nd/3rd Gen Intel Core i7/i5/i3/Pentium	2nd/3rd Gen Intel Core i7/i5/i3/Pentium	4th Gen Intel Core i7/i5/i3
LGA1155	LGA1155	LGA1155	LGA1150
3.4 GHz/3.1 GHz/3.3 GHz/2.9 GHz	3.4 GHz/3.0 GHz/3.3 GHz/3.1 GHz	3.4 GHz/3.0 GHz/3.3 GHz/3.1 GHz	3.1 GHz/ 2.9 GHz
-	-	-	-
L3: 8 MB/6 MB/3 MB/3 MB	L3: 8 MB/6 MB/3 MB/3 MB	L3: 8 MB/6 MB/3 MB/3 MB	L3: 8 MB/6 MB
Q67 for QG2 version; B65 for QVG version	Q77	H61	Q87
AMI 64 Mbit SPI	AMI 64 Mbit SPI	AMI 64 Mbit SPI	AMI 128 Mbit SPI
1 (Gen2)	1 (Gen3)	1	1 (Gen3)
1 (Gen2)	1 (Gen2)	1 for VG SKU	1 (Gen2)
1 (Gen2)	1 (Gen2)	1 for G2 SKU	1 (Gen2)
4	4	5	4
Dual Channel DDR3 1066/1333	Dual Channel DDR3 1066/1333/1600	Dual Channel DDR3 1066/1333/1600 (1600 is only supported by Core i7/i5/ i3 3xxx series processors)	Dual Channel DDR3 1333/1600
32 GB	32 GB	16 GB	32 GB
4 x 240-pin DIMM	4 x 240-pin DIMM	2 x 240-pin DIMM	4 x 240-pin DIMM
Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
Shared system memory up to 1 GB	Shared system memory up to 1 GB	1 GB maximum shared memory with 2 GB and above system memory installed	Shared system memory up to 1 GB
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V	GbE LAN1: Intel 82579V, GbE LAN2: Intel 82583V	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT
600 MB/s; 300 MB/s	600 MB/s; 300 MB/s	300 MB/s	600 MB/s
6 (SW RAID for QG2 version)	6 (SW RAID)	4	6 (SW RAID)
-	-	-	-
-	-	-	-
1	1	1	1
1 for QG2 version	1	1 for G2 version	2
14 for QG2 version; 12 for QVG version	14 (4 USB 3.0 and 10 USB 2.0)	10	13 (4 USB 3.0 and 9 USB 2.0)
6 for QG2 version	6	6 for G2 version (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)	6
1	1	1	1
-	-	-	-
2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)	2 (1 x keyboard and 1 x mouse)
2	2	2 for G2 version; 1 for VG version	2
Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
System reset	System reset	System reset	System reset
Programmable, 1 ~ 255 sec	Programmable, 1 ~ 255 sec	Programmable 1 ~ 255 sec	Programmable, 1 ~ 255 sec
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AIMB-214

Intel® Atom™ N2600/D2550 Mini-ITX with CRT/HDMI/2LVDS, 6COM, and Dual LAN



SUSIAccess

CE FCC

Features

- Supports Intel® Atom™ processor N2600, and D2550 dual core
- One 204-pin SODIMM up to 4 GB DDR3 1066 MHz SDRAM
- Supports 1 PCI and 1 Mini-PCIe expansion, 6 serial ports, 6 USB, and CFast
- Lower total cost of ownership with DC12V support, and supports 24/48-bit LVDS
- Onboard TPM 1.2 support (optional)
- Supports SUSIAccess and Embedded Software APIs

Software APIs: SMBus, H/W Monitor, Brightness, Watchdog, GPIO

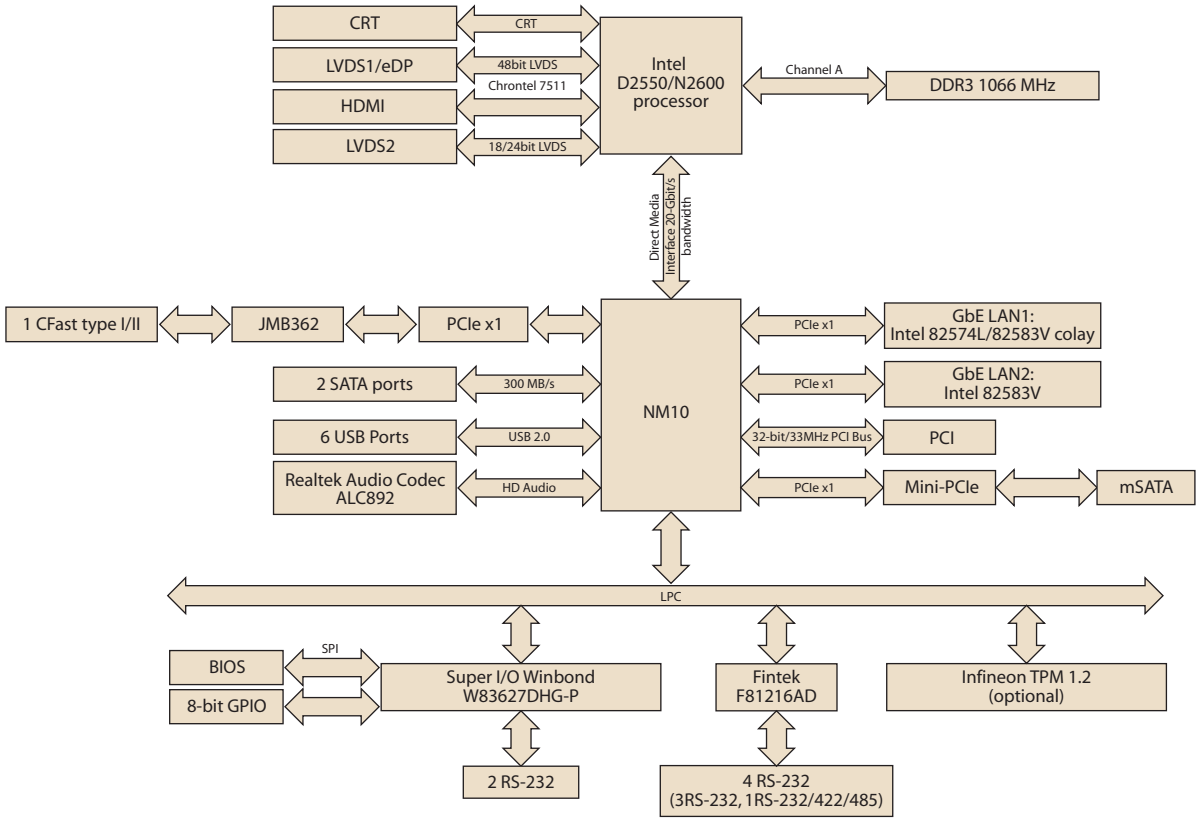
Utilities: BIOS flash, Monitoring, Embedded Security ID

Note: eSOS requires ODM BIOS, available by request

Specifications

Processor System	CPU (32nm)	Intel Atom N2600	Intel Atom D2550
	Max. Speed	1.6 GHz (Dual core)	1.86 GHz (Dual core)
	L2 Cache	1MB	1MB
	Chipset	NM10	NM10
	BIOS	AMI 16Mbit SPI	AMI 16Mbit SPI
Expansion Slot	PCI	32-bit/33 MHz, 1 slot	
	Mini-PCIe	1	
	PCIe	-	
Memory	Technology	Single channel DDR3 1066 MHz SDRAM	
	Max. Capacity	2 GB/4 GB	
	Socket	1 x 204 pin SODIMM (Non-ECC)	
Graphics	Controller	Embedded Gen3.5+ GFX Core, 400/640 MHz render clock frequency for N2600/D2550	
	VRAM	Shared system memory up to 224 MB SDRAM	
	VGA	Supports up to SXGA 1920 x 1200 @ 60 MHz	
	LVDS	LVDS1 Supports 24-bit dual channel : Max. resolution up to 2560 x 1600 (D2550); 1600 x 1200 (N2600). co-lay eDP port (optional) LVDS2 Supports 24-bit single channel up to 1400 x 800 on D2550; 18-bit single channel up to 1366x768 on N2600	
	HDMI	Support up to 1920 x 1200 @ 60 MHz	
	Dual Display	VGA+HDMI, VGA+LVDS, VGA+eDP (optional), Support extended mode and clone mode	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel 82574L/82583V co-lay GbE LAN2: Intel 82583V	
	Connector	RJ-45 x 2	
SATA	Max Data Transfer Rate	300 MB/s	
	Channel	2	
EIDE	Mode	None	
	Channel	None	
SSD	CFast CompactFlash	Support CFast Type I/II	
Rear I/O	CRT	1	
	HDMI	1	
	Ethernet	2	
	USB	4 (USB 2.0 compliant)	
	Audio	3 (Mic-in, Line-out, Line-in)	
	Serial	2 (1 of RS-232,1 of RS-232/422/485)	
	KB/MS	1	
	DC jack	1 (2.5 mm)	
Internal Connector	LVDS & Inverter	2	
	eDP	1 (optional, by removing LVDS1)	
	USB	2 (USB 2.0 compliant)	
	Serial	4 (RS-232), only COM6 supply 5V/12V	
	IDE	None	
	SATA	2	
	SATA PWR connector	2	
	CFast	1	
	Parallel	None	
	DIO	8-bit GPIO	
Watchdog Timer	Output	System reset	
	Interval	Programmable 1 ~ 255 sec/min	
Power	Power type	Single voltage 12V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Support AT/ATX mode	
	Typical power consumption	Windows IDOL: 17.8 W (Intel N2600 1.6 GHz processor/DDR3 1333 MHz 4 GB)	
Environment		Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")	

Block Diagram



Ordering Information

Part Number	CPU	SC/DC	GbE	COM	LVDS	TPM		Thermal solution
AIMB-214E-S6A1E	D2550	Dual core	2	6	2, LVDS1: 48-bit LVDS; LVDS2: 24-bit LVDS	Yes	1	Active
AIMB-214U-S6A1E	N2600	Dual core	2	6	2, LVDS1: 48-bit LVDS; LVDS2: 24-bit LVDS	No	(1)	Passive
AIMB-214L-S6A1E	D2550	Dual Core	1	2	1, LVDS2: 24-bit LVDS	No	None	Passiv

Note: Passive = fanless; Active = with fan

*( ) BOM options available on MP version

Packing List

Description	Quantity
SATA HDD cable	2
SATA power cable	2
1-to-4 serial ports cable kit, 35 cm	1
CPU cooler (For Atom D2550 only)	1
I/O port bracket	1
Startup manual	1
Driver CD	1

Optional Accessories

Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm
1757003995	Adapter AC100-240V 60W +12V/5A
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1960057364N001	AIMB-214E D2550 Fanless heatsink

I/O View



AIMB-214E-S6A1E
AIMB-214U-S6A1E

Embedded OS/API

OS/API	Part No.	Description
WES7	2070010955	WES7E SP1 x32 AIMB-214 V5.1 ENG ATIP
Software API	TBD	SUSI V3.0 SW API for AIMB-214 WIN7

AIMB-273

Intel® Core™ i7/i5/i3/Celeron uFC-PGA988 Mini-ITX with 2 DP/HDMI/LVDS/CRT, 2 COM, Dual LAN, PCIe x16



Windows 7 iManager SUSIAccess

CE FCC

Features

- Supports Intel® Core™ i7/i5/i3 mobile processor (PGA) with Intel QM77 chipset
- Supports triple display of 2 DP, HDMI, LVDS, CRT
- Supports PCIe x16 (Gen 3) and mini PCIe
- Supports Intel vPro, AMT 8.0, PECI 3.0, Software RAID 0,1,5,10, TPM 1.2 (optional)
- Supports iManager, SUSIAccess and Embedded Software APIs

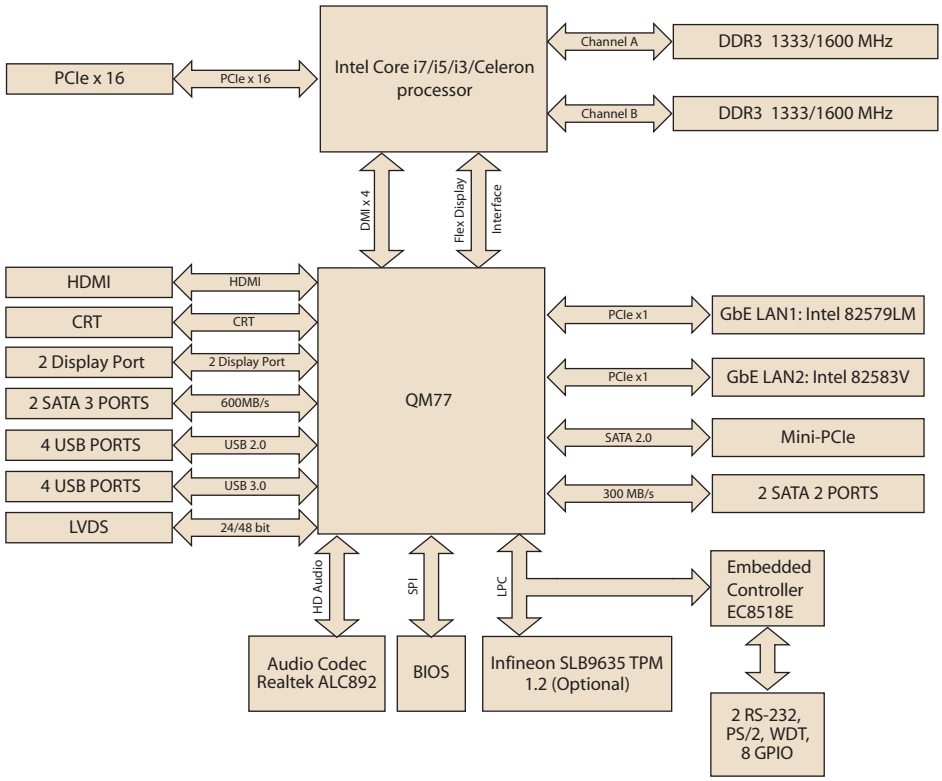
Software APIs: SMBus, H/W Monitor, Watchdog, GPIO, Brightness

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Core i7-3610QE	Intel Core i7-2710QE	Core i5-3610ME	Core i5-2510E	Core i3-3120ME	Core i3-2330E	Celeron B810
	Core Number	4	4	2	2	2	2	2
	Max Speed	2.3 GHz	2.1 GHz	2.7GHz	2.5 GHz	2.4GHz	2.2 GHz	1.6 GHz
	L3 Cache	6 MB	6 MB	3MB	3 MB	3MB	3 MB	2 MB
	Chipset	QM77						
	BIOS	AMI EFI 64 Mbit SPI						
Expansion Slot	PCI	-						
	Mini-PCIe	1						
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot						
Memory	Technology	Dual Channel DDR3 1333/1600 MHz SDRAM						
	Max. Capacity	16 GB						
	Socket	2 x 204 PIN DDR3 SODIMM						
Graphics	Controller	Integrated Gfx Gen 7, supports DirectX11, OpenGL 3.1 and OpenCL 1.1						
	VRAM	Shared system memory, 2 GB and above, total system memory shared 1 GB maximum video memory						
	CRT	Yes, supports max. resolution 2048 x 1536						
	LVDS	Single channel 24-bit/dual channel 48-bit LVDS, supports max resolution 1920 x 1080						
	HDMI	Supports HDMI 1.4, 1650 Mbps/channel with 165 MHz						
	Triple Display	DP+LVDS+HDMI, DP+DP+HDMI, DP+DP+LVDS, DP+CRT+HDMI (The Celeron B810 processor doesn't support triple display)						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	GbE LAN1: Intel 82579LM, LAN2: Intel 82583V						
	Connector	RJ-45 x 2						
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)/ 300 MB/s (SATA 2.0)						
	Channel	2/2						
Rear I/O	CRT	1						
	HDMI	1						
	Display Port	2						
	Ethernet	2						
	USB	4 (USB 3.0 compliant)						
	Audio	3 (Mic-in, Line-out, Line-in)						
	Serial	-						
	PS/2	2 (1 x keyboard and 1 x mouse)						
Internal Connector	USB	4 (USB 2.0 compliant)						
	LVDS/inverter	1						
	Serial	2 (RS-232, COM2 with 5 V/12 V)						
	IDE	-						
	SATA	2 (SATA 3.0), 2 (SATA 2.0)						
	Mini-PCIe	1						
	CFast	1						
	Parallel	-						
	IrDA	-						
	GPIO	8-bit						
Watchdog Timer	Output	System reset						
	Interval	Programmable 1 ~ 255 sec/min						
Power Requirements	Power On	Intel Core i7 -3610QE 2.30GHz processor/DDR3-1333MHz 4G x2/16G SQFlash						
		5 V	3.3 V	12 V		5 Vsb		-12 V
		3.42 A	1.1 A	1.19 A		0.5 A		0.07A
Environment		Operating			Non-Operating			
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution			-20 ~ 70° C (-4 ~ 158° F)			
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")						

Block Diagram



Ordering Information

Part Number	Chipset	DP	CRT	LVDS	HDMI	GbE LAN	COM
AIMB-273G2-00A1E	QM77	2	1	1	1	2	2

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1703150102	SATA power cable	2
1960051292N001	CPU cooler	1
1960019192T100	I/O port bracket	1
20060273010	Startup manual	1
20660273000	Driver CD	1

I/O View



AIMB-273G2-00A1E

Optional Accessories

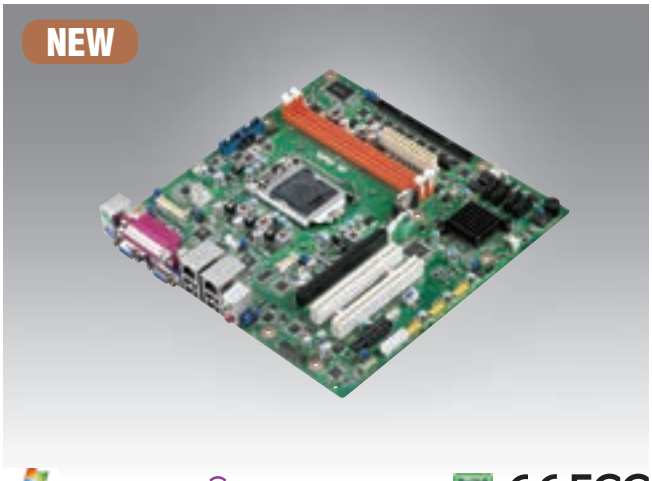
Part Number	Description
1700003195	USB cable with two ports, 17.5 cm
1700002204	USB cable with two ports, 27 cm
1700008461	USB cable with four ports, 30.5 cm

Embedded OS/API

OS/API	Part number	Description
Win XPE	2070011021	XPE WES 2009
WES7	2070011359	Windows 7 Embedded English version
WIN XPE	2070011440	XPE WES2009 with JPN/TC/SC/ENG

AIMB-501

Intel® Core™ i7/i5/i3 LGA1155 MicroATX with CRT/DVI/LVDS, 10 COM, 10 USB 2.0, Dual LAN, and DDR3



Quiet SUSIAccess

CE FCC

Features

- Supports Intel® Core™ i7/i5/i3 processor with H61 chipset
- Two DIMM sockets support up to 16 GB DDR3 1600/1333 MHz SDRAM
- Supports dual display of VGA, DVI, LVDS and two GbE LAN
- Supports 10 COM, LPT, TPM 1.2 (Optional)
- Supports 10 USB 2.0 or 2 USB 3.0 and 8 USB 2.0
- Supports SUSIAccess, McAfee, Acronis and Embedded Software APIs

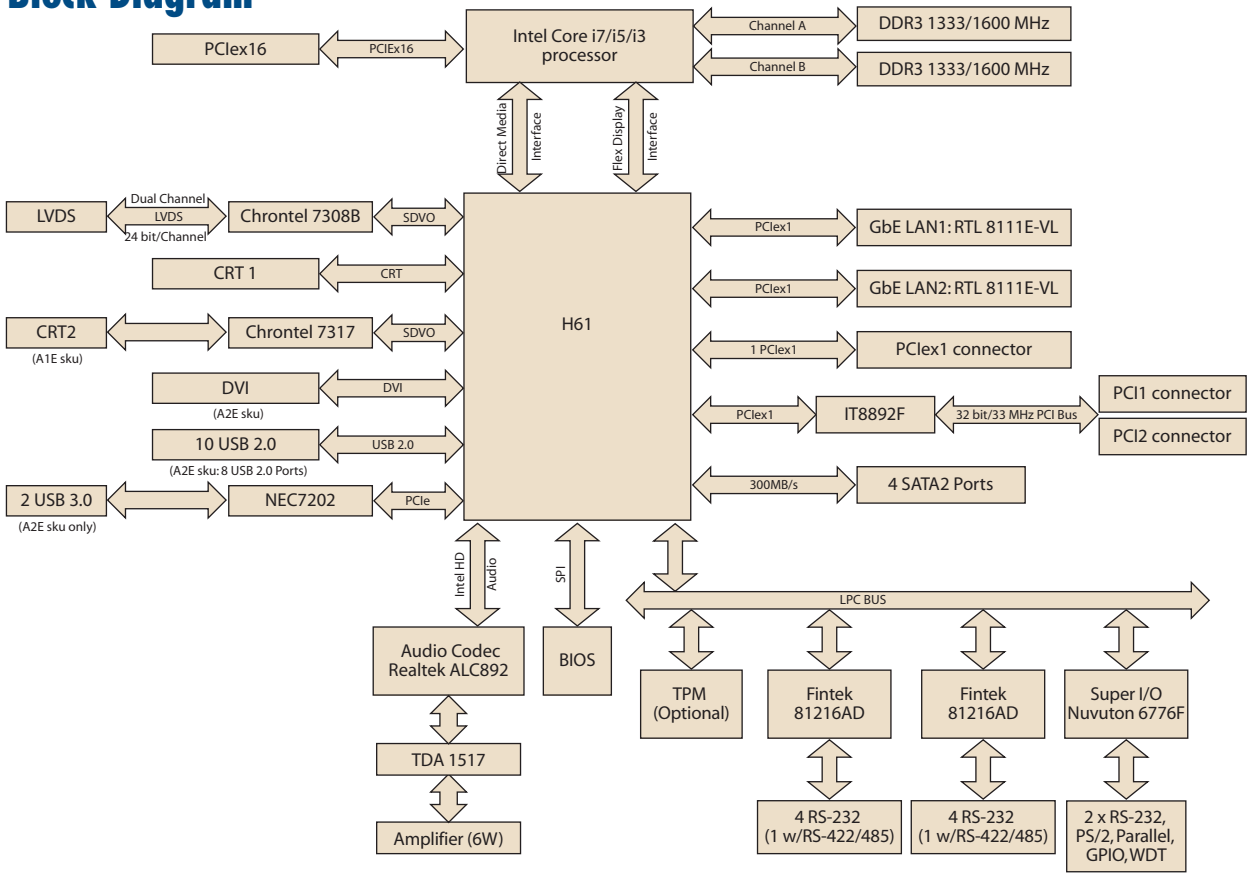
Software APIs: SMBus, H/W Monitor, Watchdog, GPIO

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Core i7-3770	Intel Core i5-3550S	Intel Core i3-3220	Intel Core i7-2600	Intel Core i5-2400	Intel Core i3-2120	Pentium G850	Celeron G540
	Core Number	4	4	2	4	4	2	2	2
	Max. Speed	3.4 GHz	3.0 GHz	3.3 GHz	3.4 GHz	3.1 GHz	3.3 GHz	2.9 GHz	2.50 GHz
	Integrated Graphics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	L3 Cache	8 MB	6 MB	3 MB	8 MB	6 MB	3 MB	3 MB	2 MB
	Chipset	H61							
	BIOS	AMI EFI 64 Mbit SPI							
Expansion Slot	PCI	32-bit/33 MHz, 2 slots							
	PCIe x 1 (Gen2)	500MB/s per direction, 1 slot							
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot							
Memory	Technology	Dual Channel DDR3 1600/1333 MHz SDRAM							
	Max. Capacity	16 GB							
	Socket	2 x 240-pin DIMM							
Graphics	Controller	Intel HD Graphics							
	VRAM	1GB maximum shared memory with 2GB and above system memory installed							
	LVDS	Supports 18/24bit, 36/48bit single/dual channel							
	CRT	Yes, supports max. resolution 2048 x 1536							
	DVI	1 (A2E sku)							
	Dual Display	CRT1+LVDS, CRT1+DVI; CRT1+CRT2							
Ethernet	Interface	10/100/1000 Mbps							
	Controller	GbE LAN: Realtek 8111E							
	Connector	RJ45 X 2							
SATA	Max Data Transfer Rate	300 MB/s (SATA 2.0)							
	Channel	4							
Rear I/O	CRT	2							
	DVI	1 (A2E sku)							
	Ethernet	2							
	USB	4 (A1E: USB 2.0 x 4. A2E: USB 2.0 x 2 /USB 3.0 x 2)							
	Parallel	1							
	Audio	2 (Mic-in, Line-out)							
	Serial	-							
	PS/2	2 (1 x keyboard and 1 x mouse)							
Internal Connector	USB	6 (USB 2.0 compliant)							
	Serial	10 (8 x RS-232. COM 3/7 supports RS-232/422/485, auto flow control. And COM1/2 with selectable 5V/12V)							
	IDE	-							
	SATA	4 x 300 MB/s (SATA 2.0)							
	LVDS & Inverter	1							
	IrDA	-							
	GPIO	8-bit GPIO							
Watchdog Timer	Output	System reset							
	Interval	Programmable 1 ~ 255 sec/min							
Power Requirements		Intel Core i7-2600 3.4GHz, 4GB DDR3 1333MHz x 2pcs							
	Power On	+3.3 V	+12 V	-12 V	5 VSB	5 V			
		1.05 A	6.66 A	0.13 A	0.49 A	2.25 A			
Environment		Operating						Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution						-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6")							

Block Diagram



Ordering Information

Part Number	PCH	Memory	VGA	DVI	LVDS	USB 3.0/2.0	SATA 2.0	COM	TPM	LAN	PCIe x 16	PCIe x 1	PCI slot	AMP
AIMB-501G2-KSA1E	H61	Non ECC	2	(1)	1	0 /10	4	10	(1)	2	1	1	2	Yes (6W)
AIMB-501VG-KSA1E	H61	Non ECC	1	(1)	0	0 /10	4	10	(1)	1	1	1	0	Yes (6W)
AIMB-501L-KSA1E	H61	Non ECC	1	0	0	0 /10	4	2	(1)	1	1	1	0	No
AIMB-501G2-KSA2E	H61	Non ECC	1	1	1	2 / 8	4	10	(1)	2	1	1	2	Yes (6W)

() not populated on MP version.

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card with 1 PCIe x16 and 2 PCI expansion
AIMB-RF10F-01A1E	1U riser card with 1 PCI e x 16 expansion

Packing List

Description	Quantity
Serial ATA HDD data cable	2
Com port cable kit	3
I/O port bracket	1
Startup manual	1
Driver CD	1

I/O View



AIMB-501G2-KSA1E AIMB-501VG/L-KSA1E AIMB-501G2-KSA2E

Optional Accessories

Part Number	Description
1700002204	USB cable with dual ports, 27 cm
1700008822	DVI cable
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm

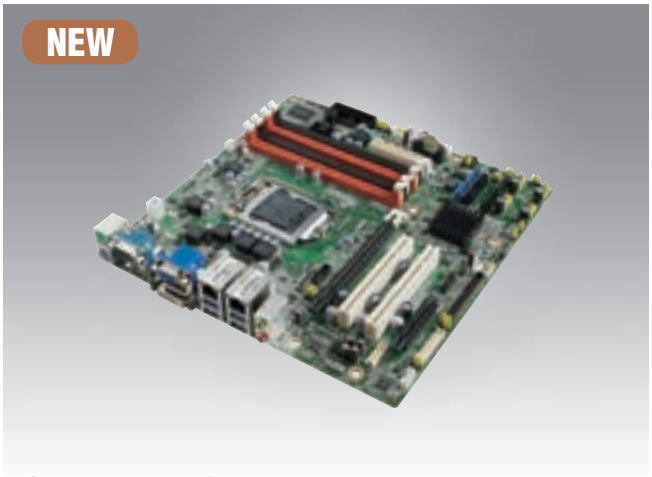
Note: Purchasing AIMB-501's proprietary CPU cooler from Advantech is a must; other brands of CPU coolers are NOT compatible with AIMB-501

Embedded OS/API

OS/API	Part No	Description
WIN XPE WES7	2070011383	Image XPE WES2009 AIMB-501KS V4.3 ENG
	2070011384	Image WES7E AIMB-501KS V5.1.2 ENG

AIMB-582

Intel® Xeon® E3/ Core™ i7/i5/i3 LGA1155 MicroATX with CRT/DVI/eDP/LVDS/DP, 6 COM, Dual LAN, DDR3 and SATAIII



Windows 7 Quiet SUSIAccess CE FCC

Features

- Supports Intel® Xeon®/ Core™ i7/i5/i3 processor with Q77/C216 chipset
- Four DIMM sockets support up to 32 GB DDR3 1333/1600 MHz SDRAM
- Supports CRT, DVI, LVDS, DP, eDP (optional) and dual GbE LAN
- Supports Intel AMT 8.0 and Intel vPro competent
- Supports PCIE Gen3, USB 3.0, Software RAID 0,1,5,10, TPM 1.2 (Optional)
- Supports SUSIAccess and Embedded Software APIs

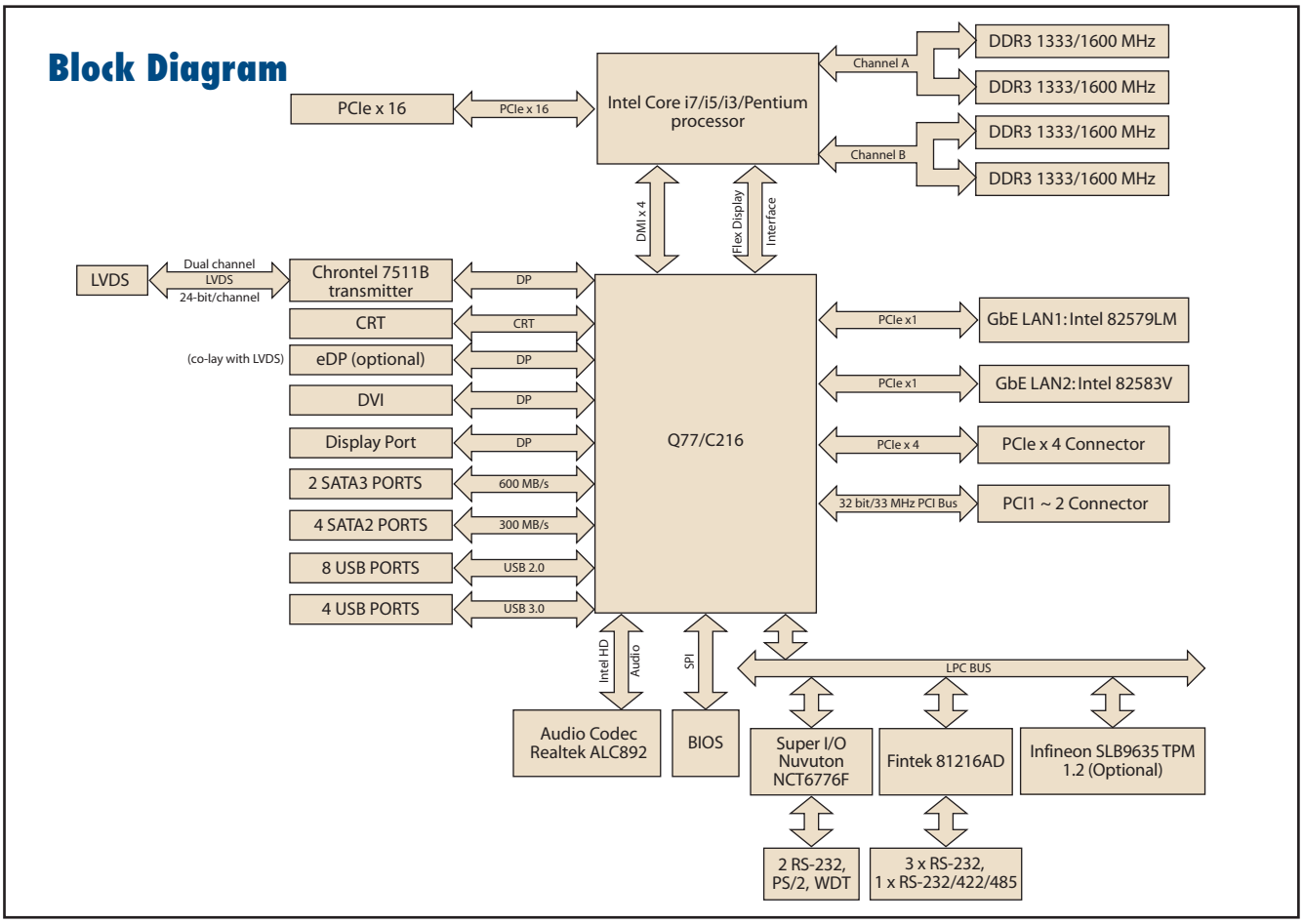
Software APIs: SMBus, H/W Monitor, Watchdog, GPIO

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	Intel Xeon E3-1275v2	Intel Xeon E3-1275	Intel Xeon E3-1225v2	Intel Xeon E3-1225	Intel Core i3-2120	Intel Pentium G850	Intel Core i7-3770	Intel Core i7-2600	Intel Core i5-3550S	Intel Core i3-3220	Intel Core i5-2400	Intel Celeron G540
	Core Number	4	4	4	4	2	2	4	4	4	2	4	2
	Max. Speed	3.5 GHz	3.4 GHz	3.2 GHz	3.1 GHz	3.3 GHz	2.9 GHz	3.4GHz	3.4 GHz	3.0GHz	3.3 GHz	3.1 GHz	2.5 GHz
	Integrated Graphic	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	L3 Cache	8 MB	8 MB	8 MB	6 MB	3 MB	3 MB	8 MB	8 MB	6 MB	3 MB	6 MB	2 MB
	Supports Model	WG2	WG2	WG2	WG2	WG2/QG2	WG2/QG2	QG2	QG2	QG2	QG2	QG2	QG2
	Chipset	Q77/C216											
	BIOS	AMI EFI 64 Mbit SPI											
Expansion Slot	PCI	32-bit/33 MHz, 2 slots											
	PCIe x4 (Gen2)	2.0 GB/s per direction, 1 slot											
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot											
Memory	Technology	Dual Channel DDR3 1333/1600 MHz SDRAM											
	Max. Capacity	32 GB											
	Socket	4 x 240-pin DIMM											
Graphics	Controller	Intel HD Graphics											
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed											
	LVDS	Single channel 24-bit/dual channel 48-bit LVDS											
	CRT	Yes, supports max resolution 2048 x 1536 at 60 Hz											
	DVI	Yes, supports max. resolution 1920 x 1200 at 60 Hz											
	eDP	Yes, with internal pin header, supports max. resolution 1920 x 1200 at 60 Hz											
	Display Port	Yes, supports max resolution 2560 x 1600 at 60 Hz											
	Triple Display	CRT+eDP (or LVDS)+DP, CRT+eDP (or LVDS)+ DVI											
	Dual Display	CRT+eDP (or LVDS), CRT+DVI, eDP (or LVDS)+ DVI											
Ethernet	Interface	10/100/1000 Mbps											
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V											
	Connector	RJ-45 x 2											
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)/ 300 MB/s (SATA 2.0)											
	Channel	2/4											
Rear I/O	CRT	1											
	DVI	1											
	Display Port	1											
	Ethernet	2											
	USB	4 (4 USB 3.0)											
	Audio	2 (Mic-in, Line-out)											
	Serial	1 (RS-232)											
	PS/2	2 (1 x keyboard and 1 x mouse)											
Internal Connector	USB	8 (USB 2.0 compliant)											
	Serial	5 (4 x RS-232, 1 x RS-232/422/485 to supports auto flow control)											
	IDE	-											
	SATA	2 x 600 MB/s (SATA 3.0)/4 x 300 MB/s (SATA 2.0)											
	LVDS & Inverter	1 (default)											
	Extended Display Port (eDP)	1 (optional by removing LVDS)											
	Parallel	1											
	JTAG	1											
	IrDA	-											
	GPIO	8-bit GPIO											
Watchdog Timer	Output	System reset											
	Interval	Programmable 1 ~ 255 sec/min											
Power Requirements		Intel Core i7-3770 3.4 GHz, 8 GB DDR3 1600 MHz x 4pcs											
	Power On	+5 V		3.3 V		12 V		5 Vsb		-12 V			
		2.69 A		0.93 A		5.3 A		0.0 A		0.52 A			
Environment		Operating											
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution											
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6")											

Block Diagram



Ordering Information

Part Number	Chipset	Memory	USB 3.0	CRT	DP	DVI	LVDS/eDP	USB	COM	TPM	GbE LAN
AIMB-582QG2-00A1E	Q77	Non-ECC	4	Yes	1	1	1/(1)	8	6	(1)	2
AIMB-582WG2-00A1E	C216	ECC/Non-ECC	4	Yes	1	1	1/(1)	8	6	(1)	2
AIMB-582QG2-TPA1E	Q77	Non-ECC	4	Yes	1	1	1/(1)	8	6	1	2

*() BOM options available on MP version.

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card for 1 PCIe x 16 abd 2 PCI expansion
AIMB-RF10F-01A1E	1U riser card with 1 PCI e x 16 expansion
AIMB-RP3P8-12A1E	2U riser card with 2 PCIe x 8 & 1 PCI slots expansion (For WG2 Sku)

Note: AIMB-RP3P8-12A1E is not compatible with ACP-2010MB/2320MB chassis unless special bracket changed to 1950014302N001.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1703150102	SATA power cable	2
1960056089T000	I/O port braket	1
2002058100	Startup manual	1
2062058100	Driver CD	1

I/O View



AIMB-582QG2-00A1E
AIMB-582WG2-00A1E
AIMB-582QG2-TPA1E

Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis, for CPU TDP ≦ 95W, 4.72" (W) x 4.72" (L)X 3.03" (H)
1960047831N001	LGA1156 CPU cooler for 2U and backplane version of chassis, for CPU TDP ≦ 95W, 3.27" (W) x 3.27" (L)X 2.17" (H)
1960049408N001	LGA1156 CPU cooler for 1U and wallmount chassis, for CPU TDP ≦ 73W, 3.35" (W) x 3.35" (L)X 1.02" (H)
1700000446	Printer port cable kit
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm
1950014302N001	Special bracket for riser card AIMB-RP3P8-12A1E

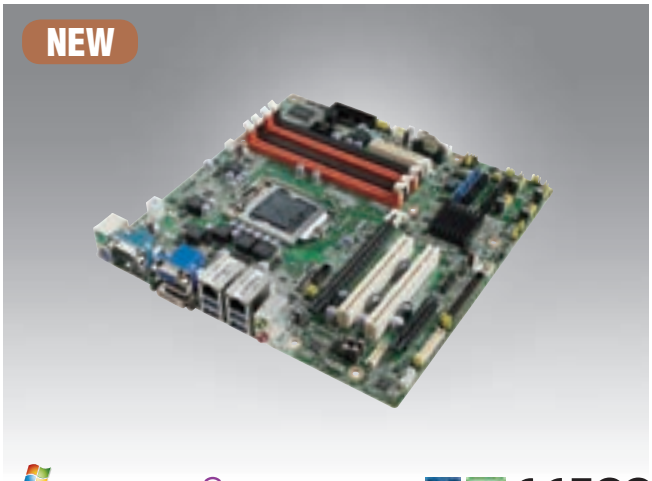
Note: Purchasing AIMB-582's proprietary CPU cooler from Advantech is a must, other brand's CPU cooler are NOT compatible with AIMB-582.

Embedded OS/API

OS/API	Part No.	Description
Win XPE	2070011427	Image XPE WES2009 AIMB-582QG2-00A1E V4.1 ENG
WES 7	2070011428	Image WES7E AIMB-582QG2 V5.1.2 4Muti
WES 7	2070011429	Image WES7E AIMB-582QG2 64bit V5.6.4 Eng/Chs/Jpn

AIMB-584

Intel® Xeon® E3/ Core™ i7/i5/i3 LGA1150 MicroATX with CRT/DVI/eDP/LVDS/DP, 6 COM, Dual LAN, DDR3 and SATAIII



Windows Embedded Standard 7 | Quiet | SUSIAccess | CE FCC

Features

- Supports Intel® Xeon®/ Core™ i7/i5/i3 processor with Q87/C226 chipset
- Four DIMM sockets support up to 32 GB DDR3 1333/1600 MHz SDRAM
- Supports CRT, DVI, LVDS, DP, eDP (optional) display
- Supports Intel AMT 9.0 and Intel vPro competent
- Supports PCIE Gen3, USB 3.0, Software RAID 0,1,5,10, TPM 1.2 (Optional)
- Supports 6 x SATAIII and dual GbE LAN
- Supports SUSIAccess and Embedded Software APIs

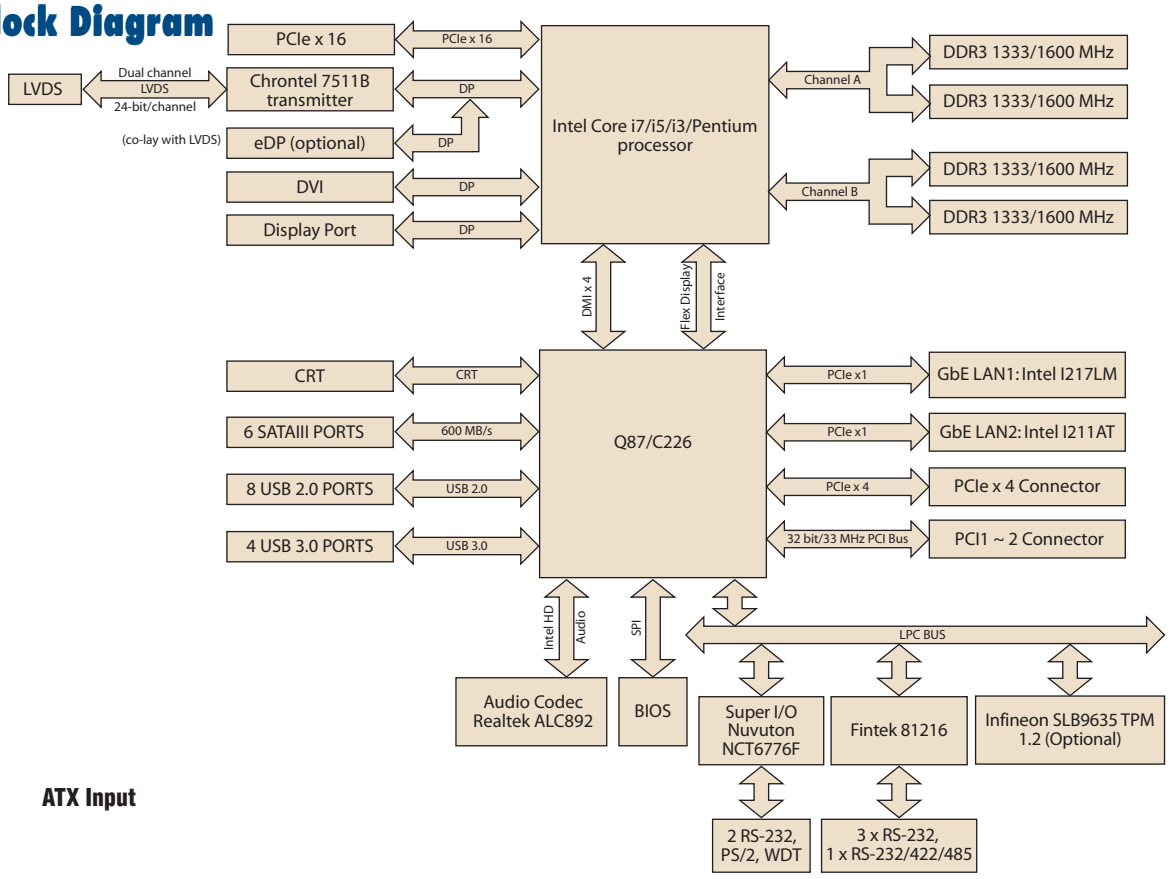
Software APIs: SMBus, H/W Monitor, Watchdog, GPIO

Utilities: BIOS flash, Monitoring

Specifications

Processor System	CPU	E3-1275 v3	E3-1225 v3	E3-1268L v3	i7-4770S / i7-4770TE	i5-4570S / i5-4570TE	i3-4330 / i3-4330TE	Pentium G3420	Pentium G3320TE
	Core Number	4	4	4	4 / 4	4 / 2	2 / 2	2	2
	Max. Speed	3.5GHz	3.2GHz	2.3GHz	3.1GHz / 2.3GHz	2.9GHz / 2.7GHz	3.5G / 2.4GHz	3.2 GHz	2.3 GHz
	Integrated Graphic	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	L3 Cache	8M	8M	8M	8M / 8M	6M / 4M	3M / 3M	3M	3M
	TDP (W)	95W	95W	45W	65W / 45W	65W / 35W	65W / 35W	65W	35W
	Supports Model	WG2	WG2	WG2/QG2	QG2	QG2/WG2 (i5-4570TE only)	WG2/QG2	WG2/QG2	WG2/QG2
	Chipset	Q87/C226							
	BIOS	AMI EFI 64 Mbit SPI							
Expansion Slot	PCI	32-bit/33 MHz, 2 slots							
	PCIe x4 (Gen2)	2.0 GB/s per direction, 1 slot							
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot							
Memory	Technology	Dual Channel DDR3 1333/1600 MHz SDRAM							
	Max. Capacity	32 GB							
	Socket	4 x 240-pin DIMM							
Graphics	Controller	Intel HD Graphics Supports DirectX11.1, OpenGL 3.2 and OpenCL 1.2							
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed							
	LVDS	Single channel 24-bit/dual channel 48-bit LVDS							
	CRT	Yes, supports max resolution 2048 x 1536 at 60 Hz							
	DVI	Yes, supports max. resolution 1920 x 1200 at 60 Hz							
	eDP	Yes, with internal pin header, supports max. resolution 1920 x 1200 at 60 Hz							
	Display Port	Yes, supports max resolution 2560 x 1600 at 60 Hz							
	Triple Display	CRT+eDP (or LVDS)+DP, CRT+eDP (or LVDS)+ DVI CRT+DP+DVI, DP+DVI+eDP (or LVDS)							
	Dual Display	CRT+eDP (or LVDS), CRT+DVI, eDP (or LVDS)+ DVI DP+DVI, DP+eDP (or LVDS)							
Ethernet	Interface	10/100/1000 Mbps							
	Controller	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT							
	Connector	RJ-45 x 2							
SATA	Max Data Transfer Rate	600 MB/s (SATA 3.0)							
	Channel	6							
Rear I/O	CRT	1							
	DVI	1							
	Display Port	1							
	Ethernet	2							
	USB	4 (4 USB 3.0)							
	Audio	2 (Mic-in, Line-out)							
	Serial	1 (RS-232)							
	PS/2	2 (1 x keyboard and 1 x mouse)							
Internal Connector	USB	8 (USB 2.0 compliant)							
	Serial	5 (4 x RS-232, 1 x RS-232/422/485 to support auto flow control)							
	IDE	-							
	SATA	6 x 600 MB/s (SATA 3.0)							
	LVDS & Inverter	1 (default)							
	Extended Display Port (eDP)	1 (optional by removing LVDS)							
	Parallel	1							
	JTAG	1							
	IrDA	-							
	GPIO	8-bit GPIO							
Watchdog Timer	Output	System reset							
	Interval	Programmable 1 ~ 255 sec/min							
Power Requirements		Intel Core i7-4770 3.1 GHz, 8 GB DDR3 1600 MHz x 4pcs							
	Power On	+5 V	3.3 V	12 V	5 Vsb	-12 V			
		2.22A	1.13A	5.18A	0A	0.49A			
Environment		Operating							
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution							
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6")							
Power	Input Mode	ATX input (Default)							

Block Diagram



Ordering Information

Part Number	Chipset	Memory	USB3.0/2.0	CRT	DP	DVI	LVDS/eDP	SATAIII	COM	TPM	GbE LAN
AIMB-584QG2-00A1E	Q87	Non-ECC	4/8	Yes	1	1	1(1)	6	6	(1)	2
AIMB-584WG2-00A1E	C226	ECC/Non-ECC	4/8	Yes	1	1	1(1)	6	6	(1)	2

*() BOM options available on MP version.

Riser Card

Part Number	Description
AIMB-RP10P-01A1E	1U riser card with 1 PCI expansion
AIMB-RP30P-03A1E	2U riser card with 3 PCI expansion
AIMB-RP3PF-21A1E	2U riser card for 1 PCIe x 16 abd 2 PCI expansion
AIMB-RF10F-01A1E	1U riser card with 1 PCI e x 16 expansion
AIMB-RP3P8-12A1E	2U riser card with 2 PCIe x 8 & 1 PCI slots expansion (For WG2 Sku)

Note: AIMB-RP3P8-12A1E is not compatible with ACP-2010MB/2320MB chassis unless special bracket changed to 1950014302N001.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	2
1703150102	SATA power cable	2
1960056089T000	I/O port braket	1
2002058400	Startup manual	1
2062058400	Driver CD	1

I/O View



AIMB-584QG2-00A1E
AIMB-584WG2-00A1E

Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1156 CPU cooler for 4U and wallmount chassis, for CPU TDP =< 95W, 4.72" (W) x 4.72" (L) x 3.03" (H)
1960047831N001	LGA1156 CPU cooler for 2U and backplane version of chassis, for CPU TDP =< 95W, 3.27" (W) x 3.27" (L) x 2.17" (H)
1960053207N001	LGA1155 CPU cooler for 2U and wallmount chassis, for CPU TDP =< 65W . D=3.66"(W) x 3.66"(L) x 1.81"(H)
1700018699	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm
1700000447	1-to-4 serial ports cable kit, 45cm
1701400181	1-to-4 serial ports cable kit, 18cm
1950014302N001	Special bracket for riser card AIMB-RP3P8-12A1E

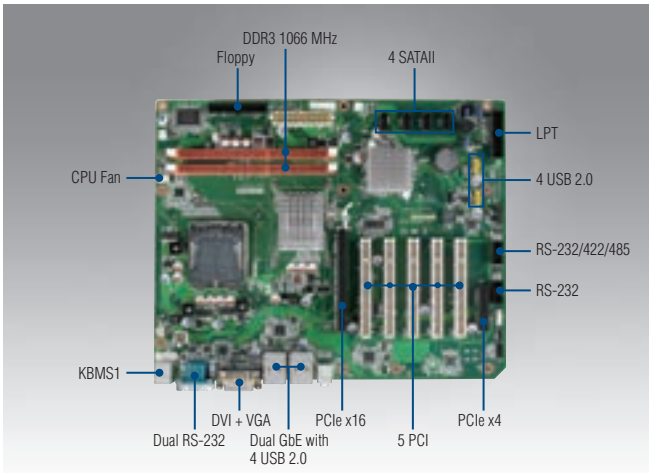
Note: Purchasing AIMB-584's proprietary CPU cooler from Advantech is a must, other brand's CPU cooler are NOT compatible with AIMB-584.

Embedded OS/API

OS/API	Part No.	Description
WES 7		Image WES7E 32 bit AIMB-584 ENG/TC/SC/JPN
		Image WES7E 32 bit AIMB-584 ENG/TC/SC/JPN
Software API		SUSI 3.0 SW API for AIMB-584 WIN 7

AIMB-767

LGA775 Intel® Core™2 Quad ATX with Dual VGA/DVI, 4 COM, Dual LAN



Features

- Intel® G41 chipset supports 800/1066/1333 MHz FSB
- Dual channel DDR3 800/1066 supports up to 8 GB
- Supports dual display, VGA and DVI-D
- Supports dual core and quad core processors with 45nm processing
- Supports SATA RAID 0,1,5,10
- Supports Embedded software APIs and utilities

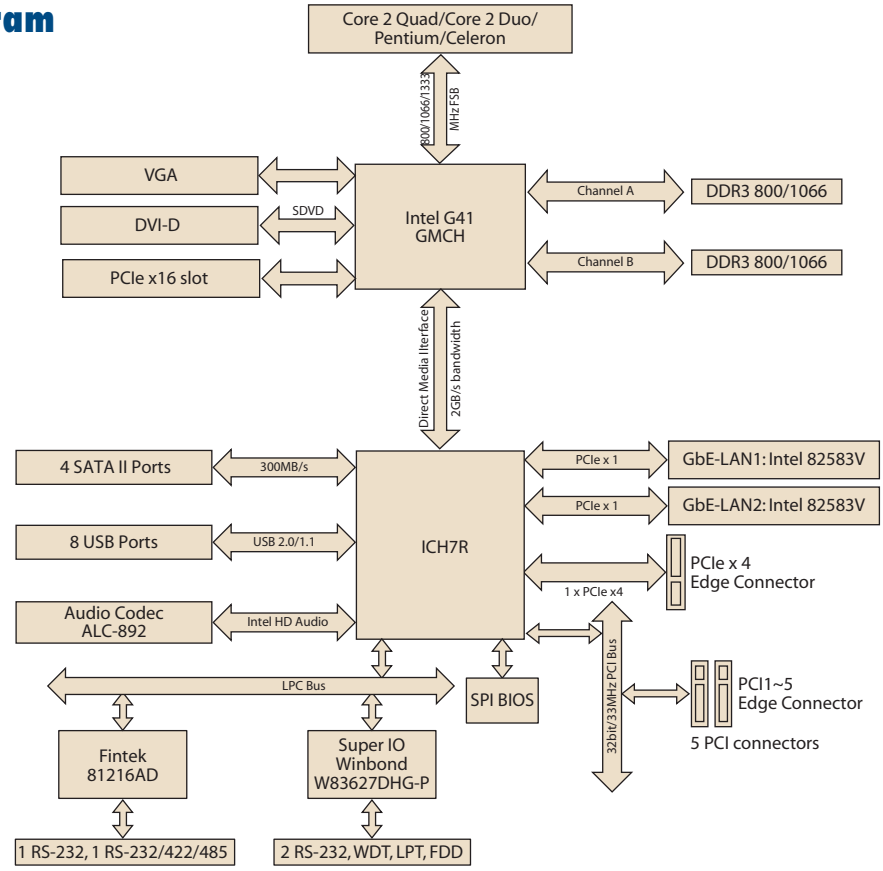
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Processor System	CPU (45nm/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium	Intel Celeron	
	Max. Speed	Q9650 3.0 GHz	E8500 3.16 GHz	E6500 2.93 GHz	E1500 2.2 GHz	
	L2 Cache	12 MB	6 MB	8 MB	512 KB	
	Chipset	Intel G41 + ICH7R				
	BIOS	AMI 16 Mbit, SPI				
	Front Side Bus	800/1066/1333 MHz				
Expansion Slot	PCIe x16	4.0 GB/s per direction, 1 slot				
	PCIe x4	1 GB/s per direction, 1 slot				
	PCI	32-bit/33 MHz, 5 slots				
Memory	Technology	Dual channel DDR3 800/1066 MHz				
	Max. Capacity	8 GB				
	Socket	2 x 240-pin DIMM				
Graphics	Embedded	Intel GMA X4500 shared 352 MB system memory				
	DVI	Yes (If PCIe x16 slot is used, DVI is automatically disabled)				
	Dual Display	VGA + DVI				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel 82583V, GbE LAN2: Intel 82583V				
	Connector	RJ-45 x 2				
SATA II	Max. Data Transfer Rate	300 MB/s				
	Channel	4				
Rear I/O	VGA	1				
	DVI	1				
	Ethernet	2				
	USB	4				
	Audio	2 (Line-out, Mic-in)				
	Serial	2 (2 x RS-232)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Internal Connectors	USB	4				
	Serial	2 (1 x RS-232/422/485 with auto-flow control)				
	Parallel	1				
	SATA	4				
	FDD	1				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec				
Power Requirement	Power On	Intel Core 2 Quad Q9400 2.66 GHz FSB 1333 MHz, 2 x 2 GB DDR3 1066 SDRAM				
		3.3 V	5 V	12 V	5 Vsb	-12 V
		0.28 A	3.12 A	2.52 A	0.6 A	0.24 A
Environment		Operating		Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)		
Physical Characteristics	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Display	GbE LAN	SW RAID	PCIe x16	PCIe x4
AIMB-767G2-00A2E	G41/ICH7R	VGA/DVI	2	Yes	1	1

Riser Card

Part Number	Description
AIMB-RP3PF-21A1E	2U riser card with 1 PCIe x 16 & 2 PCI slot expansion
AIMB-RP30P-03A1E	2U riser card for 3 PCI expansion
AIMB-RP10P-01A1E	1U riser card for 1 PCI expansion

Bracket View



AIMB-767G2-00A2E

Packing List

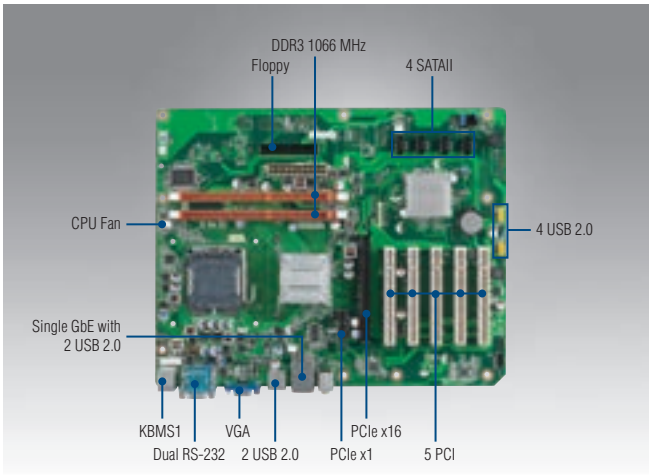
Description	Quantity
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
COM port cable kit	x 1
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler for 4U chassis
1960022033T000	LGA775 CPU cooler for 2U chassis
1700008461	USB cable with four ports, 30.5 cm
1700002204	USB cable with dual ports, 27 cm
1700003195	USB cable with dual ports, 17.5 cm
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1700340640	FDD cable
1960048353T000	I/O port bracket for 1U chassis

AIMB-769

LGA775 Intel® Core™2 Quad ATX with VGA, 2 COM, Single LAN



Features

- Intel® G41 chipset supports 800/1066/1333 MHz FSB
- Dual channel DDR3 800/1066 supports up to 8 GB
- Chipset integraged VGA
- Supports dual core and quad core processors with 45 nm processing
- Supports single 10/100/1000 Mbps Ethernet via dedicated PCIe x1 bus
- Supports Embedded Software APIs and Utilities

Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

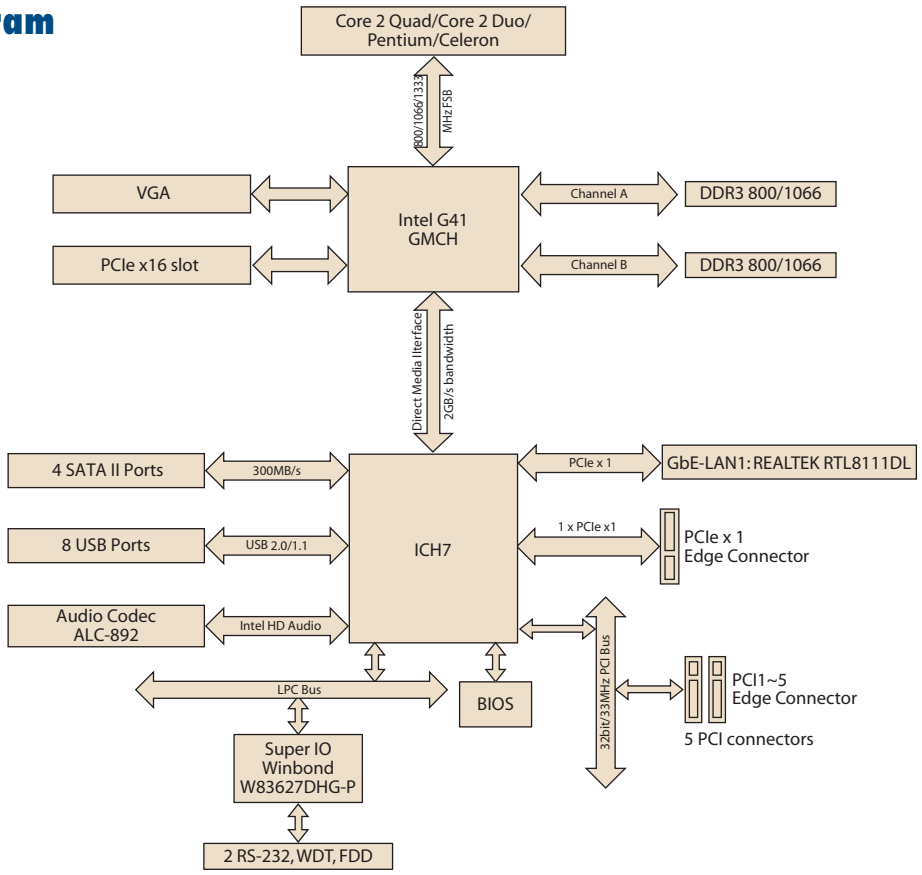
SUSIAccess Remote Device Management

CE FCC

Specifications

Processor System	CPU (45nm/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium	Intel Celeron	
	Max. Speed	Q9650 3.0GHz	E8500 3.16 GHz	E6500 2.93 GHz	E1500 2.2 GHz	
	L2 Cache	12 MB	6 MB	8 MB	512 KB	
	Chipset	Intel G41 + ICH7				
	BIOS	AMI 16 Mbit, SPI				
	Front Side Bus	800/1066/1333 MHz				
Expansion Slot	PCIe x16	4.0 GB/s per direction, 1 slot				
	PCIe x1	250 MB/s per direction, 1 slot				
	PCI	32-bit/33 MHz, 5 slots				
Memory	Technology	Dual channel DDR3 800/1066 MHz				
	Max. Capacity	8 GB				
	Socket	2 x 240-pin DIMM				
Graphics	Embedded	Intel GMA X4500 shared 352 MB system memory				
	Add-on	PCIe x16 slot				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	GbE LAN: REALTEK RTL8111DL				
	Connector	RJ-45 x 1				
SATA II	Max. Data Transfer Rate	300 MB/s				
	Channel	4				
Rear I/O	VGA	1				
	Ethernet	1				
	USB	4				
	Audio	2 (Line-out, Mic-in)				
	Serial	2 (2 x RS-232 to support DC power on 9th pin)				
	PS/2	2 (1 x keyboard and 1 x mouse)				
Internal Connectors	USB	4				
	SATA	4				
	FDD	1				
	GPIO	8-bit				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec				
Power Requirements	Power On	Intel Core 2 Quad Q6600 2.4 GHz				
		3.3 V	5 V	12 V	5 Vsb	-12 V
		2.33 A	1.75 A	5.01 A	0.14 A	0.08 A
Environment		Operating		Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)		
Physical Characteristics	Dimensions (W x D)	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Display	GbE LAN	PCIe x16	PCIe x1
AIMB-769VG-00A1E	G41/ICH7	VGA	1	1	1

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card for 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card for 3 PCI expansion

Bracket View



AIMB-769VG-00A1E

Packing List

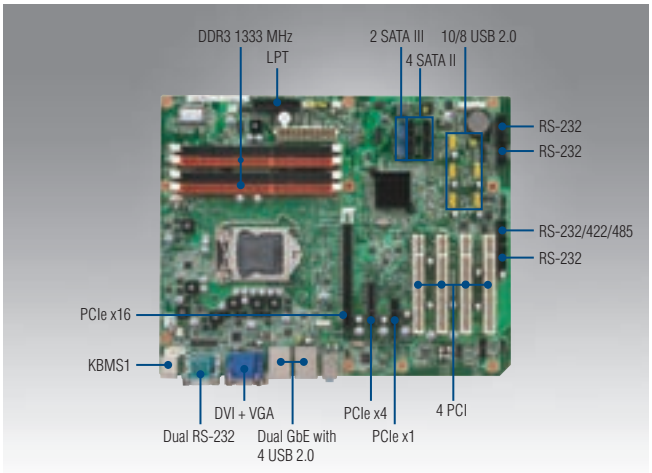
Description	Quantity
Serial ATA HDD data cable	x 2
Serial ATA HDD power cable	x 2
I/O port bracket	x 1
Startup manual	x 1
Utility CD	x 1

Optional Accessories

Part Number	Description
1750000334	LGA775 CPU cooler for 4U chassis (115 W)
1960022033T000	LGA775 CPU cooler for 2U chassis
1700008461	USB cable with four ports (30.5 cm)
1700002204	USB cable with dual ports (27 cm)
1700003195	USB cable with dual ports (17.5 cm)
1960048353T000	I/O port bracket for 1U chassis

AIMB-781

LGA1155 2nd generation Intel® Core™ i7/i5/i3/ Pentium ATX with DVI/VGA, Dual Gigabit LAN, DDR3, SATA III



Features

- Supports Intel® Core™ i7/i5/i3/Pentium processor with Q67/B65 chipset
- Four DIMM sockets support up to 32 GB DDR3 1066/1333
- Supports dual display VGA/DVI and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT7.0
- Supports Advantech LPC modules of TPM and additional RS-232/422/485 ports

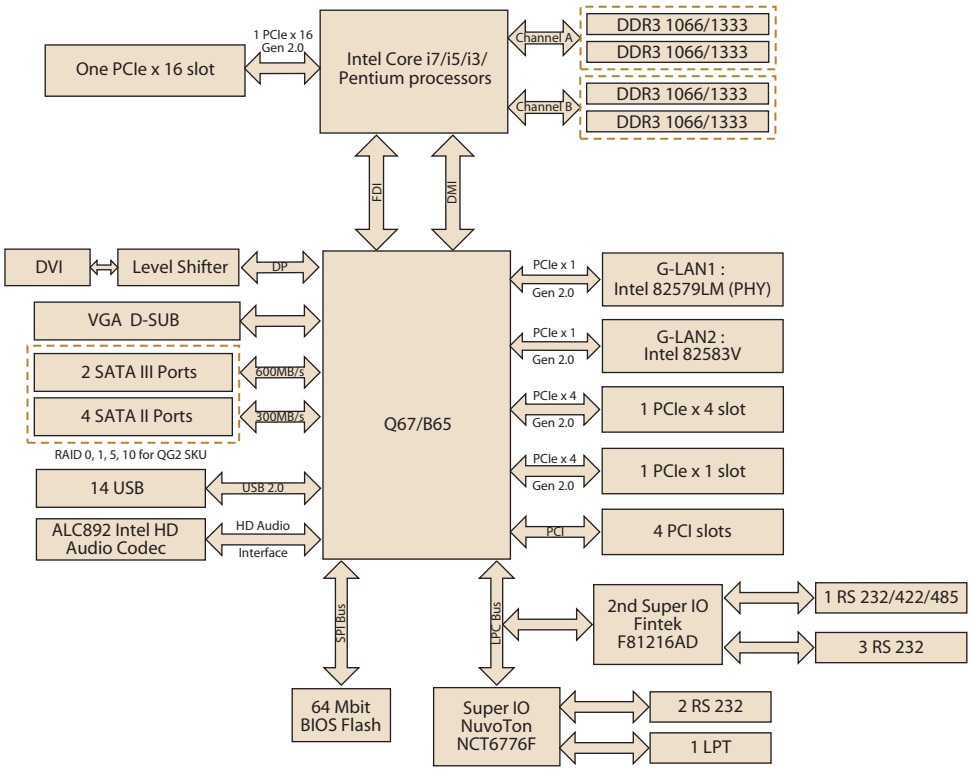
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Processor System	CPU	Core i7 2xxx	Core i5 2xxx	Core i3 2xxx	Pentium G8xx
	Speed	3.4 GHz	3.3 GHz	3.3 GHz	2.9 GHz
	L3 Cache	8MB	6MB	3MB	3MB
	Socket	LGA1155			
	Chipset	Q67 for QG2 version; B65 for QVG version			
	BIOS	AMI 64 Mbit SPI			
Expansion Slot	PCI	32-bit/33 MHz, 4 slots			
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot			
	PCIe x 4 (Gen2)	2.0 GB/s per direction, 1 slot			
	PCIe x16 (Gen2)	8 GB/s per direction, 1 slot			
Memory	Technology	Dual Channel DDR3 1066/1333			
	Max. Capacity	32 GB			
	Socket	4 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics			
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V for QG2 version			
	Connector	RJ-45 x 2 for QG2 version			
SATA	Max Data Transfer Rate	600 MB/s			
	Channel	2 for QG2 version (SATA1-2); 1 for QVG version (SATA1)			
	Max Data Transfer Rate	300 MB/s			
	Channel	4 for QG2 version (SATA3-6); 5 for QVG version (SATA2-6)			
Rear I/O	VGA	1			
	DVI	1 for QG2 version			
	Ethernet	2 for QG2 version; 1 for QVG version			
	USB	4			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connectors	USB	10 for QG2 version; 8 for QVG version (USB 2.0 compliant)			
	Serial	4 for QG2 (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)			
	SATA	6 (QG2 version: SATA II x4 and SATA III x2; QVG version : SATA II x5 and SATA III x1)			
	Parallel	1			
	IrDA	1			
	GPIO	8-bit			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec			
Power Requirement	Power On	Intel Core i5 2400 3.1 GHz; DDR3 4 GB x 4			
		3.3 V	5 V	12 V	5 Vsb
		1.02 A	2.89 A	5.88 A	0.5 A
Environment		Operating		Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")			

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-781QG2-00A1E	Q67	Non-ECC DDR3	VGA + DVI	14	6	2	Yes	2	Yes
AIMB-781QVG-00A1E	B65	Non-ECC DDR3	VGA	12	2	1	None	1	None

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R4301-03A1E*	2U riser card with 3 PCIe x1 expansion
AIMB-R431F-21A1E*	2U riser card with 1 PCIe x16 & 2 PCIe x1 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

* When installing AIMB-R4301-03A1E and AIMB-R431F-21A1E, please set PCIE STRAP as "4 PCIE x1" in chipset sector's south bridge page of BIOS menu.

Bracket View



AIMB-781QG2-00A1E



AIMB-781QVG-00A1E

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960050472T000	I/O port bracket	x 1
2002078110	Startup manual	x 1
2062078100	Driver CD	x 1

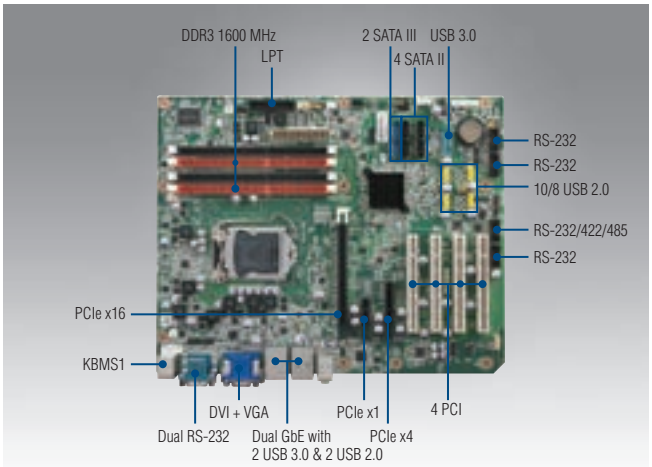
Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700020294-01	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

Note: Purchasing AIMB-781's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-781.
1960049408N001 supports up to 73W processor.

AIMB-782

LGA1155 3rd generation Intel® Core™ i7/i5/i3/ Pentium ATX with DVI/VGA, DDR3, SATA III



Features

- 3rd generation Intel® Core™ processor-based platform
- Supports Intel® Core™ i7/i5/i3/Pentium processor with Q77 chipset
- Four DIMM sockets support up to 32 GB DDR3 1066/1333/1600
- Supports dual display VGA/DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, AMT8.0, USB 3.0
- Supports Advantech LPC modules of TPM

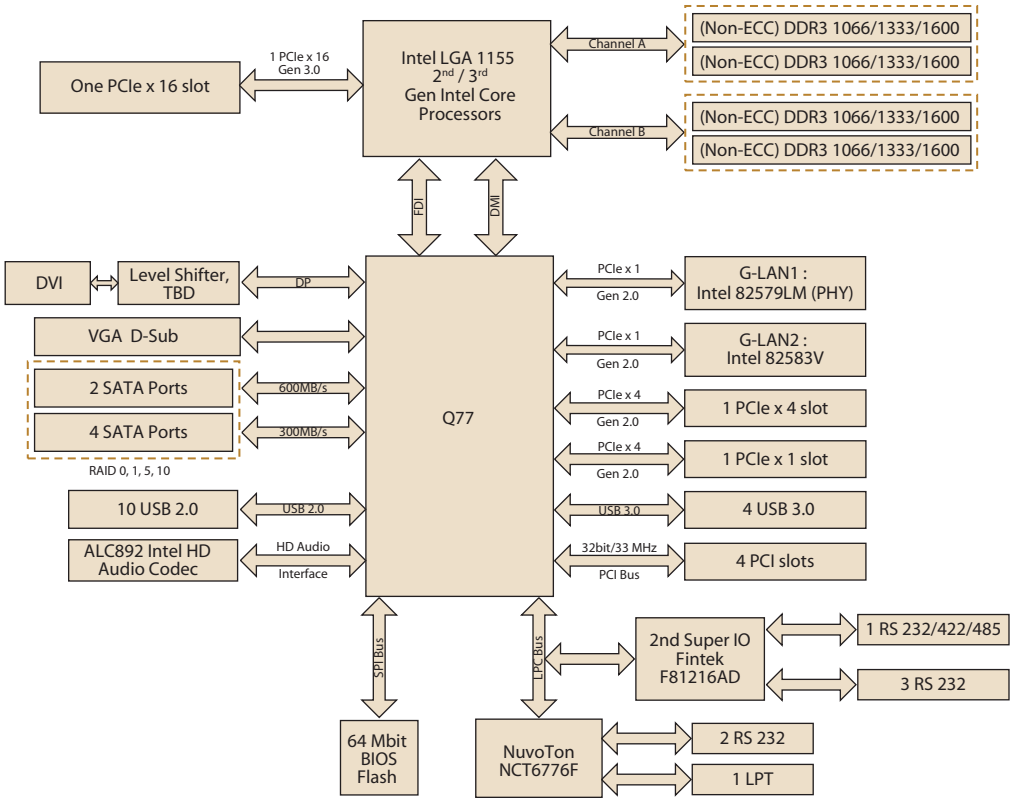
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Processor System	CPU	Core i7 3xxx	Core i5 3xxx	Core i3 3xxx	
	Speed	3.4 GHz	3.4/3.3 GHz	3.4 GHz	
	L3 Cache	8 MB	6 MB	3 MB	
	Socket	LGA1155			
	Chipset	Q77			
	BIOS	AMI 64 Mbit SPI			
Expansion Slot	PCI	32-bit/33 MHz, 4 slots			
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot			
	PCIe x 4 (Gen2)	2.0 GB/s per direction, 1 slot			
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot			
Memory	Technology	Dual Channel DDR3 1066/1333/1600 (1600 only supported by Core i7/i5/i3 3xxx series processors)			
	Max. Capacity	32 GB			
	Socket	4 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics 2000/2500/3000/4000 (Depends on processor)			
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82579LM, GbE LAN2: Intel 82583V			
	Connector	RJ-45 x 2			
SATA	Max Data Transfer Rate	600 MB/s			
	Channel	2			
	Max Data Transfer Rate	300 MB/s			
	Channel	4			
Rear I/O	VGA	1			
	DVI	1			
	Ethernet	2			
	USB	4 (Two USB 3.0)			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connectors	USB	10 (Two USB 3.0)			
	Serial	4 (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)			
	SATA	6 (SATA II x4 and SATA III x2)			
	Parallel	1			
	IrDA	1			
	GPIO	8-bit			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec			
Power Requirement	Power On	Intel Core i5 3550 3.0 GHz; DDR3 8G x 4			
		3.3 V	5 V	12 V	5 Vsb
		0.77 A	2.23 A	3.56 A	0.46 A
Environment		Operating		Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution		-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")			

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-782QG2-00A1E	Q77	Non-ECC DDR3	VGA + DVI	4	10	6	2	Yes	2	Yes

Riser Card

Part Number	Description
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
1960050472T000	I/O port bracket	x 1
2002078210	Startup manual	x 1
2062078200	Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700020277-01	Dual port USB 3.0 Cable with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700020294-01	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

Note: Purchasing AIMB-782's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-782.
1960049408N001 supports up to 73W processor.

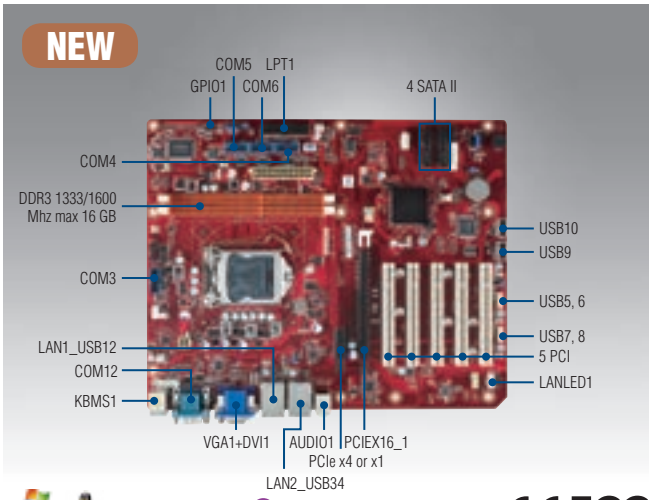
Bracket View



AIMB-782QG2-00A1E

AIMB-701

LGA1155 3rd Intel® Core™ i7/i5/i3/Pentium® ATX with DVI/VGA, Dual GbE LAN



Quiet SUSIAccess

CE FCC

Features

- Supports Intel® Core™ i7/i5/i3/Pentium® processor with H61 chipset
- Two DIMM sockets support up to 16 GB DDR3 1066/1333/1600
- Supports dual display VGA/DVI-D and dual GbE LAN
- Supports RS-232/422/485 with auto flow control
- Supports one PCIe x16 and 5 PCI expansion slots

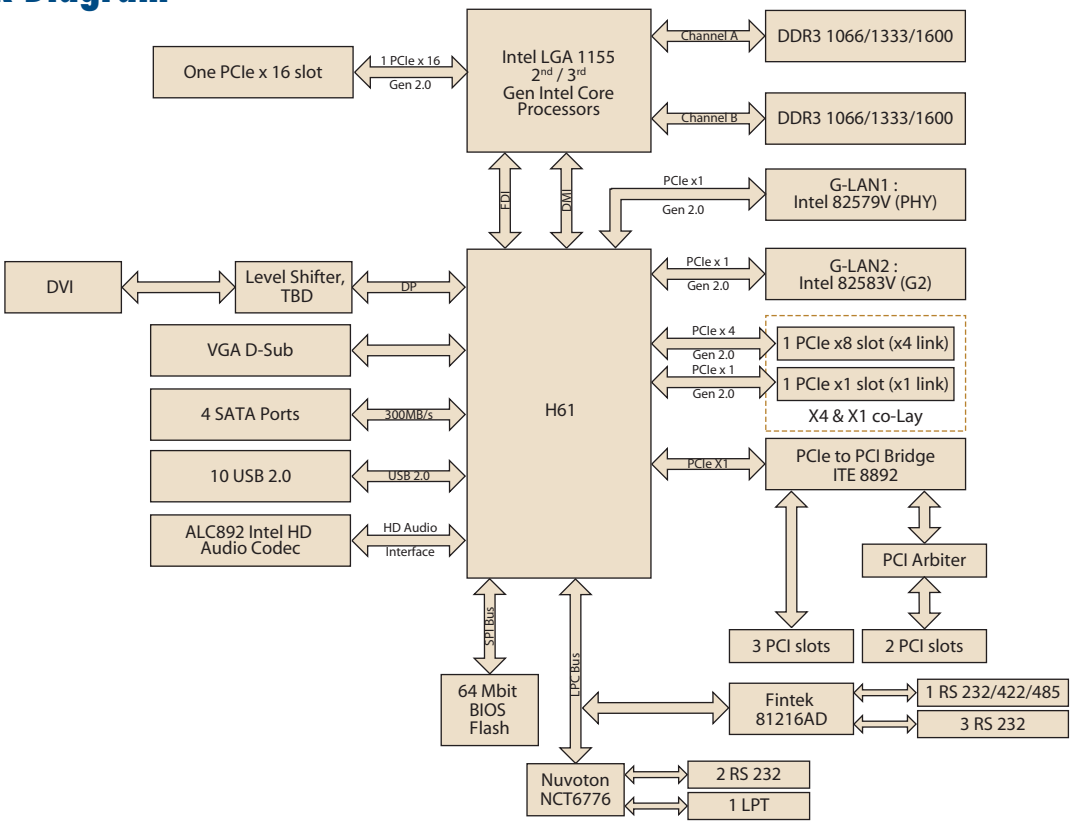
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Processor System	CPU	Core i7 3xxx	Core i5 3xxx	Core i3 3xxx	Pentium G8xx
	Speed	3.4 GHz	3.4/3.3 GHz	3.4 GHz	2.9 GHz
	L3 Cache	8 MB	6 MB	3 MB	3 MB
	Socket	LGA1155			
	Chipset	H61			
	BIOS	AMI 64 Mbit SPI			
Expansion Slot	PCI	32-bit/33 MHz, 5 slots			
	PCIe x 1 (Gen2)	500 MB/s, 1 slot for G2 SKU			
	PCIe x 4 (Gen2)	2.0 GB/s, 1 slot for VG SKU			
	PCIe x16 (Gen2)	8 GB/s, 1 slot			
Memory	Technology	Dual Channel DDR3 1066/1333/1600 (1600 is only supported by Core i7/i5/i3 3xxx series processors)			
	Max. Capacity	16 GB			
	Socket	2 x 240-pin DIMM			
Graphics	Controller	Intel HD Graphics			
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Intel 82579V, GbE LAN2: Intel 82583V			
	Connector	RJ-45 x 2			
SATA	Max Data Transfer Rate	300 MB/s			
	Channel	4			
Rear I/O	VGA	1			
	DVI	1 for G2 version			
	Ethernet	2 for G2 version; 1 for VG version			
	USB	4			
	Audio	2 (Mic-in, Line-out)			
	Serial	2 (RS-232)			
	PS/2	2 (1 x keyboard and 1 x mouse)			
Internal Connectors	USB	6			
	Serial	4 for G2 version (3 x RS-232, 1 x RS-232/422/485 with auto-flow control)			
	IDE	-			
	SATA	4			
	Parallel	1			
	IrDA	1			
	GPIO	8-bit			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec			
Power Requirement	Power On	Intel i7 2600 3.4 GHz processor, DDR3 4 GB x 2			
		3.3 V	5 V	12 V	5 Vsb
		1.01 A	1.08 A	5.48 A	1.76 A
Environment		Operating		Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F) (Depends on CPU speed and cooler solution)		-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")			

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 2.0	COM	GbE LAN	PCIe x1	PCIe x4	SW RAID
AIMB-701G2-00A1E	H61	Non-ECC	VGA + DVI	10	6	2	Yes	NA	NA
AIMB-701VG-00A1E	H61	Non-ECC	VGA	10	2	1	NA	Yes	NA

Riser Card

Part Number	Description
AIMB-R4104-01A1E	1U riser card with 1 PCIe x4 expansion
AIMB-R430P-03A2E	2U riser card with 3 PCI expansion

Bracket View



AIMB-701G2-00A1E



AIMB-701VG-00A1E

Packing List

Description	Quantity
SATA HDD cable	x 2
SATA power cable	x 2
I/O port bracket	x 1
Startup manual	x 1
Driver CD	x 1

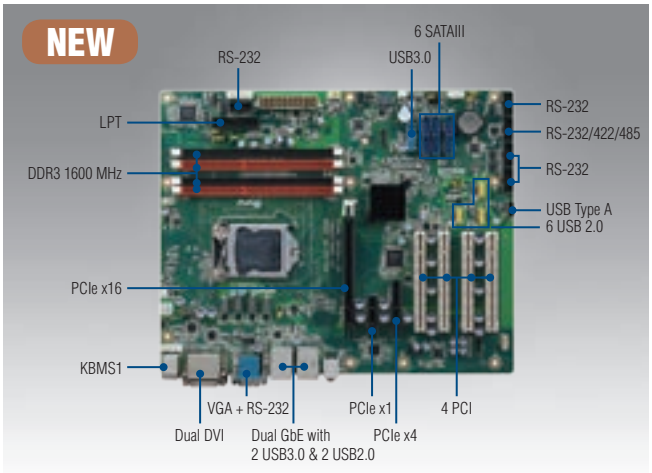
Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1960047669N001	LGA1155/1156 CPU cooler for 4U and wallmount chassis
1960047831N001	LGA1155/1156 CPU cooler for 2U and wallmount chassis
1960049408N001	LGA1155/1156 CPU cooler for 1U and wallmount chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
1960055954T000	I/O port bracket for 1U chassis

Note: Purchasing AIMB-701's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-701.

AIMB-784

LGA1150 4th Generation Intel® Core™ i7/i5/i3/ Pentium ATX with DVI/VGA, DDR3, SATA III



Features

- 4th generation Intel® Core™ processor-based platform
- Supports Intel® Core™ i7/i5/i3 processor with Q87 chipset
- Four DIMM sockets support up to 32 GB DDR3 1333/1600
- Supports triple display VGA/2 DVI-D and dual GbE LAN
- Supports SATA RAID 0, 1, 5, 10, USB 3.0
- Supports Intel vPro, iAMT 9.0 & TPM technologies
- Note: PCA-TPM-00A1E module is required to enable Intel vPro and TPM technologies

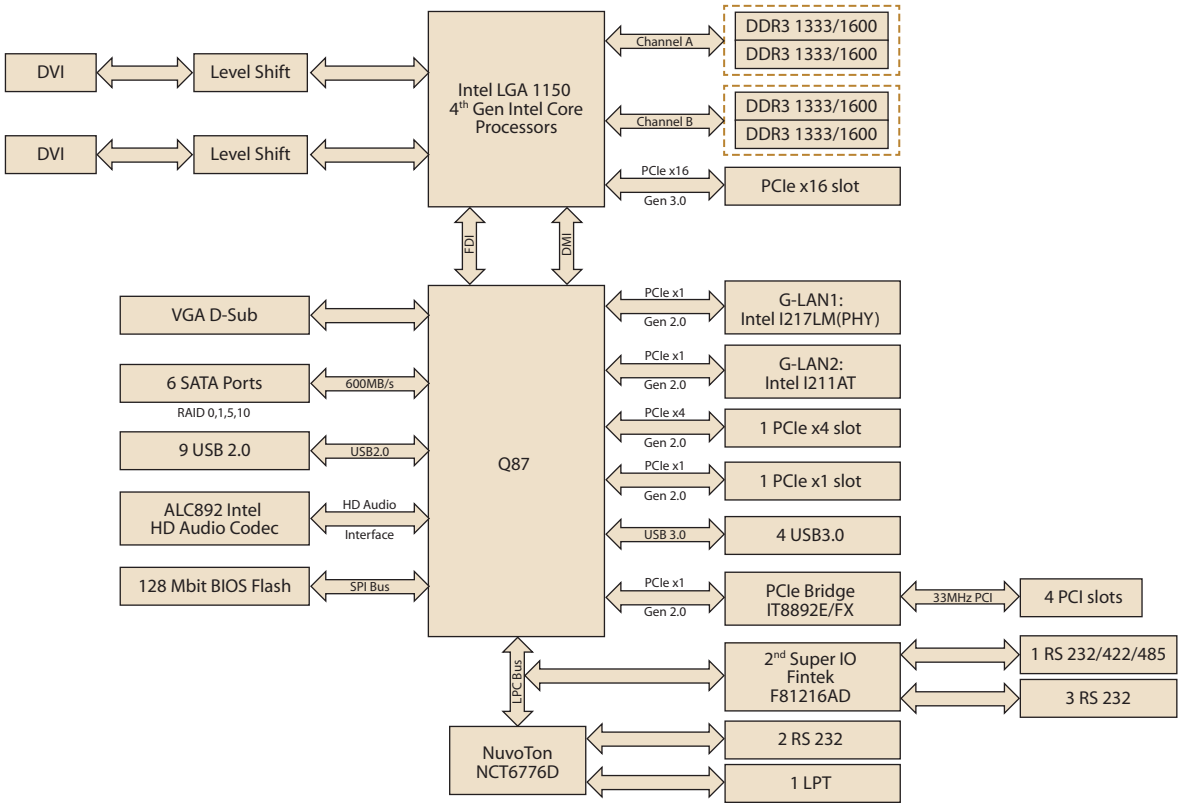
Software APIs: SMBus, H/W Monitor, Watchdog

Utilities: Monitoring

Specifications

Processor System	CPU	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE	G4320	G4320TE
	Speed	3.1 GHz	2.3 GHz	2.9 GHz	2.7 GHz	3.5 GHz	2.4 GHz	3.2 GHz	2.3 GHz
	L3 Cache	8 MB	8 MB	6 MB	4 MB	3 MB	3 MB	3 MB	3 MB
	Socket	LGA1150							
	Chipset	Q87							
	BIOS	AMI 128 Mbit SPI							
Expansion Slot	PCI	32-bit/33 MHz, 4 slots							
	PCIe x 1 (Gen2)	500 MB/s per direction, 1 slot							
	PCIe x 4 (Gen2)	2.0 GB/s per direction, 1 slot							
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot							
Memory	Technology	Dual Channel DDR3 1333/1600							
	Max. Capacity	32 GB							
	Socket	4 x 240-pin DIMM							
Graphics	Controller	Intel HD Graphics (Depends on processor)							
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed							
Ethernet	Interface	10/100/1000 Mbps							
	Controller	GbE LAN1: Intel I217LM, GbE LAN2: Intel I211AT							
	Connector	RJ-45 x 2							
SATA	Max Data Transfer Rate	600 MB/s							
	Channel	6							
Rear I/O	VGA	1							
	DVI	2							
	Ethernet	2							
	USB	4 (Two USB 3.0)							
	Audio	2 (Mic-in, Line-out)							
	Serial	1 (RS-232)							
	PS/2	2 (1 x keyboard and 1 x mouse)							
Internal Connectors	USB	9 (Two USB 3.0)							
	Serial	4 (3 x RS-232, 1 x RS-232/422/485 with BIOS selection)							
	SATA	6							
	Parallel	1							
	Display Port	1							
	IrDA	1							
	GPIO	8-bit							
Watchdog Timer	Output	System reset							
	Interval	Programmable 1 ~ 255 sec							
Power Requirement	Power On	Intel Core i7-4770S processor; DDR3 8GB x4							
		3.3V		5V		12V		5Vsb	
		1.02A		2.07A		4.17A		0.55A	
Environment		Operating				Non-Operating			
	Temperature	0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution				-40 ~ 85° C (-40 ~ 185° F)			
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")							

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA III	SW RAID
AIMB-784G2-00A1E	Q87	Non-ECC DDR3	VGA + dual DVI	4	9	6	2	Yes	6	Yes

Riser Card

Part Number	Description
AIMB-RF10F-01A1E	1U riser card with 1 PCIe x 16 expansion
AIMB-R43PF-21A1E	2U riser card with 1 PCIe x16 & 2 PCI expansion

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	x 2
1703150102	SATA power cable	x 2
19Z0000454T000	I/O port bracket	x 1
2006078410	Startup manual	x 1
2066078401	Driver CD	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700020277-01	Dual port USB 3.0 Cable with bracket
1960047669N001	CPU cooler for 4U and wallmount chassis
1960047831N001	CPU cooler for 2U and wallmount chassis
1700020294-01	Printer port cable kit (42 cm)
1701092300	COM port cable kit
PCA-TPM-00A1E	TPM module to enable TPM and vPro technologies

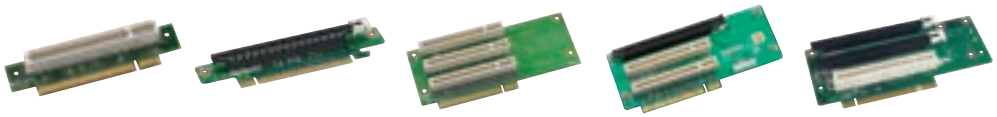
Note: Purchasing AIMB-784's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with AIMB-784.

Bracket View



AIMB-784G2-00A1E

Riser Cards



Selection Guide

Model Name		AIMB-RP10P-01A1E	AIMB-RF10F-01A1E	AIMB-RP30P-03A1E	AIMB-RP3PF-21A1E	AIMB-RP3P8-12A1E
Interface		PCI	PCIe x 16	PCI	PCIe x16/PCI	PCIe x16/PCI
Expansion Slots		1 PCI	1 PCIe x 16	3 PCI	1 PCIe x16 + 2 PCI	2 PCIe x8 + 1 PCI
Chassis	1U	Yes	Yes	-	-	-
	2U	-	-	-	Yes	Yes
ATX	AIMB-784	-	Yes	-	-	-
	AIMB-782	-	Yes	-	-	-
	AIMB-781	-	Yes	-	-	-
	AIMB-780	Yes	Yes	Yes	Yes	Yes (WG2 Only)*
	AIMB-701	-	Yes	-	-	-
	AIMB-769	-	Yes	-	-	-
	AIMB-767	Yes	Yes	Yes	Yes	-
	AIMB-766	Yes	Yes	Yes	Yes	-
	AIMB-763	-	Yes	-	Yes	-
MicroATX	AIMB-584	Yes	Yes	Yes	Yes	Yes (WG2 Only)
	AIMB-582	Yes	Yes	Yes	Yes	Yes (WG2 Only)*
	AIMB-581	Yes	Yes	Yes	Yes	Yes (WG2 Only)*
	AIMB-580	Yes	Yes	Yes	Yes	Yes (WG2 Only)*
	AIMB-567	Yes	Yes	Yes	Yes	-
	AIMB-566	Yes	-	Yes	-	-
	AIMB-564	-	Yes	-	Yes	-
	AIMB-562	-	-	-	Yes	-
	AIMB-502	Yes	Yes	Yes	Yes	-
	AIMB-501 KIOSK	Yes	Yes	Yes	Yes	-

*Note: AIMB-RP3P8-12A1E is not compatible with ACP-2010MB/2320MB, IPC-603MB chassis unless changing the riser card bracket to P/N: 1950014302N001.



Selection Guide

Model Name		AIMB-R4104-01A1E	AIMB-R430P-03A2E	AIMB-R4301-03A1E	AIMB-R431F-21A1E	AIMB-R43PF-21A1E
Interface		PCIe x4	PCIe x4	PCIe x4	PCIe x16/PCIe x4	PCIe x16/PCIe x4
Expansion Slots		1 PCIe x4	3 PCI	3 PCIe x1	1 PCIe x16 + 2 PCIe x1	1 PCIe x16 + 2 PCI
Chassis	1U	Yes	-	-	-	-
	2U	-	Yes	Yes	Yes	Yes
ATX	AIMB-784	-	-	-	☐	Yes
	AIMB-782	-	Yes	-	☐	Yes
	AIMB-781	Yes	Yes	Yes	Yes	Yes
	AIMB-780	-	-	-	-	-
	AIMB-701	Yes	Yes	△	-	-
	AIMB-769	Yes	Yes	△	-	-
	AIMB-767	-	-	-	-	-
	AIMB-766	-	-	-	-	-
	AIMB-763	-	-	-	-	-
Micro ATX	AIMB-562 KIOSK	-	Yes	-	-	-
	AIMB-556	Yes	Yes	Yes	Yes	Yes
	AIMB-554	Yes	Yes	△	△	Yes

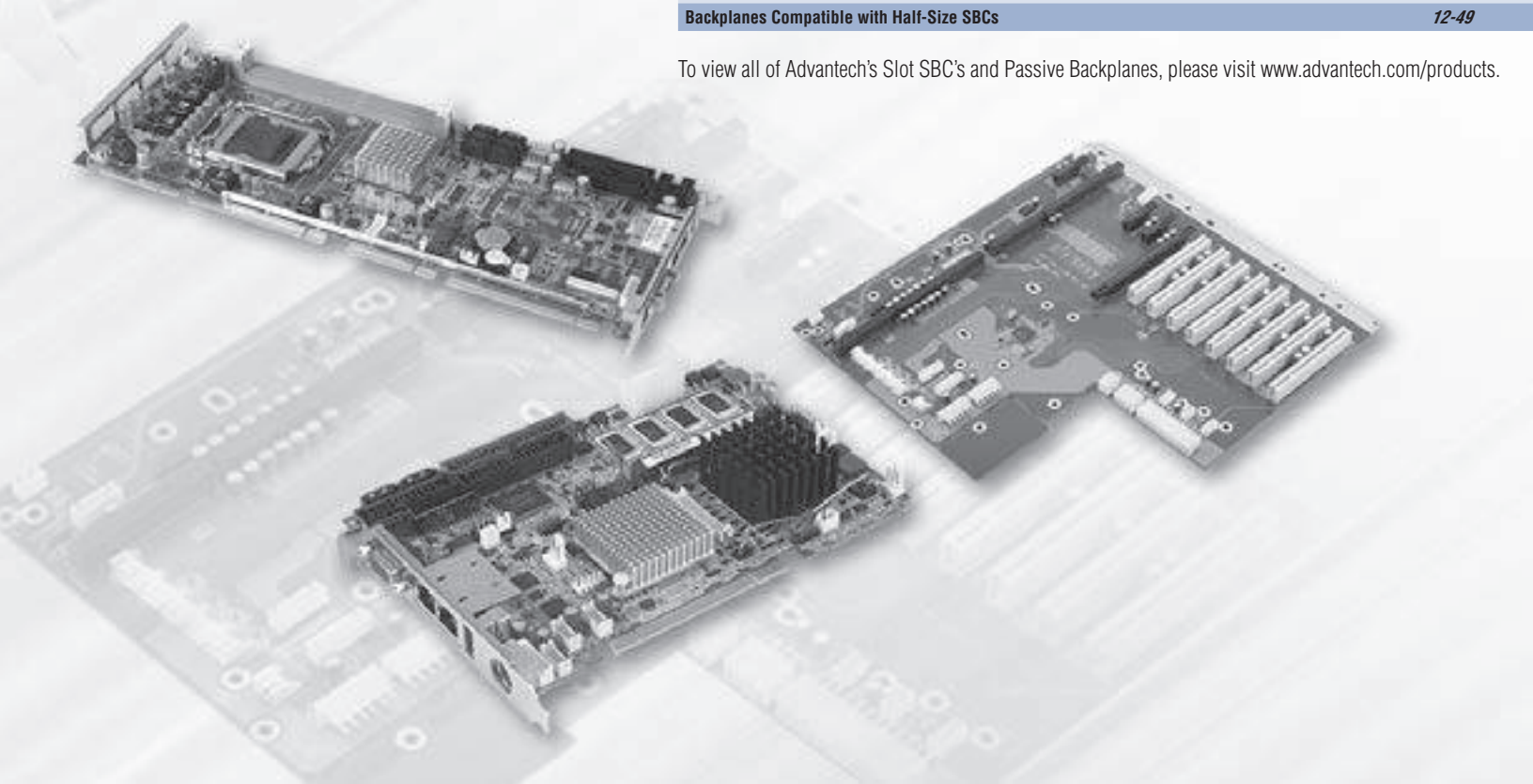
Yes: Fully compatible
☐: Only the PCIe x 16 and PCIe x1 (bottom slot) connectors work.
△: Only one PCIe x1 connector works (bottom slot).

12

Slot SBC & Passive Backplanes

Selection Guide		*12-2*
Extension Modules for Slot SBCs		*12-11*
PICMG 1.3 System Host Boards		
PCE-5026	LGA1155 Intel® Core™ i7/i5/i3 SHB DDR3/SATA 2.0/Single GbE	*12-12*
PCE-5126	LGA1155 Intel® Core™i7/i5/i3 SHB with DDR3/Dual GbE/SATA III	*12-14*
PCE-5127	LGA1155 Intel® Core™i7/i5/i3 SHB DDR3/SATA 3.0/USB3.0/Dual GbE	*12-16*
PCE-5128	LGA1150 Intel® Core™i7/i5/i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/ Dual GbE /3 Displays	*12-18*
PCE-7127	LGA1155 Intel® Xeon®/Core™i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/Dual GbE	*12-20*
PCE-7128	LGA1150 Intel® Xeon®/Core™i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/Dual GbE /3 Displays	*12-22*
PICMG 1.0 Single Board Computers		
PCA-6011	LGA775 Intel® Core™2 Quad SBC with VGA/Dual GbE LAN	*12-24*
PCA-6012	Intel® Atom™ N455/D525 SBC with VGA/Dual GbE LAN	*12-26*
PCA-6013	Intel® Atom™ N455 SBC with On-board DDR3/ Anti-surge VGA, GbE LAN	*12-28*
PCA-6028	LGA1150 Intel® Core™i7/i5/i3 SBC with VGA/DVI/Dual GbE LAN	*12-30*
Half-Size Single Board Computers		
PCE-3026	LGA 1155 Intel® Core™ i7/i5/i3 Half-size SHB with PCIe/VGA/DVI/Dual GbE LAN	*12-32*
PCI-7031	Intel® Atom™ N450/D510 PCI Half-size SBC with Onboard DDR2/VGA/LVDS/ Dual GbE/SATA/COM	*12-34*
PCA-6743	DM&P Vortex86DX ISA Half-size SBC with VGA/ TTL/ LAN/ USB/ PC/104/CFC/ COM	*12-36*
PCA-6782	Intel® Atom™ N455/D525 ISA Half-size SBC with VGA/LVDS/GbE LAN/SATA/ COM/CFC/FDD and PC/104	*12-38*
Passive Backplanes		
PICMG1.3 Full-Size SHB Backplanes		*12-40*
PCI/ISA Backplanes		*12-45*
Backplanes Compatible with Half-Size SBCs		*12-49*

To view all of Advantech's Slot SBC's and Passive Backplanes, please visit www.advantech.com/products.



PICMG 1.3 System Host Boards





Selection Guide

Model Name		LGA1155 PCIMG 1.3 SHB	LGA1155 PCIMG 1.3 SHB
		PCE-5026	PCE-5127
Processor System	CPU	Intel® Core™ i7/Core™ i5/Core™ i3/Pentium/Celeron LGA1155 processors	Intel® Core™ i7/Core™ i5/Core™ i3 LGA1155 Processors
	Max. Speed	3.4/ 3.1 /3.3 GHz	3.4 GHz/3.4 GHz/3.1 GHz/3.3 GHz
	Cache	L3: 8 MB/ 6 MB/ 3 MB	L3: 8/8/6/3/3 MB
	Chipset	Intel® H61	Intel® Q77
	BIOS	AMI 64 Mbit SPI Flash	AMI 64 Mbit SPI Flash
Backplane Bus	PCIe	One x16 & Four x1	One x16 & Four PCIex1
	PCI(32bit/33 MHz)	4	4
Memory	Technology	Dual-channel (Non-ECC) DDR3 1066/1333	Dual-channel (Non-ECC) DDR3 1333/1600
	Max. Capacity	16 GB	16 GB
	Socket	240-pins DIMM x 2	240-pins DIMM x 2
Graphics	Controller	Chipset integrated Intel® HD Graphics	Chipset integrated Intel® HD Graphics
	VRAM	Shared system memory is subject to OS	Shared system memory is subject to OS
	Video Out	VGA	VGA/DVI-D (Optional DVI-D cable)
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	LAN1/LAN2 Controller	Intel® 82579V	Intel® 82579LM/ 82583V
	Connector	RJ45 x 1	RJ45 x 2
	Disable in BIOS	Yes	Yes
SATA	Max. Date Transfer Rate	300 MB/s SATA2	300 MB/s SATA2.0 & 600 MB/s SATA3.0
	Channel	4 x SATA2.0	2 x SATA3.0; 4 x SATA2.0
	S/W Raid	-	0, 1, 5, 10
Rear I/O	VGA	1	1
	Ethernet	1	2
	USB2.0	-	-
	USB3.0	-	1
	PS/2	1	1
	Serial	1	-
Internal I/O	USB 2.0	10 USB 2.0 (Pin-header x 4+Vertical USB A type x 2+ 4 on backplane)	9 USB 2.0 (Pin-header x 4+USB Type A x 1+ 4 on backplane)
	USB 3.0	-	2 USB3.0 (Pin-Header x 2)
	SATA	4	6
	Serial	2 RS-232(Pin-Header)	2 RS-232(Pin-Header)
	Parallel	1(SPP/EPP/ECP)	1(SPP/EPP/ECP)
	PS/2	1	1
	OBS(Onboard Security Hardware Monitor)	Yes	Yes
Watchdog Timer	Output	System reset	System reset
	Interval	Programable, 1~255 sec/min	Programable, 1~255 sec/min
Miscellaneous	Advantech Audio Module	PCA-Audio-HDA1E	PCA-Audio-HDA1E
	Advantech SNMP-1000	Yes	Yes
	Advantech SAB-2000	Yes	Yes
	Advantech IPMI Module	-	-
	AMT	-	Yes
Page		12-12	12-16

NEW



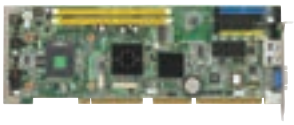


NEW



LGA1150 PCIMG 1.3 SHB	LGA1155 PCIMG 1.3 SHB	LGA1150 PCIMG 1.3 SHB
PCE-5128	**PCE-7127**	**PCE-7128**
Intel® Core™ i7/Core™ i5/Core™ i3 LGA1150 Processors	Intel® Xeon®/Core™ i3/Pentium LGA1155 processors	Intel® Xeon® and Core™ i7/Core™ i5/Core™ i3 LGA1150 Processors
3.1/2.9 GHz	3.9/3.3/3.1 GHz	3.5/2.9 GHz
L3: 8/6 MB	L3: 8/3/3 MB	L3: 8/6 MB
Intel® Q87	Intel® C216	Intel® C226
AMI 128 Mbit SPI Flash	AMI 64 Mbit SPI Flash	AMI 128 Mbit SPI Flash
One x16 & Four x1	One x16/Two x8 & Four x1	One x16/ Two x8 & Four x1
4	4	4
Dual-channel (Non-ECC) DDR3 1333/1600	Dual-channel (ECC) DDR3 1333/1600	Dual-channel (Non-ECC) DDR3 1333/1600
16 GB	16 GB	16 GB
240-pins DIMM x 2	240-pins DIMM x 2	240-pins DIMM x 2
Chipset integrated Intel® HD Graphics	Chipset integrated Intel® HD Graphics	Chipset integrated Intel® HD Graphics
Shared system memory is subject to OS	Shared system memory is subject to OS	Shared system memory is subject to OS
VGA/DVI-D/DVI-D (Optional DVI-D cable)	VGA/DVI-D (Optional DVI-D cable)	VGA/DVI-D/DVI-D (Optional DVI-D cable)
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
Intel® I217LM/I211AT	Intel® 82579LM/ 82583V	Intel® I217LM/I210AT
RJ45 X 2	RJ45 x 2	RJ45 X 2
Yes	Yes	Yes
600 MB/s SATA3.0	300 MB/s SATA2.0 & 600 MB/s SATA3.0	600 MB/s SATA3.0
6 x SATA3.0	2 x SATA3.0; 4 x SATA2.0	6 x SATA3.0
0, 1, 5, 10	0, 1, 5, 10	0, 1, 5, 10
1	1	1
2	2	2
	-	
1	1	1
1	1	1
	-	
9 USB 2.0 (Pin-Header x 4 + USB Type A x 1 + 4 on backplane)	9 USB 2.0 (Pin-header x 4+USB Type A x 1+ 4 on backplane)	9 USB 2.0 (Pin-Header x 4 + USB Type A x 1 + 4 on backplane)
2 USB3.0 (Pin-Header)	2 USB3.0 (Pin-Header)	2 USB3.0 (Pin-Header)
6	6	6
2 RS-232(Pin-Header)	2 RS-232(Pin-Header)	2 RS-232(Pin-Header)
1(SPP/EPP/ECP)	1(SPP/EPP/ECP)	1(SPP/EPP/ECP)
1	1	1
Yes	Yes	Yes
System reset	System reset	System reset
Programable, 1~255 sec/min	Programable, 1~255 sec/min	Programable, 1~255 sec/min
PCA-Audio-HDA1E	PCA-Audio-HDA1E	PCA-Audio-HDA1E
Yes	Yes	Yes
Yes	Yes	Yes
-	Yes	Yes
Yes	Yes	Yes
12-18	12-20	12-22

PICMG 1.0 Single Board Computers





Selection Guide

Model Name		Pentium M PICMG 1.0 SBC	Core™ 2 Duo PICMG 1.0 SBC
		PCA-6008	PCA-6010
Processor System	CPU	Intel® Pentium M/Celeron M (G2 version only) Onboard Celeron M (VG version only)	Intel® Core™ 2 Duo/Pentium/Celeron 4XX/Pentium 4/ Celeron D LGA775 processors
	Max. Speed	2.26/1.7 GHz (G2 version only) 1.0 GHz/600 MHz (VG version only)	3.06 GHz/3.06 GHz/2 GHz/3.4 GHz/3.6 GHz
	Max. L2 Cache	G2: 1 MB, 2 MB VG: 512 KB	4 MB/2 MB/512 KB/2 MB/512 KB
	Chipset	Intel® 915GME+ ICH6M (G2 version only) Intel® 910GMLE+ ICH6M (VG version only)	Intel® 945GC + ICH7
	BIOS	Award 4 Mbit FWH	Award 8 Mbits SPI Flash
	FSB	533/400 MHz	1066/800/533 MHz
Bus	PCI	32-bit/33 MHz PCI	32-bit/33 MHz PCI
	ISA	HISA (ISA High Driver)	HISA (ISA High Drive)
Graphics	Controller	Chipset integrated Intel® Graphics Media Accelerator 900	Chipset integrated Intel® Graphics Media Accelerator 950
	VRAM	Shared with system memory up to 128 MB	Shared with system memory up to 224 MB
	LCD/DVI	LVDS/DVI (G2 version only)	DVI (G2 version only)
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: RTL8111B LAN2: RTL8111B	LAN1: Intel® 82574L LAN2: Intel® 82574L
	Connector	RJ-45 x 2	RJ-45 x 2
	Disabled in BIOS	Yes	Yes
Memory	Technology	Dual-channel DDR2 533/400 MHz	Dual-channel DDR2 667/533 MHz
	Max. Capacity	2 GB	4 GB
	Socket	240-pin DIMM x 2	240-pin DIMM x 2
SATA	Max. Data Transfer Rate	150 MB/s	300 MB/s
	Channel	2	4
	RAID	-	-
EIDE	Mode	ATA 100/66/33	ATA 100/66/33
	Channel	1 (Max. two devices)	1 (Max. two devices)
I/O Interface	USB	4 (USB 2.0, for VG version) 8 (USB 2.0, for G2 version)	8 (USB 2.0, for VG version) 7 (USB 2.0, for G2 version)
	Serial	G2 version: 5 (RS-232)/1 (RS-232/422/485) VG version: 1 (RS-232)/1 (RS-232/422/485)	2 (RS-232)
	Parallel	1 (SPP/EPP/ECP)	1 (SPP/EPP/ECP)
	FDD	1	1
	PS/2	1	1
	LAN	1 (for VG version) 2 (for G2 version)	1 (for VG version) 2 (for G2 version)
	OBS (Hardware Monitor)	Yes	Yes
Watchdog Timer	Output	System reset	System reset
	Interval	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min
Miscellaneous	Audio	PCA-AUDIO-00A1E	PCA-AUDIO-HDA1E
	Advantech SNMP-1000-B	Yes	Yes
	Advantech SAB-2000	-	Yes
	Solid State Disk	CompactFlash Type I/II	CompactFlash Type I/II (G2 version only)
Page		Online	Online

NEW







Core™ 2 Quad PICMG 1.0 SBC	Atom™ N455/D525 PICMG 1.0 SBC	Atom™ N455 PICMG 1.0 SBC
PCA-6011	**PCA-6012**	**PCA-6013**
Intel® Core™ 2 Quad/Core™ 2 Duo/ Pentium dual-Core™/Celeron LGA775 processors	Onboard Intel® Atom™ N455 (VG version only) Onboard Intel® Atom™ D525 (G2 version only)	Onboard Intel® Atom™ N455
3.0 GHz/3.16 GHz/2.93 GHz/2.2 GHz	1.66 GHz/1.8 GHz	1.66 GHz
12 MB/6 MB/8 MB/512 KB	512 KB/1MB	512 KB
Intel® G41 + ICH7 (VG version only) Intel® G41 + ICH7R (G2 version only)	Intel® ICH8M	Intel® ICH8M
AMI 16 Mb SPI Flash	AMI 16Mb SPI Flash	AMI 16Mb SPI Flash
1333/1066/800 MHz	-	-
32-bit/33 MHz PCI	32-bit/33 MHz PCI	32-bit/33 MHz PCI
HISA (ISA High Drive)	HISA (ISA High Drive)	HISA (ISA High Drive)
Chipset integrated Intel® Graphics Media Accelerator X4500	Embedded Gen3.5+ GFX Core™ technology, Direct X 9/Pixel Shader 2.0 compliant	Embedded Gen3.5+ GFX Core™ technology, Direct X 9/Pixel Shader 2.0 compliant
Shared with system memory up to 352 MB	Shared with system memory up to 224 MB	Shared with system memory up to 224 MB
DVI (Optional)	LVDS (G2 version only)	-
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
LAN1: Intel® 82583V LAN2: Intel® 82583V	LAN1: Intel® 82567V LAN2: Intel® 82583V	LAN1: Intel® 82567V
RJ-45 x 2	RJ-45 x 2	RJ-45 x 2
Yes	Yes	Yes
Dual-channel DDR3 1066/800 MHz	Dual-channel DDR3 800 MHz	Dual-channel DDR3 800 MHz
8 GB	2 GB (VG version only) 4 GB (G2 version only)	2 GB (VG version only)
240-pin DIMM x 2	204-pin SODIMM x 2	1 GB on Board + 204-pin SODIMM x 1
300 MB/s	300 MB/s	300 MB/s
4	3	3
0, 1, 5, 10 (G2 version only)	-	Yes
ATA 100/66/33	ATA 100/66/33	ATA 100/66/33
1 (Max. two devices)	1 (Max. two devices)	1 (Max. two devices)
8 (USB 2.0, for VG version) 7 (USB 2.0, for G2 version)	8 (USB 2.0, for VG version) 9 (USB 2.0, for G2 version)	8 (USB 2.0, for VG version)
2 (RS-232)	2 (RS-232)	2 (RS-232)
1 (SPP/EPP/ECP)	1 (EPP/ECP)	1 (EPP/ECP)
1	1	1
1	1	1
1 (for VG version) 2 (for G2 version)	1 (for VG version) 2 (for G2 version)	1 (for VG version)
Yes	Yes	Yes
System reset	System reset	System reset
Programmable, 1~255 sec/min	Programmable, 1~255 sec/min	Programable, 1~255 sec/min
PCA-AUDIO-HDA1E	PCA-AUDIO-HDA1E	PCA-AUDIO-HDA1E
Yes	Yes	Yes
Yes	Yes	Yes
(Optional)	CompactFlash Type I/II (G2 version only)	-
12-24	12-26	12-28

Half-Size Single Board Computers

Selection Guide





Specifications		PCIe Half-Size SBC	PCI Half-Size SBC
		PCE-3026	PCI-7030
Processor System	CPU	Intel® Core™ i7/i5/i3/Pentium/Celeron LGA1155 processor	Intel® Atom™ N270 processor onboard
	Speed	up to 3.4 GHz	1.6 GHz
	L2 Cache	up to 8 MB	512 KB
	Chipset	Intel® H61	Intel® 945GSE+Intel® ICH7M
	BIOS	AMI 64 Mbit SPI Flash	Award SPI 8 Mbit SPI Fash
	FSB	N/A	400/533 MHz
Bus	PCIe	One PCIe x16, Four PCIe x1	-
	PCI	-	32-bit/33 MHz PCI
	ISA	-	-
Graphics	Controller	Chipset integrated graphics with Intel® HD	Chipset integrated
	VRAM	Shared with system memory is subject to OS	Shared with system memory up to 224 MB
	Video output	D-sub VGA port, DVI	D-sub VGA port, 18/36 bit LVDS, DVI (G2 SKU)
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel® 82579V LAN2: Intel® 82583V	Intel® 82574L
	Connector	RJ-45 x 2	RJ-45 x 1 (VG SKU) RJ-45 x 2 (G2 SKU)
	Disabled in BIOS	Yes	Yes
Memory	Technology	Dual-Chnnel DDR3 1066/1333 MHz	Single-Channel DDR2 400/533 MHz
	Max. Capacity	16 GB	2 GB
	Socket	204-pin SODIMM x 2	200-pin SODIMM x 1
SATA	Max. Data Transfer Rate	300 MB/s	150 MB/s
	Channel	3	2
	RAID	-	-
EIDE	Mode	-	Ultra ATA 100/66/33
	Channel	-	1 (Max. 2 devices)
I/O Interface	USB	8	6 (VG SKU) or 5 (G2 SKU)
	Serial	2 x RS-232 Optional: 4 x RS-422/485 w/Auto-flow or 4 RS-232 by COM module	2 x RS-232 Optional: 4 x RS-422/485 w/Auto-flow or 4 x RS-232 by COM module
	Parallel	1	1
	FDD	-	1
	PS/2	1	1
	LAN	2	1 (VG SKU) 2 (G2 SKU)
	OBS (Onboard Security Hardware Monitor)	-	-
Watchdog Timer	Output	System reset	System reset
	Interval	programmable 1-255 sec/min	1 min/sec or Max 65535 min/sec
Miscellaneous	Audio	PCA-AUDIO-HDA1E	PCA-AUDIO-HDA1E
	Advantech SNMP-1000	-	-
	IPMI	-	-
	Solid State Disk	-	CompactFlash Type I/II
Page		12-32	Online






PCI Half-Size SBC	ISA Half-Size SBC	ISA Half-Size SBC	ISA Half-Size SBC
PCI-7031	**PCA-6742**	**PCA-6743**	**PCA-6782**
Intel® Atom™ D510/N450	Advantech EVA-X4300	DM&P Vortex86DX	Intel® Atom™ D525/N455
1.66 GHz	300 MHz	800 MHz	D525 1.8 GHz/N455 1.66 GHz
512 KB (N450)/1 MB (D510)	L1 Cache 32 KB	256 KB	512 KB (N455)/1 MB (D525)
Intel® Atom™ D510/N450+ICH8M	Advantech EVA-X4300	DM&P Vortex86DX	Intel® Atom™ D525/N455+ICH8M
AMI 16 Mbit SPI Flash	Award integrated 256 KB ROM in EVA-X4300	Award integrated 256 KB ROM in Vortex86DX	AMI 16 Mbit SPI Flash
-	-	-	-
-	-	-	-
32-bit/33 MHz PCI	-	-	-
-	8/16-bit 8 MHz ISA	16-bit ISA Bus	16-bit ISA Bus
Embedded Gen3.5+ GFX Core™ technology	SMI 712 graphic controller	SMI 712 graphic controller	Embedded Gen3.5+ GFX Core™ technology
Shared with system memory up to 224 MB	4 MB display memory	4 MB display memory	Shared with system memory up to 224 MB
D-Sub VGA port, LVDS	D-Sub VGA port, 18/24 bit TTL or 18/24 bit LVDS (optional)	D-Sub VGA port, up to 24 bit TTL or 18 bit LVDS (optional)	D-sub VGA port, 18 bit LVDS
10/100/1000 Mbps	10/100 Mbps	10/100 Mbps	10/100/1000 Mbps
LAN1: Intel® 82567V LAN2: Intel® 82583V	Realtek RTL8100C (VE)	LAN on Vortex86DX	Intel® 82567V
RJ-45 x 2	RJ-45 x 1	RJ-45 x 1	RJ-45 x 1
Yes	Yes	Yes	Yes
Onboard 1G DDR2 667 MHz (for PCI-7031N) Single Channel DDR2 667 MHz (for PCI-7031D)	Default onboard DDR 2 166MHz	Default onboard DDR2 (for VE SKU) Default onboard DDR2 (for F SKU)	Single-Channel DDR2 667 MHz (for PCA-6782N) Single-Channel DDR2 667/800 MHz (for PCA-6782D)
1 GB (for PCI-7031N) 2 GB (for PCI-7031D)	64 MB	256 MB (for VE SKU) 512 MB (for F SKU)	2 GB
200-pin SODIMM x 1	-	-	200-pin SODIMM x 1
300 MB/s	-	150 MB/s	300 MB/s
3	-	1 (for F SKU)	3
-	-	-	-
ATA 100/66/33	UDMA 100	UDMA 100	ATA 100/66/33
1 (Max. 2 devices)	1 (Max. 2 devices)	1 (Max. 2 devices)	1 (Max. 2 devices)
7	4	4	8
2 x RS-232 Optional: 4 x RS-422/485 w/Auto-flow by COM module	1 x RS-232/422/485 3 x RS-232	F SKU: 2 x RS-232/422/485 & 2 x RS-232 VE SKU: 2 x RS-232	2 x RS-232 Optional: 4 x RS-422/485 w/Auto-flow by COM module
1	1	1	1
1	-	1	1
1	1	1	1
2	1 (VE)	1	1
-	-	-	-
System reset	System reset/IRQ11	System reset/IRQ11	System reset
Programmable, 1~255 sec/min	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min	Programmable, 1~255 sec/min
PCA-AUDIO-HDA1E	-	-	PCA-AUDIO-HDA1E
-	-	-	-
-	-	-	-
CompactFlash Type I/II	CompactFlash Type I/II	CompactFlash Type I/II	CompactFlash Type I/II
12-34	Online	12-36	12-38

PICMG1.3 Full-Size SHB Backplanes

Server Grade: Compatible with PCE-7000 Series CPU Boards

Category	Model Name	PCIe				PCI-X			PCI
		x16	x8	x4	x1	64/66	64/100	64/133	32/33
1U Butterfly BP	PCE-7B03V-01A1E	-	1	-	-	-	-	-	1
	PCE-7B03V-00A1E	-	2	-	-	-	-	-	-
2U Butterfly BP	PCE-7B06V-04A1E	-	1	-	-	-	-	-	4
	PCE-7B06V-30A1E	-	2	-	-	-	2	1	-
5 slots BP	PCE-7B05-20A1E	-	2	-	-	-	-	2	-
6 slots BP	PCE-7B06-04A1E	-	1	-	-	-	-	-	4
	PCE-7B06-40A1E	-	1	-	-	-	4	-	-
8 slots BP	PCE-7B08-04A1E	-	2	1	-	-	-	-	4
14 slots BP	PCE-7B10-04A1E	-		5	-	-	-	-	4
	PCE-7B13-64B1E	-	2	-	-	4	2	-	4
	PCE-7B13-07A1E	-	2	3	-	-	-	-	7
	PCE-7B13D-04A1E	-	1, 2	-	-	-	-	-	4
20 slots BP	PCE-7B17-00A1E	-	5	11	-	-	-	-	-
	PCE-7B19-88A1E	-	2	-	-	8	-	-	8
	PCE-7B16Q-02A1E	-	1	-	-	-	-	-	2

Category	Model Name	Wallmount/Desktop Chassis				
		IPC-6025	IPC-6606	IPC-6806W	IPC-6608	IPC-6908
		5-slot	6-slot	6-slot	8-slot	8-slot
1U Butterfly BP	PCE-7B03V-01A1E	-	-	-	-	-
	PCE-7B03V-00A1E	-	-	-	-	-
2U Butterfly BP	PCE-7B06V-04A1E	-	-	-	-	-
	PCE-7B06V-30A1E	-	-	-	-	-
5 slots BP	PCE-7B05-20A1E	Yes	-	-	-	-
6 slots BP	PCE-7B06-04A1E	-	Yes	Yes	-	-
	PCE-7B06-40A1E	-	Yes	Yes	-	-
8 slots BP	PCE-7B08-04A1E	-	-	-	Yes	Yes
14 slots BP	PCE-7B10-04A1E	-	-	-	-	-
	PCE-7B13-64B1E	-	-	-	-	-
	PCE-7B13-07A1E	-	-	-	-	-
	PCE-7B13D-04A1E	-	-	-	-	-
20 slots BP	PCE-7B17-00A1E	-	-	-	-	-
	PCE-7B19-88A1E	-	-	-	-	-
	PCE-7B16Q-02A1E	-	-	-	-	-

Category	Model Name	Rackmount Chassis															
		ACP-1010	ACP-1320	ACP-2000EBP	IPC-602EBP	IPC-510	IPC-610	IPC-611	IPC-630	ACP-4000	ACP-4010	ACP-4320	ACP-4360	IPC-623	ACP-5360	IPC-622	ACP-7360
		2 slot / 1U		6 slot / 2U		15 slot / 4U								20 slot / 4U	20 slot / 5U	20 slot / 6U	20 slot / 7U
1U Butterfly BP	PCE-7B03V-01A1E	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-7B03V-00A1E	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2U Butterfly BP	PCE-7B06V-04A1E	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-7B06V-30A1E	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
5 slots BP	PCE-7B05-20A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 slots BP	PCE-7B06-04A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-7B06-40A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 slots BP	PCE-7B08-04A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 slots BP	PCE-7B10-04A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-7B13-64B1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-7B13-07A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-7B13D-04A1E	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-
20 slots BP	PCE-7B17-00A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes
	PCE-7B19-88A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes
	PCE-7B16Q-02A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes

Desktop: Compatible with PCE-5000 Series CPU Boards

Category	Model Name	PCIe				PCI-X			PCI
		x16	x8	x4	x1	64/66	64/100	64/133	32/33
1U Butterfly BP	PCE-5B03V-01A1E	1	-	-	-	-	-	-	1
	PCE-5B03V-00A1E	1		1	-	-	-	-	-
2U Butterfly BP	PCE-5B05V-30A1E	1	-	-	-	-	2	1	-
	PCE-5B06V-00A1E	1	-	-	4	-	-	-	-
	PCE-5B06V-04A1E	1	-	-	-	-	-	-	4
5 slot BP	PCE-5B04-20A1E	1	-	-	-	-	-	2	-
	PCE-5B05-02A1E	1	-	1	-	-	-	-	2
	PCE-5B05-03A1E	1	-	-	-	-	-	-	3
	PCE-5B05-04A1E	-	-	-	-	-	-	-	4
6 slot BP	PCE-5B06-00A1E	1	-	-	4	-	-	-	-
	PCE-5B06-03A1E	1	-	1	-	-	-	-	3
	PCE-5B06-04A1E	1	-	-	-	-	-	-	4
	PCE-5B06-40A1E	1	-	-	-	-	4	-	-
8 slot BP	PCE-5B07-04A1E	1	-	1	-	-	-	-	4
	PCE-5B08-02A1E	1	-	-	4	-	-	-	2
10 slot BP	PCE-5B09-04A1E	1	-	3	-	-	-	-	4
	PCE-5B09-06A1E	1	-	1	-	-	-	-	6
14 slot BP	PCE-5B10-04A1E	1	-	-	4	-	-	-	4
	PCE-5B12-07A1E	1	-	3	-	-	-	-	7
	PCE-5B12-64B1E	1	-	-	-	4	2	-	4
	PCE-5B13-08A1E	1	-	-	3	-	-	-	8
	PCE-5B12D-04A1E	1	-	-	-	-	-	-	4
20 slot BP	PCE-5B18-88A1E	1	-	-	-	8	-	-	8
	PCE-5B16Q-02A1E	1	-	-	-	-	-	-	2
	PCE-5B12-00A1E	10	-	1	-	-	-	-	-

Category	Model Name	Wallmount/Desktop Chassis					
		IPC-6025	IPC-6606	IPC-6806W	IPC-6608	IPC-6908	IPC-7132
		5-slot	6-slot	6-slot	8-slot	8-slot	10-slot
1U Butterfly BP	PCE-5B03V-01A1E	-	-	-	-	-	-
	PCE-5B03V-00A1E	-	-	-	-	-	-
2U Butterfly BP	PCE-5B05V-30A1E	-	-	-	-	-	-
	PCE-5B06V-00A1E	-	-	-	-	-	-
	PCE-5B06V-04A1E	-	-	-	-	-	-
5 slot BP	PCE-5B04-20A1E	Yes	-	-	-	-	-
	PCE-5B05-02A1E	Yes	-	-	-	-	-
	PCE-5B05-03A1E	Yes	-	-	-	-	-
	PCE-5B05-04A1E	Yes	-	-	-	-	-
6 slot BP	PCE-5B06-00A1E	-	Yes	Yes	-	-	-
	PCE-5B06-03A1E	-	Yes	Yes	-	-	-
	PCE-5B06-04A1E	-	Yes	Yes	-	-	-
	PCE-5B06-40A1E	-	Yes	Yes	-	-	-
8 slot BP	PCE-5B07-04A1E	-	-	-	Yes	Yes	-
	PCE-5B08-02A1E	-	-	-	Yes	Yes	-
10 slot BP	PCE-5B09-04A1E	-	-	-	-	-	Yes
	PCE-5B09-06A1E	-	-	-	-	-	Yes
14 slot BP	PCE-5B10-04A1E	-	-	-	-	-	-
	PCE-5B12-07A1E	-	-	-	-	-	-
	PCE-5B12-64B1E	-	-	-	-	-	-
	PCE-5B13-08A1E	-	-	-	-	-	-
	PCE-5B12D-04A1E	-	-	-	-	-	-
20 slot BP	PCE-5B18-88A1E	-	-	-	-	-	-
	PCE-5B16Q-02A1E	-	-	-	-	-	-
	PCE-5B12-00A1E	-	-	-	-	-	-

Category	Model Name	Rackmount Chassis															
		ACP-1010	ACP-1320	ACP-2000	IPC-602	IPC-510	IPC-610	IPC-611	IPC-630	ACP-4000	ACP-4010	ACP-4320	ACP-4360	IPC-623	ACP-5360	IPC-622	ACP-7360
		2 slot / 1U		6 slot / 2U		15 slot / 4U								20 slot / 4U	20 slot / 5U	20 slot / 6U	20 slot / 7U
1U Butterfly BP	PCE-5B03V-01A1E	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B03V-00A1E	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2U Butterfly BP	PCE-5B05V-30A1E	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B06V-00A1E	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B06V-04A1E	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
5 slot BP	PCE-5B04-20A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B05-02A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B05-03A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B05-04A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 slot BP	PCE-5B06-00A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B06-03A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B06-04A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B06-40A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 slot BP	PCE-5B07-04A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCE-5B08-02A1E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 slot BP	PCE-5B09-04A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-5B09-06A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
14 slot BP	PCE-5B10-04A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-5B12-07A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-5B12-64B1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-5B13-08A1E	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	PCE-5B12D-04A1E	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-
20 slot BP	PCE-5B18-88A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes
	PCE-5B16Q-02A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes
	PCE-5B12-00A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes

PCI/ISA Backplanes

Selection Guide

Yes: supported/- : not supported/△ : optional

Category	Model Name	Slot per segment					Segment	AT	ATX	1U Chassis		2U Chassis		4U Chassis	
		ISA	PCI	PICMG	PICMG/ PCI	ISA/PCI				ACP-1010	ACP-1320	ACP-2000	IPC-602	ACP-4360	ACP-4320
										2-slot	2-slot	6-slot	6-slot	15-slot	15-slot
1U Butterfly BP	PCA-6103P2V-0A2E*	-	2	1	-	-	1	-	Yes	Yes	Yes	-	-	-	-
2U Butterfly BP	PCA-6105P4V-0B3E*	-	4	1	-	-	1	-	Yes	-	-	Yes	Yes	-	-
	PCA-6106P3V-0B2E*	1	3	2	-	-	1	Yes	Yes	-	-	Yes	Yes	-	-
5 Slot BP	PCA-6105P3-5A1E	1	2	1	-	1	1	-	Yes	-	-	-	-	-	-
6/8 Slot BP	PCA-6106P4-0A2E	-	4	2	-	-	1	Yes	Yes	-	-	-	-	-	-
	PCA-6106P3-0D2E	2	2	1	1	-	1	Yes	Yes	-	-	-	-	-	-
	PCA-6106-0B2E	6	-	-	-	-	1	Yes	Yes	-	-	-	-	-	-
	PCA-6108E-0C2E	8	-	-	-	-	1	Yes	Yes	-	-	-	-	-	-
	PCA-6108P6-0B4E	1	5	1	1	-	1	Yes	Yes	-	-	-	-	-	-
	PCA-6108P4-0C2E	3	3	1	1	-	1	Yes	Yes	-	-	-	-	-	-
	PCA-6108-0B2E	8	-	-	-	-	1	Yes	Yes	-	-	-	-	-	-
14/15 Slot BP	PCA-6114P12-0B3E	1	11	1	1	-	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6114P10-0B2E	2	10	2	-	-	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6114P7-0D3E	4	6	3	-	1	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6114P4-0C2E	8	4	2	-	-	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6113P4R-0C2E	7	4	2	-	-	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6114-0B2E	14	-	-	-	-	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6115-0B2E	15	-	-	-	-	1	Yes	Yes	-	-	-	-	Yes	Yes
	PCA-6113DP4-0A2E	1	3,4	1,2	1,0	-	2	Yes	Yes	-	-	-	-	-	-
20 Slot BP	PCA-6119P17-0B2E	-	16	1	1	-	1	Yes	△	-	-	-	-	-	-
	PCA-6120P18-0A2E	1	17	1	1	-	1	Yes	△	-	-	-	-	-	-
	PCA-6116QP2-0B2E	1,0	2	1,2	-	-	4	Yes	△	-	-	-	-	-	-
	PCA-6120P4-0B2E	14	4	2	-	-	1	Yes	△	-	-	-	-	-	-
	PCA-6120P12-0A2E	7	11	1	1	-	1	Yes	△	-	-	-	-	-	-
	PCA-6119P7-0B3E	10	7	2	-	-	1	Yes	△	-	-	-	-	-	-
	PCA-6120DP4-0B2E	3,4	3	2	1	-	2	Yes	△	-	-	-	-	-	-
	PCA-6120Q-0B2E	5	-	-	-	-	4	Yes	△	-	-	-	-	-	-

Category	Model Name	4U Chassis					5U Chassis	6U Chassis	7U Chassis	Wallmount/Desktop Chassis					Cage
		ACP-4010	ACP-4000	IPC-610	IPC-611	IPC-623	ACP-5360	IPC-622	ACP-7360	8-slot	8-slot	6-slot	6-slot	5-slot	6-slot
		15-slot	15-slot	15-slot	15-slot	20-slot	20-slot	20-slot	20-slot	IPC-6908	IPC-6608	IPC-6606	IPC-6806	IPC-6025	IPC-6006
1U Butterfly BP	PCA-6103P2V-0A2E*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2U Butterfly BP	PCA-6105P4V-0B3E*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	PCA-6106P3V-0B2E*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Slot BP	PCA-6105P3-5A1E	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-
6/8 Slot BP	PCA-6106P4-0A2E	-	-	-	-	-	-	-	-	-	-	Yes	Yes	-	Yes
	PCA-6106P3-0D2E	-	-	-	-	-	-	-	-	-	-	Yes	Yes	-	Yes
	PCA-6106-0B2E	-	-	-	-	-	-	-	-	-	-	Yes	Yes	-	Yes
	PCA-6108E-0C2E	-	-	-	-	-	-	-	-	Yes	Yes	-	-	-	-
	PCA-6108P6-0B4E	-	-	-	-	-	-	-	-	Yes	Yes	-	-	-	-
	PCA-6108P4-0C2E	-	-	-	-	-	-	-	-	Yes	Yes	-	-	-	-
	PCA-6108-0B2E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14/15 Slot BP	PCA-6114P12-0B3E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6114P10-0B2E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6114P7-0D3E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6114P4-0C2E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6113P4R-0C2E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6114-0B2E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6115-0B2E	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-
	PCA-6113DP4-0A2E	Yes	-	-	-	-	-	-	-	-	-	-	-	-	
20 Slot BP	PCA-6119P17-0B2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6120P18-0A2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6116QP2-0B2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6120P4-0B2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6120P12-0A2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6119P7-0B3E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6120DP4-0B2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-
	PCA-6120Q-0B2E	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-

Remarks:
1. * : only sold with Advantech's 1U/2U chassis
2. IPC-622, IPC-623, ACP-7360 provides four reset buttons for quad-system. For more information regarding chassis, please refer to chapter 4.

Backplanes Compatible with Half-Size SBCs

Selection Guide

Yes : supported/- : not supported

Category	Model Name	Slots per segment						Segment
		ISA	PCI	PCIe x16	PCIe x4	PCIe x1	PICMG	
Pure ISA Backplane	PCA-6104-0C2E	3	-	-	-	-	1	1
	PCA-6106-0B2E	5	-	-	-	-	1	1
	PCA-6108-0B2E *	7	-	-	-	-	1	1
	PCA-6108E-0C2E	7	-	-	-	-	1	1
Pure PCI Backplane	PCA-6104P4-0B2E	-	3	-	-	-	1	1
	PCA-6105P5-0B2E	-	4	-	-	-	1	1
	PCA-6108P8-0A2E	-	7	-	-	-	1	1
	PCA-6110P10-0A1E *	-	9	-	-	-	1	1
PCI/ISA Backplane	PCI-7110P3S6-00A1E	6	3	-	-	-	1	1
PICMG1.3 Half-Size Backplanes	PCE-3B03-00A1E	-	-	1	1	-	1	1
	PCE-3B06-00A1E	-	-	1	-	4	1	1
	PCE-3B06-03A1E	-	3	1	-	1	1	1

Category	Model Name	AT	ATX	IPC-619S	IPC-6908	IPC-6608	IPC-6606	IPC-6806S*	IPC-6006S	IPC-3026	IPC-3012
				Rackmount	Wallmount	Wallmount	Wallmount	Wallmount	Wallmount	Wallmount	Wallmount
				10-slot	8-slot	8-slot	6-slot	6-slot	6-slot	6-slot	3-slot
Pure ISA Backplane	PCA-6104-0C2E	Yes	Yes	-	-	-	-	-	-	-	-
	PCA-6106-0B2E	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	-
	PCA-6108-0B2E *	Yes	Yes	-	-	-	-	-	-	-	-
	PCA-6108E-0C2E	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
Pure PCI Backplane	PCA-6104P4-0B2E	Yes	Yes	-	-	-	-	-	-	-	-
	PCA-6105P5-0B2E	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	-
	PCA-6108P8-0A2E	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
	PCA-6110P10-0A1E *	-	Yes	-	-	-	-	-	-	-	-
PCI/ISA Backplane	PCI-7110P3S6-00A1E	-	Yes	Yes	-	-	-	-	-	-	-
Half-Size Backplanes	PCE-3B03-00A1E	-	Yes	-	-	-	-	-	Yes	Yes	-
	PCE-3B06-00A1E	-	Yes	-	-	-	-	-	Yes	Yes	-
	PCE-3B06-03A1E	-	Yes	-	-	-	-	-	Yes	Yes	-
	PCE-3B03A-00A1E	-	Yes	-	-	-	-	-	-	-	Yes

* Not suitable for Advantech Chassis

Extension Modules for Slot SBCs



PCA-AUDIO-00A1E

- 5.1 Channel AC'97 Audio Extension Module
- Line-in, Mic-in, Aux-in, Line-out, Speaker-out, CD-in and Buzzer-in from CPU card
- Dimensions: 44.05 x 94 mm



PCA-AUDIO-HDA1E

- 7.1 Channel HD Audio Extension Module
- Line-in, Mic-in, Lin-out, Front-out, Speaker-out, Rear-out, Subcen-out, Side-out
- Dimensions: 47.5 x 80.74 mm



PCA-COM232-00A1E

- 4 RS-232 series ports extension module by LPC connector on CPU card.
- Dimensions: 31.5 x 48 mm



PCA-COM485-00A1E

- 4 RS-422/485 series ports extension module by LPC connector on CPU card.
- With Auto-flow control function
- Dimensions: 31.5 x 48 mm



PCA-CFP1-00A1E

- IDE to CF adapter board with bracket
- 1 EIDE (ATA100/66/33)
- 1 CF socket
- Dimensions: 64.3 x 67.3 mm



PCA-5650-00A1E

- 2 VGA output Mini PCI Express Graphic card
- GPU: Silicon Motion SM750
- VGA output: 1920 x 1080, up to 75Hz vertical rate
- 16 Mb of embedded DDR memory

NEW



PCA-TPM-00A1E

- Trusted platform module compliant with TCG 1.2 specification and TCG software stack 1.2 via LPC connector on CPU card.
- Hardware based data protection solution for storage device encryption and decryption.
- Dimensions: 31.5 x 30.5 mm

NEW

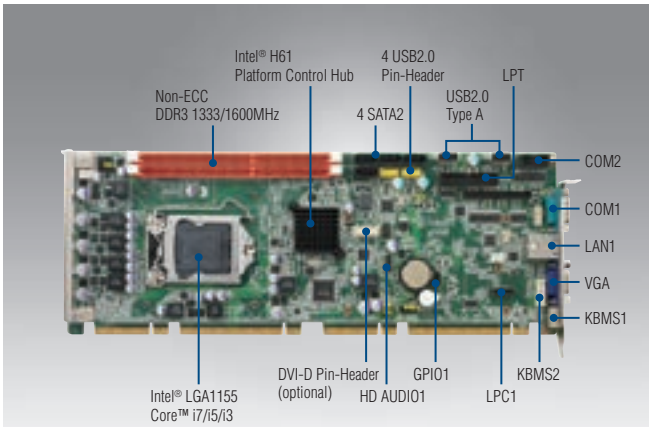


IPMI-1000-00A1E

- IPMI2.0 Server-grade remote control solution
- OS independent hardware-based solution
- Real-time and centralized management
- KVM over IP remote control function
- User friendly UI and utility
- Supports Model: PCE-5126WG2, PCE-7127, PCE-5128

PCE-5026

LGA1155 Intel® Core™ i7/i5/i3 SHB DDR3/SATA 2.0/Single GbE



Features

- LGA1155 Intel® Core™ i7/i5/i3, Pentium® and Celeron® processors
- Dual Channel (Non-ECC) DDR3 1066/1333/1600* up to 16 GB
- Supports 10 USB2.0 and TPM1.2(Optional)
- Supports embedded software APIs and utilities

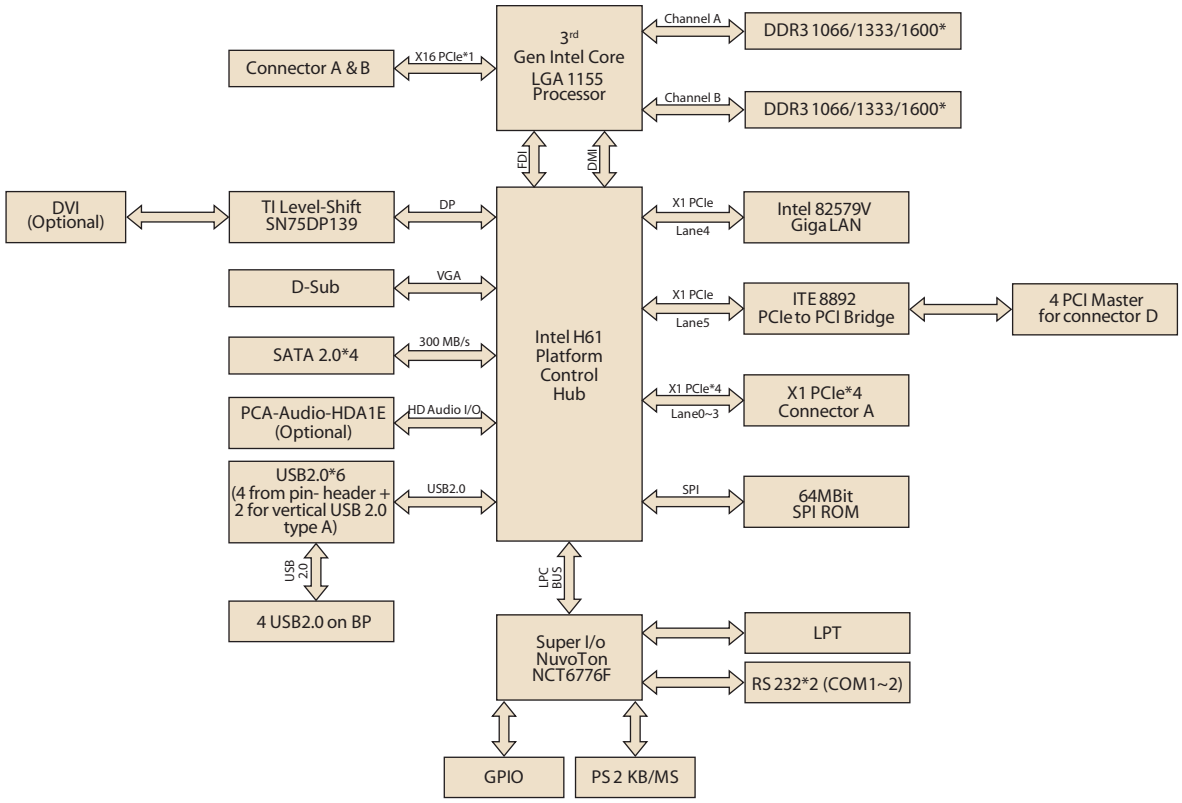
Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Specifications

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220	Pentium G2120	Pentium G850	Celeron G540
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz	3.1 GHz	2.9 GHz	2.5 GHz
	L3 Cache	8 MB	6 MB	3 MB	3 MB	3 MB	2 MB
	Chipset	Intel H61					
	BIOS	AMI 64Mbit SPI Flash					
Bus	PCI Express	One PCIe x16, plus four x1 to backplane					
	PCI	Four 32-bit 33 MHz PCI Masters to Backplane					
Memory	Technology	Dual channel(Non-ECC) DDR3 1066/1333/1600*(depends on CPU Spec.)					
	Max. Cap.	16 GB (8 GB per DIMM)					
	Socket	DDR3 240-pin DIMM x 2					
Graphics	Controller	Chipset integrated Intel HD Graphics					
	VRAM	Shared system memory is subject to OS					
	Video Output	15 Pin VGA D-sub Connector x1/DVI-D connector x 1 (TPN optional)					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	Intel 82579V					
	Connector with LED	RJ45 x 1					
SATA	SATA	SATA 2.0 x 4(300MB/sec)					
	Raid	-					
I/O Interface	USB	Ten USB2.0(Pin-header*4+Vertical USB A type*2+ 4 on backplane)					
	Serial	1 x RS-232 Pin-Header; 1 x RS-232 COM port					
	Parallel	1 (SPP/EPP/ECP)					
	PS/2	1 (Y cable for mouse and keyboard is included in the package)					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1-255 sec					
Miscellaneous	Audio	Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDA1E)					
Power Requirement	Test Environment	Core i7-3770 (3.4 GHz) + DDR3 1066 4 GB x 2					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	5.92 A	0.9 A	2.01 A	0.22 A	0.02 A	0 A
Environment		Operating			Non-operating		
	Temperature/Humidity	0 ~ 60° C(32 ~ 140° F); Depends on CPU frequency and cooler solution 40° C @ 85% RH Non-Condensing			-40 ~ 85° C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI	COM	SATA II	USB 2.0	SW Raid	iAMT
PCE-5026VG-00A1E	H61	Non-ECC	PCE-5BXX	1	Yes	Optional	2	4	10	No	No

Optional Accessories

Part Number	Description
1960047831N001	PCE-5026 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trusted Platform Module compliant TCG 1.2

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1703150102	Serial ATA HDD power cable	x2
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006502610	Startup manual	x1
2066502600	Utility CD	x1

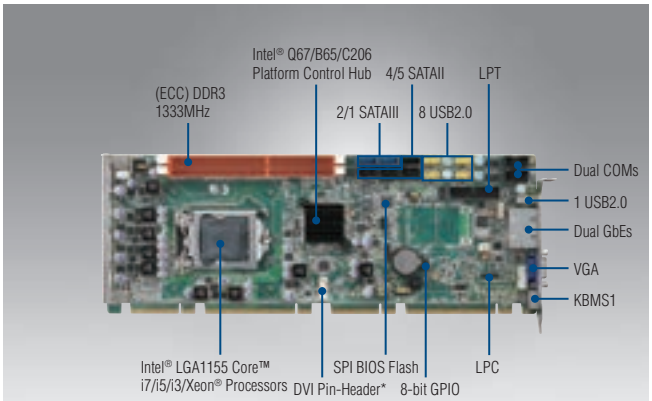
Bracket View



PCE-5026VG-00A1E

PCE-5126

LGA1155 Intel® Core™i7/i5/i3 SHB with DDR3/Dual GbE/SATA III



*: DVI pin-header is default on QG2 and WG2, and optional on QVG

Features

- LGA 1155 Intel® Core™ i7/i5/i3/Xeon® processors
- Dual Channel (ECC) DDR3 1066/1333 up to 16 GB
- Supports SATA RAID 0, 1, 5, 10, AMT7.0, TPM 1.2 (optional)
- Out-of-band remote management with IPMI (optional by IPMI module)
- Supports embedded software APIs and utilities

Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Quiet

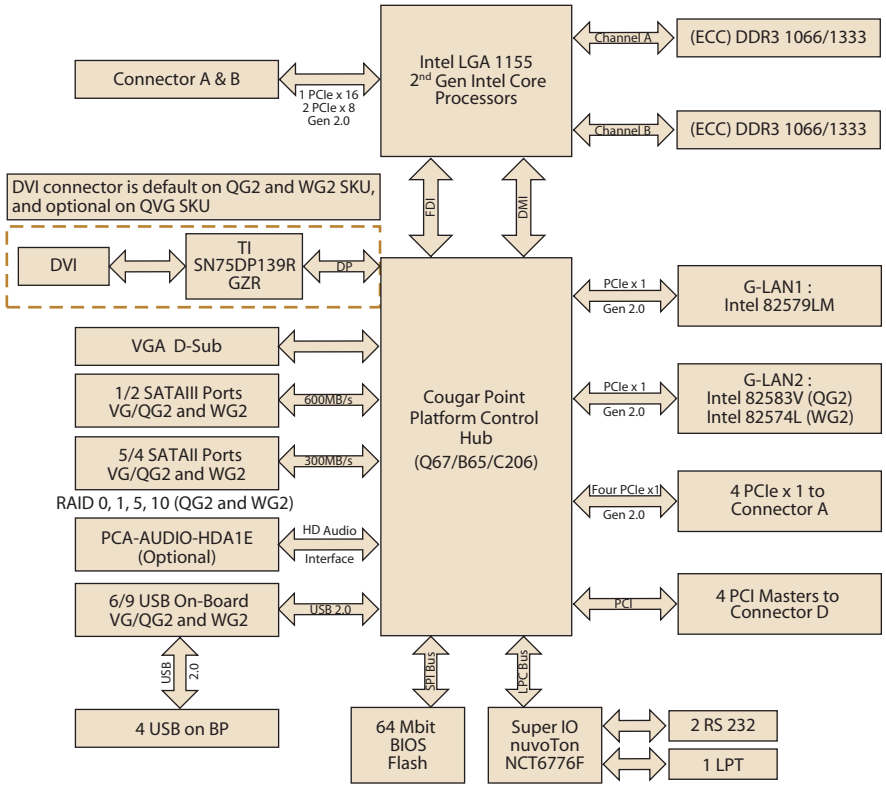
CE FCC

Specifications

Processor System	CPU	Core i7 2600	Xeon E3 1275	Xeon E3 1225	Core i5 2400	Core i3 2120	Pentium G850	Celeron G540
	Base Frequency	3.4 GHz	3.4 GHz	3.1 GHz	3.1 GHz	3.3 GHz	2.9 GHz	2.5 GHz
	L3 Cache	8 MB	8 MB	6 MB	6 MB	3 MB	3 MB	2 MB
	Supports Model	QG2/QVG	WG2	WG2	QG2/QVG	QG2/QVG/ WG2	QG2/QVG	QG2/QVG
	Socket	LGA1155						
	Chipset	QG2: Intel Q67; QVG: Intel B65; WG2: Intel C206						
	BIOS	AMI 64 Mbit SPI Flash						
Bus	PCI-Express	One PCIe x16 or two x8, plus four x1 to backplane (Gen 2.0) (Only WG2 version supports two PCIe x8 to support PCE-7XXX backplanes)						
	PCI	Four 32-bit 33 MHz PCI Masters to Backplane						
Memory	Technology	Dual channel (ECC) DDR3 1066/1333 (ECC is only for WG2 version)						
	Max. Cap.	16 GB (8GB per DIMM)						
	Socket	Two 240-pin DDR3 memory sockets						
Graphics	Onboard	Intel HD Graphics						
	VRAM	Shared system memory is subject to OS						
	Video Output	15 pin VGA D-sub connector x1/onboard DVI pin header x 1 (Default on QG2 and WG2, optional on QVG)						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	LAN1: Intel 82579LM LAN2: Intel 82583V for QG2 version; Intel 82574L for WG2 version						
	Connector	RJ-45 with LED Connector x 2 for QG2, WG2 versions; RJ45 with LED Connector x 1 for QVG versions						
SATA	Max. Transfer Rate	600 MB/s						
	Channel	2 (Only 1 for QVG version)						
	Max. Transfer Rate	300 MB/s						
	Channel	(5 for QVG version)						
	RAID	0, 1, 5, 10 (Only for QG2 and WG2 version)						
I/O Interface	USB 2.0	WG2/QG2-Thirteen USB2.0(Pin-header*8 + USB A type*1 + 4 on backplane) QVG- Ten USB2.0(Pin-header*6 + 4 on backplane)						
	Serial	2 RS-232 with pin Headers						
	Parallel	1 (SPP/EPP/ECP)						
	PS/2	1 (for mouse and keyboard, a Y cable is included in the package)						
Watchdog Timer	Output	System reset						
	Interval	Programmable, 1~255 sec/min						
Miscellaneous	Audio	Intel High Definition audio interface (requires an audio extension module, P/N: PCA-AUDIO-HDA1E)						
Power Requirement	Test Equipment	Intel Core i7-2600 processor; DDR3 1333 2G x2						
	Voltage	+12 V	+5 V	+3.3 V	+5 Vsb	-12 V	-5 V	
	Current	6.65 A	1.62 A	1.98 A	0.73 A	0.13 A	-	
Environment		Operating			Non-Operating			
	Temperature/Humidity	0 ~ 60° C* (32 ~ 140° F) (Depends on CPU frequency and cooler solution Operating humidity: 40° C @ 85% RH Non-Condensing)			-40 ~ 85° C and 60° C @ 95% RH Non-Condensing			
Physical	Dimensions	338 x 122 mm (13.3" x 4.8")						

* Recommend operating temperature is 50° C for better thermal reliability

Block Diagram



Ordering Information

Model Name	Chipset	Memory	Backplane	LAN	Display	iAMT	SATAIII	SW RAID	IPMI Module	USB
PCE-5126QG2-00A1E	Q67	Non-ECC	PCE-5XXX	2 GbE	VGA+DVI**	Yes	2	Yes	None	13
PCE-5126QVG-00A1E	B65	Non-ECC	PCE-5XXX	1 GbE	VGA	None	1	None	None	10
PCE-5126WG2-00A1E	C206	ECC/Non-ECC	PCE-5XXX/7XXX*	2 GbE	VGA+DVI**	Yes	2	Yes	Optional	13

*: WG2 version supports all Advantech PCE-5XXX/7XXX backplanes except PCE-7B10-04A1E.

**: For DVI display, optional DVI cable (1700008822) is required

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trust platform module compliant TCG 1.2
1960047831N001	PCE-5126 optimized CPU Cooler (2U)
1700008822	DVI Cable

Note: Purchasing PCE-5126's optimized CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with PCE-5126.

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x 2
1703150102	Serial ATA HDD power cable	x 2
1701260305	COM + printer ports cable kit	x 1
1700060202	Keyboard and mouse Y-cable	x 1
1700008461	4-port USB cable kit	x 1
9689000068	Jumper package	x 1
2190000902	Warranty Card	x 1
2002512610	Startup manual	x 1
2062512600	Utility CD	x 1

Bracket View



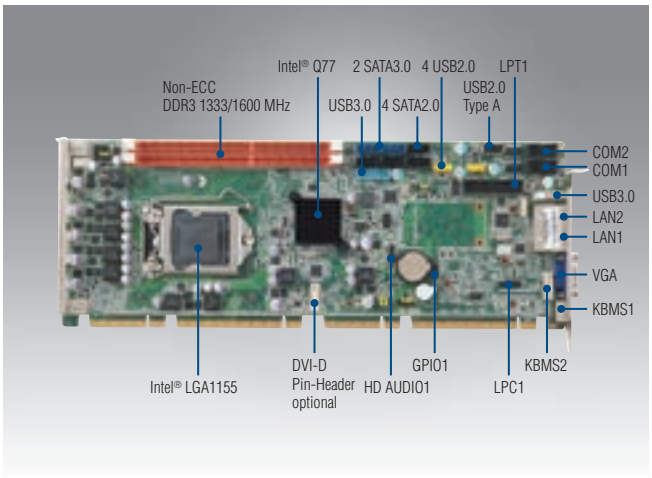
PCE-5126QG2-00A1E
PCE-5126WG2-00A1E



PCE-5126QVG-00A1E

PCE-5127

LGA1155 Intel® Core™i7/i5/i3 SHB DDR3/SATA 3.0/USB3.0/Dual GbE



Features

- LGA1155 Intel® Core™ i7/i5/i3 and Pentium® processors
- Dual Channel (Non-ECC) DDR3 1333/1600 up to 16 GB
- Supports USB3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Out-of-band remote management with iAMT8.0 and TPM 1.2 (optional)
- Supports embedded software APIs and utilities

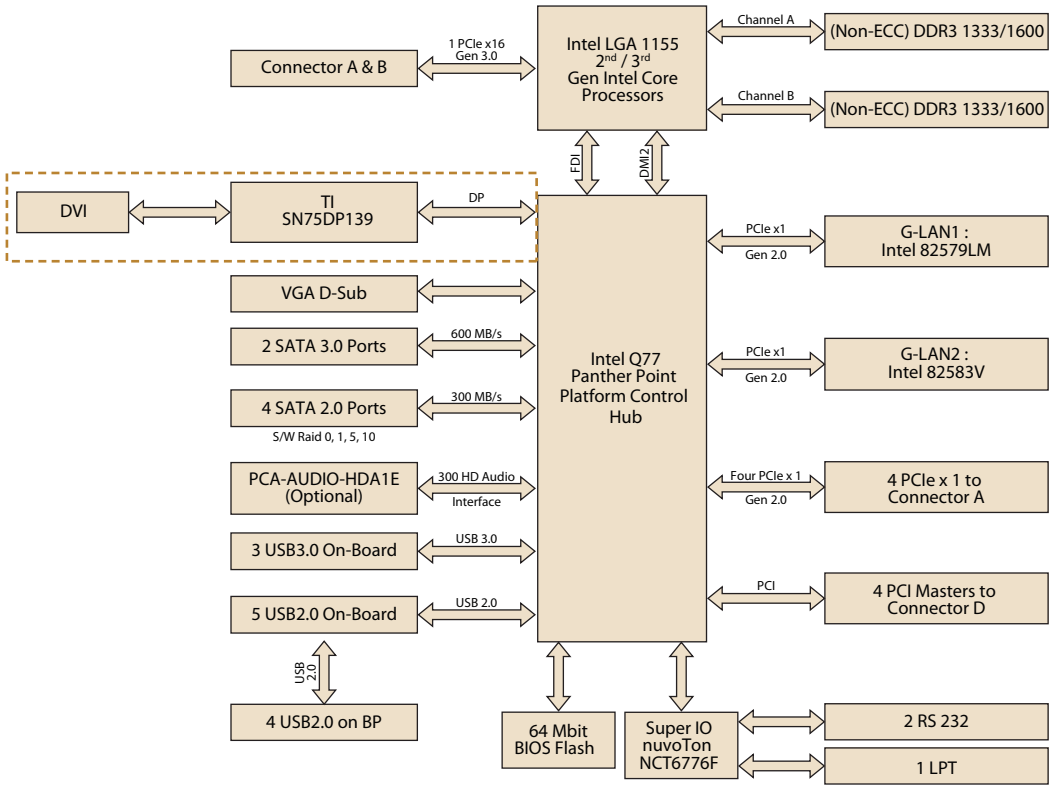
Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Specifications

Processor System	CPU	Core i7-3770	Core i5-3550S	Core i3-3220	Pentium G2120	Pentium G850	Celeron G540
	Base Frequency	3.4 GHz	3.0 GHz	3.3 GHz	3.1 GHz	2.9 GHz	2.5 GHz
	L3 Cache	8 MB	6 MB	3 MB	3 MB	3 MB	2 MB
	SKU/Chipset	Intel Q77					
	BIOS	AMI 64Mbit SPI Flash					
Bus	PCI-Express	One x16 plus four x1 to backplane					
	PCI	Four 32-bit 33 MHz PCI Masters to backplane					
Memory	Technology	Dual channel (Non-ECC) DDR3 1333/1600					
	Max. Cap.	16 GB (8 GB per DIMM)					
	Socket	DDR3 240-pin DIMM x 2					
Graphics	Controller	Chipset integrated Intel HD Graphics					
	VRAM	Shared system memory is subject to OS					
	Video Output	15 Pin VGA D-sub Connector x1/DVI-D connector x1 (Pin Header)					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	LAN 1: Intel 82579LM LAN 2: Intel 82583V					
	Connector with LED	RJ45 x 2					
SATA	S/W Raid 0, 1, 5, 10	SATA 2.0 x 4 (300 MB/sec) SATA 3.0 x 2 (600 MB/sec)					
I/O Interface	USB	Nine USB2.0 (Pin-header*4+USB Type A*1+ 4 on backplane); Three USB3.0 (Pin-Header*2+Rear*1)					
	Serial	2 x RS-232 Pin-Header					
	Parallel	1 (SPP/EPP/ECP)					
	PS/2	1 (Y cable for mouse and keyboard is included in the package)					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1-255 sec					
Miscellaneous	Audio	Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDA1E)					
Power Requirement	Test environment	Core i7-3770 3.4GHz+DDR3 1333 4G X 2					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	5.37 A	0.98 A	1.44 A	0.42 A	0.01 A	0 A
Environment		Operating			Non-operating		
	Temperature/Humidity	0 ~ 60° C(32~140° F); Depends on CPU frequency and cooler solution Operating humidity: 40° C @ 85% RH Non-Condensing			-40 ~ 85°C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI	COM	SATA II	SATA III	USB 2.0	USB 3.0	S/W Raid	iAMT
PCE-5127G2-00A1E	Q77	Non-ECC	PCE-5BXX	2	Yes	Yes*	2	4	2	9	3	Yes	Yes

*Note: 1.Output DVI-D signal only (Required DVI-D cable:1700008822)

Optional Accessories

Part Number	Description
1960047831N001	PCE-5127 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trusted Platform Module compliant TCG 1.2
1700020277-01	2 ports USB 3.0 cable W/ BKT(30cm)
1700008822	DVI-D Cable

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1703150102	Serial ATA HDD power cable	x2
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006512700	Startup manual	x1
2066512700	Utility CD	x1

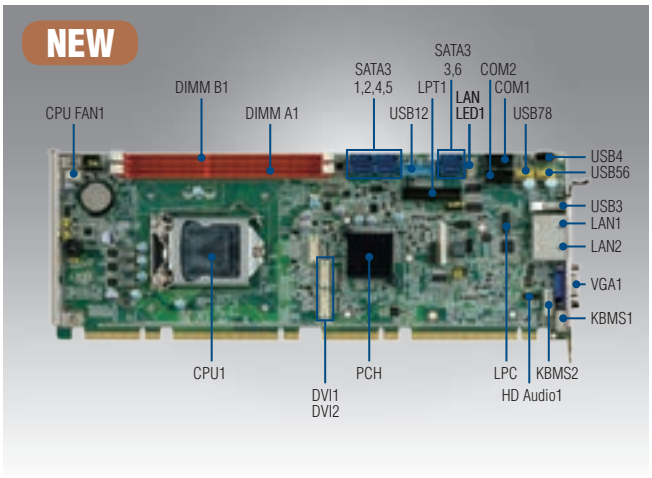
Bracket View



PCE-5127G2-00A1E

PCE-5128

LGA1150 Intel® Core™i7/i5/i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/Dual GbE /3 Displays



Features

- Supports Intel® Core™ i7/i5/i3 LGA1150 processors with Q87
- Dual Channel (Non-ECC) DDR3 1333/1600 up to 16 GB
- Supports PCIE 3.0, USB 3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Supports CRT and 2 x DVI-D(optional) display
- Supports out-of-band remote management with AMT9.0
- Supports Advantech TPM module (LPC I/O)
- Supports SUSIAccess and Embedded Software APIs

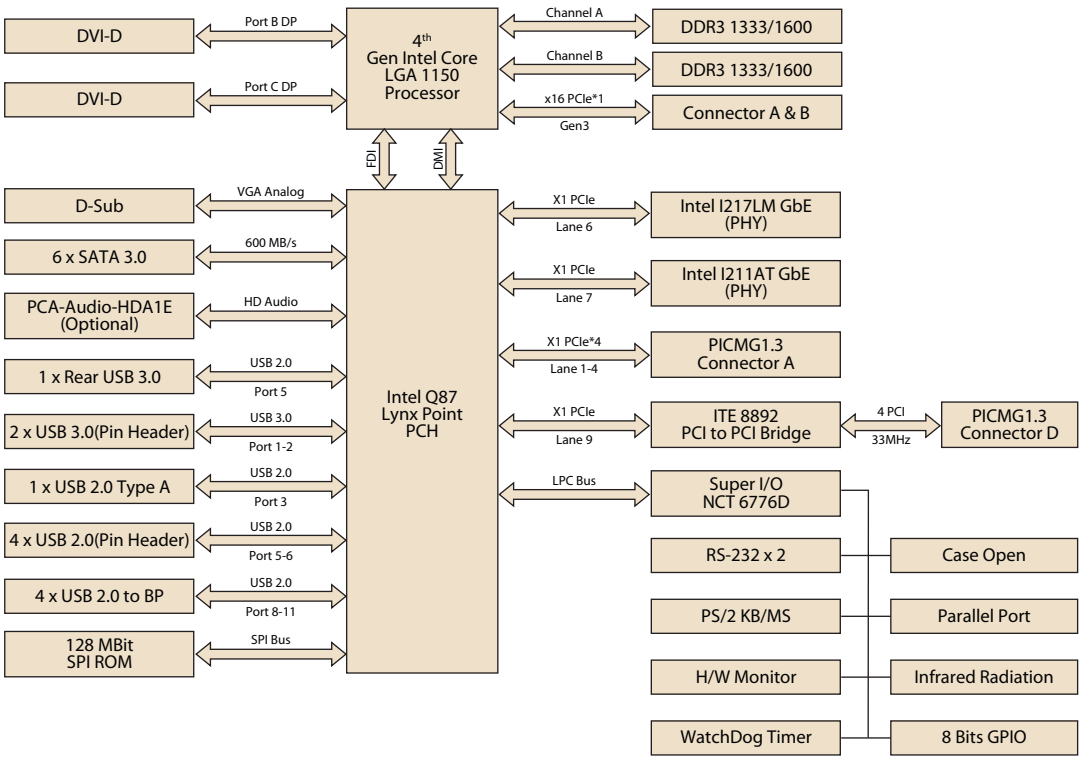
Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Specifications

Processor System	CPU	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE	G4320	G4320TE
	Base Frequency	3.1GHz	2.3GHz	2.9GHz	2.7GHz	3.5GHz	2.4GHz	3.2GHz	2.3GHz
	L3 Cache	8MB	8M	6MB	4MB	3MB	3MB	3MB	3MB
	SKU/Chipset	Intel Q87							
	BIOS	AMI 128Mbit SPI Flash							
Bus	PCI-Express	One x16 plus four x1 to backplane							
	PCI	Four 32-bit 33 MHz PCI Masters to backplane							
Memory	Technology	Dual channel (Non-ECC) DDR3 1333/1600							
	Max. Cap.	16 GB (8 GB per DIMM)							
	Socket	DDR3 240-pin DIMM x 2							
Graphics	Controller	Chipset integrated Intel HD Graphics							
	VRAM	Shared system memory is subject to OS							
	CRT	Supports resolution up to 2048 x 1536 pixel at 60MHz							
	DVI-D	Supports resolution up to 1920 x 1200 pixel at 60MHz							
	Triple Display	CRT+DVI-D+ DVI-D							
Ethernet	Interface	10/100/1000 Mbps							
	Controller	LAN 1: Intel I217LM LAN 2: Intel I211AT							
	Connector with LED	RJ-45 x 2							
SATA	S/W Raid 0, 1, 5, 10	SATA 3.0 x 6 (600 MB/sec)							
Rear I/O	USB 3.0	1							
	Ethernet	2							
	VGA	1							
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)							
Internal Connector	USB	Night USB2.0 (Pin-header*4+USB Type A*1+ 4 on backplane); Two USB3.0 (Pin header)							
	SATA	6							
	DVI-D	2 (Pin header)							
	COM	2							
	Parallel	1							
	IrDA	1							
	GPIO	8-bit							
Watchdog Timer	Output	System reset							
	Interval	Programmable 1-255 sec							
Miscellaneous	Audio	Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDA1E)							
Power Requirement	Test Environment	Core i7-4770S DDR3 1600 8GB x 2							
	Voltage	+12V	+5V	+3.3V	+5Vsb	-12V	-5V		
	Current	4.02A	1.36A	0.81A	0.09A	0A	0A		
Environment		Operating			Non-operating				
	Temperature/Humidity	0 ~ 60° C(32~140° F); Depends on CPU frequency and cooler solution Operating humidity: 40° C @ 85% RH Non-Condensing			-40 ~ 85°C and 60° C @ 95% RH Non-Condensing				
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")							

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI-D	COM	SATA III	USB 2.0	USB 3.0	S/W Raid	AMT
PCE-5128G2-00A1E	Q87	Non-ECC	PCE-5BXX	2	Yes	2*	2	6	10	3	Yes	Yes

Note: DVI-D cable is optional

Optional Accessories

Part Number	Description
1960047831N001	PCE-5128 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio module
PCA-TPM-00A1E	TPM module(Trust Platform management)
1700020277-01	2 ports USB 3.0 cable W/ BKT(30cm)
1700021831-01	DP to DVI-D cable w/ BKT

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1703150102	Serial ATA HDD power cable	x2
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006512800	Startup manual	x1
2066512800	Utility CD	x1

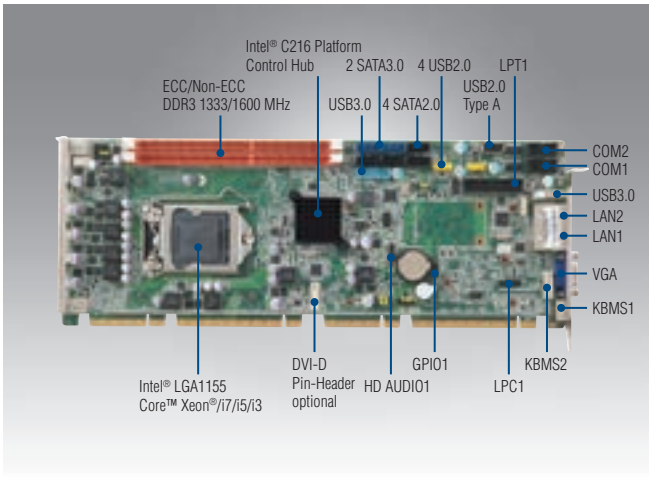
Bracket View



PCE-5128G2-00A1E

PCE-7127

LGA1155 Intel® Xeon®/Core™i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/Dual GbE



Features

- LGA1155 Intel® Xeon®/Core™i3/Pentium® processors
- Dual Channel (ECC) DDR3 1333/1600 up to 16 GB
- Supports USB3.0, SATA3.0, SW Raid 0, 1, 5, 10,and TPM 1.2 (optional)
- Out-of-band remote management with iAMT8.0 and IPMI (Optional)
- Supports embedded software APIs and utilities

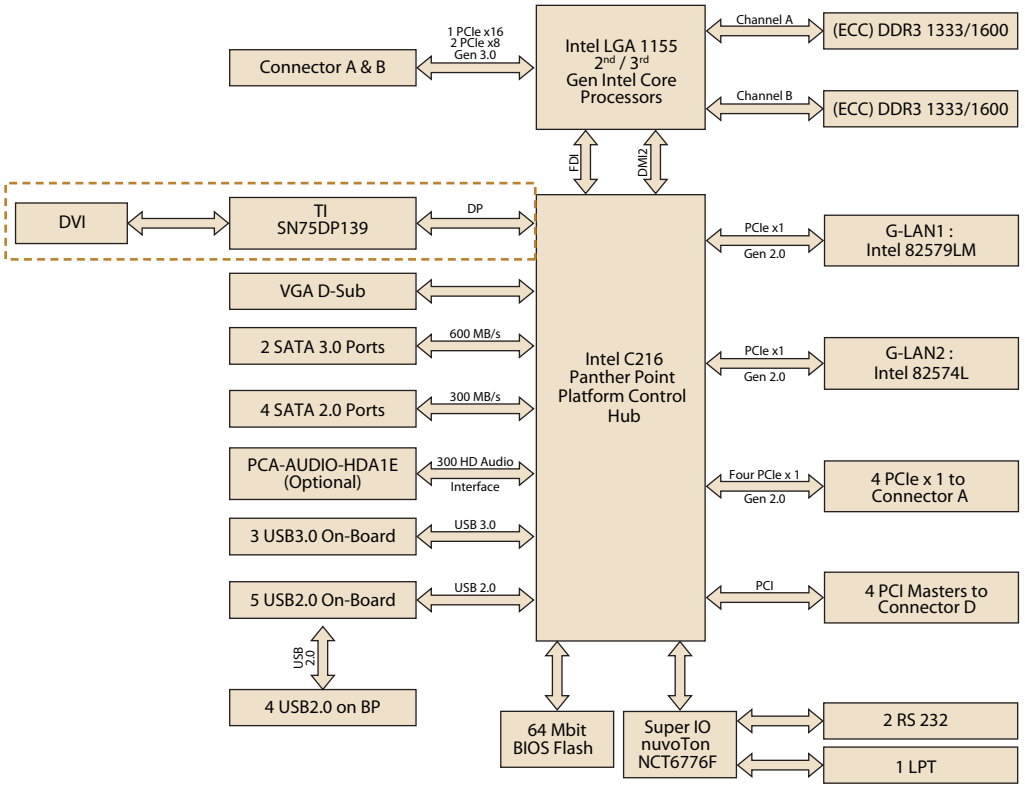
Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Specifications

Processor System	CPU	Xeon E3-1275V2/ E3-1225V2	i7-3770	i5-3550S	Core i3-3220	Pentium G2120	Pentium G850	Celeron G540
	Base Frequency	3.5/ 3.2 GHz	3.4 GHz	3.0 GHz	3.3 GHz	3.1 GHz	2.9 GHz	2.5 GHz
	L3 Cache	8/ 8 MB	8 MB	6 MB	3 MB	3 MB	3 MB	2MB
	SKU/Chipset	Intel C216						
	BIOS	AMI 64Mbit SPI Flash						
Bus	PCI-Express	One x16 or two x8, plus four x1 to backplane Gen. 2.0						
	PCI	Four 32-bit 33 MHz PCI Masters to backplane						
Memory	Technology	Dual channel(ECC) DDR3 1333/1600 *Note: ECC supported on Intel Xeon/i3/Pentium processors when paired with Intel C216 PCH						
	Max. Cap.	16 GB (8 GB per DIMM)						
	Socket	DDR3 240-pin DIMM x 2						
Graphics	Controller	Chipset integrated Intel HD Graphics						
	VRAM	Shared system memory is subject to OS						
	Video Output	15-Pin VGA D-sub Connector x1/DVI-D connector x 1 (Pin Header)						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	LAN 1: Intel 82579LM LAN 2: Intel 82574L						
	Connector with LED	RJ-45 x 2						
SATA	Ports/Max. Transfer Rate	SATA 2.0 x 4 (300 MB/sec) SATA 3.0 x 2 (600 MB/sec)						
	Raid	SW Raid 0, 1, 5, 10						
I/O Interface	USB	Nine USB2.0 (Pin-header*4+USB Type A*1+ 4 on backplane); Three USB3.0 (Pin-Header*2+Rear*1)						
	Serial	2 x RS-232 Pin-Header						
	Parallel	1 (SPP/EPP/ECP)						
	PS/2	1 (Y cable for mouse and keyboard is included in the package)						
Watchdog Timer	Output	System reset						
	Interval	Programmable 1-255 sec						
Miscellaneous	Audio	Intel High Definition audio interface (Required an audio extension module P/N: PCA-AUDIO-HDA1E)						
Environment		Operating				Non-operating		
	Temperature/Humidity	0 ~ 60° C (32~140° F); Depends on CPU frequency and cooler solution Operating humidity: 40° C @ 85% RH Non-Condensing				-40 ~ 85°C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")						

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI	COM	SATA II	SATA III	USB 2.0	USB 3.0	S/W Raid	iAMT	IPMI
PCE-7127G2-00A1E	C216	ECC/Non-ECC	PCE-5BXX/7BXX*	2	Yes	Yes*	2	4	2	9	3	Yes	Yes	Optional

* Note: 1.PCE-7127 supports all Advantech PCE-5BXX/7BXX backplanes except PCE-7B10-04A1E
2. Output DVI-D signal only(Required DVI-D cable:1700008822)

Optional Accessories

Part Number	Description
1960047831N001	PCE-7127 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio extension module
PCA-TPM-00A1E	Trusted Platform Module compliant TCG 1.2
1700020277-01	2 ports of USB 3.0 cable W/ BKT(30cm)
1700008822	DVI-D Cable

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1703150102	Serial ATA HDD power cable	x2
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006512700	Startup manual	x1
2066512700	Utility CD	x1

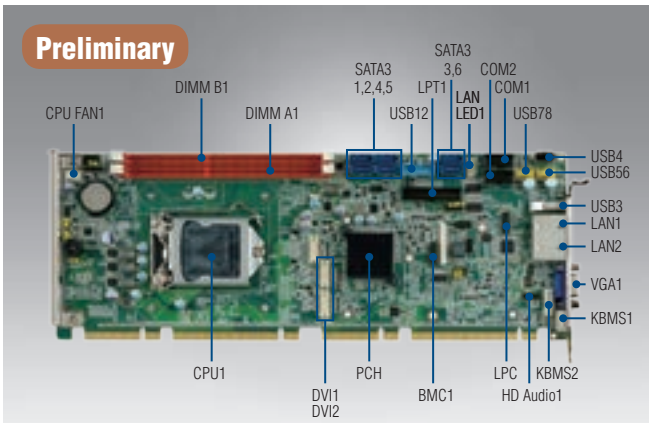
Bracket View



PCE-7127G2-00A1E

PCE-7128

LGA1150 Intel® Xeon®/Core™i3/Pentium® SHB DDR3/SATA 3.0/USB3.0/Dual GbE /3 Displays



Features

- Supports Intel® Xeon® E3 1200v3 series, Core™ i7/i5/i3 LGA1150 processors with C226
- Dual Channel (ECC) DDR3 1333/1600 up to 16 GB
- Supports PCIE 3.0, USB 3.0, SATA3.0, SW Raid 0, 1, 5, 10
- Supports CRT and 2 x DVI-D(optional) display
- Supports out-of-band remote management with AMT9.0 and IPMI
- Supports Advantech TPM module (LPC I/O)
- Supports SUSIAccess and Embedded Software APIs

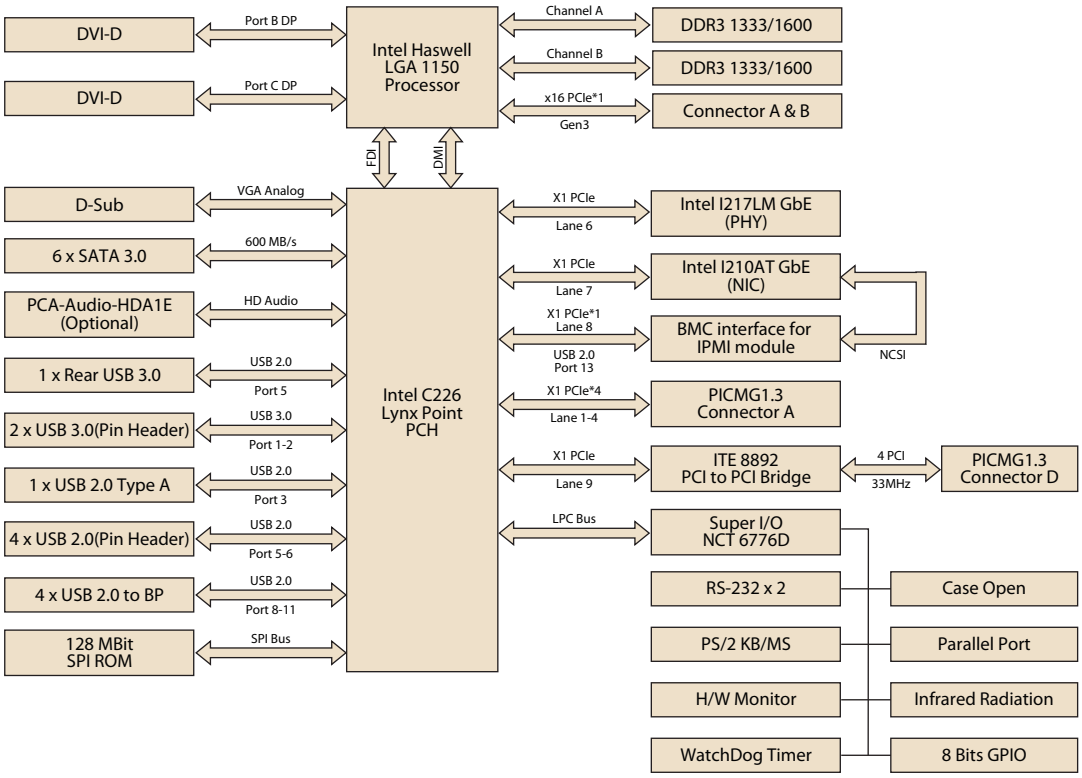
Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Specifications

Processor System	CPU	E3-1275v3	E3-1225v3	E3-1268v3	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE	G4320	G4320TE
	Base Frequency	3.5GHz	3.2GHz	2.3GHz	3.1GHz	2.3GHz	2.9GHz	2.7GHz	3.5GHz	2.4GHz	3.2GHz	2.3GHz
	L3 Cache	8MB	8MB	8MB	8MB	8M	6MB	4MB	3M	3M	3MB	3MB
	SKU/Chipset	Intel C226										
	BIOS	AMI 128Mbit SPI Flash										
Bus	PCI-Express	One x16 plus four x1 to backplane										
	PCI	Four 32-bit 33 MHz PCI Masters to backplane										
Memory	Technology	Dual channel (ECC) DDR3 1333/1600 (Note: Please select ECC supported CPU)										
	Max. Cap.	16 GB (8 GB per DIMM)										
	Socket	DDR3 240-pin DIMM x 2										
Graphics	Controller	Chipset integrated Intel HD Graphics										
	VRAM	Shared system memory is subject to OS										
	CRT	Supports resolution up to 2048 x 1536 pixel at 60MHz										
	DVI-D	Supports resolution up to 1920 x 1200 pixel at 60MHz										
	Triple Display	CRT+DVI-D+ DVI-D										
Ethernet	Interface	10/100/1000 Mbps										
	Controller	LAN 1: Intel I217LM LAN 2: Intel I210AT										
	Connector with LED	RJ45 x 2										
SATA	S/W Raid 0, 1, 5, 10	SATA 3.0 x 6 (600 MB/sec)										
Rear I/O	USB 3.0	1										
	Ethernet	2										
	VGA	1										
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)										
Internal Connector	USB	Night USB2.0 (Pin-header*4+USB Type A*1+ 4 on backplane); Two USB3.0 (Pin header)										
	SATA	6										
	DVI-D	2 (Pin header)										
	COM	2										
	Parallel	1										
	IrDA	1										
	GPIO	8bit										
Watchdog Timer	Output	System reset										
	Interval	Programmable 1-255 sec										
Miscellaneous	Audio	Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDA1E)										
Power Requirement	Test environment	Core i7-4770S DDR3 1600 8GB x 2										
	Voltage	+12V		+5V		+3.3V		+5Vsb		-12V		-5V
	Current	4.02A		1.36A		0.81A		0.09A		0A		0A
Environment		Operating						Non-operating				
	Temperature/Humidity	0 ~ 60° C(32~140° F); Depends on CPU frequency and cooler solution Operating humidity: 40° C @ 85% RH Non-Condensing						-40 ~ 85°C and 60° C @ 95% RH Non-Condensing				
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")										

Block Diagram



Ordering Information

Part Number	PCH	Memory	Backplane	LAN	VGA	DVI-D	COM	SATA III	USB 2.0	USB 3.0	S/W Raid	AMT	IPMI
PCE-7128G2-00A1E	C226	ECC	PCE-5BXX PCE-7BXX	2	Yes	2*	2	6	10	3	Yes	Yes	Yes

Note: DVI-D cable is optional

Optional Accessories

Part Number	Description
1960047831N001	PCE-7128 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio module
PCA-TPM-00A1E	TPM module(Trust Platform management)
IPMI-1000-00A1E	IPMI2.0 module(Remote control management)
1700020277-01	2 ports USB 3.0 cable W/ BKT(30cm)
1700021831-01	DP to DVI-D cable w/ BKT

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1703150102	Serial ATA HDD power cable	x2
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006512800	Startup manual	x1
2066512800	Utility CD	x1

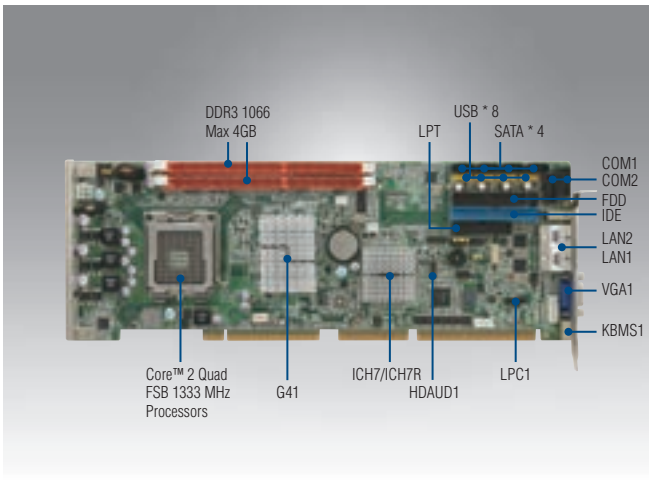
Bracket View



PCE-7128G2-00A1E

PCA-6011

LGA775 Intel® Core™2 Quad SBC with VGA/Dual GbE LAN



Features

- Compliant with PICMG 1.0
- Supports LGA 775 Intel® Core™2 Quad FSB 1333 MHz processors
- Supports Dual Channel DDR3 1066 SDRAM up to 4 GB
- Dual GbE LAN via two PCIe x1 lane
- 2 COM ports, 4 SATA ports, 8 USB ports

Software APIs: Watchdog, H/W Monitor, GPIO

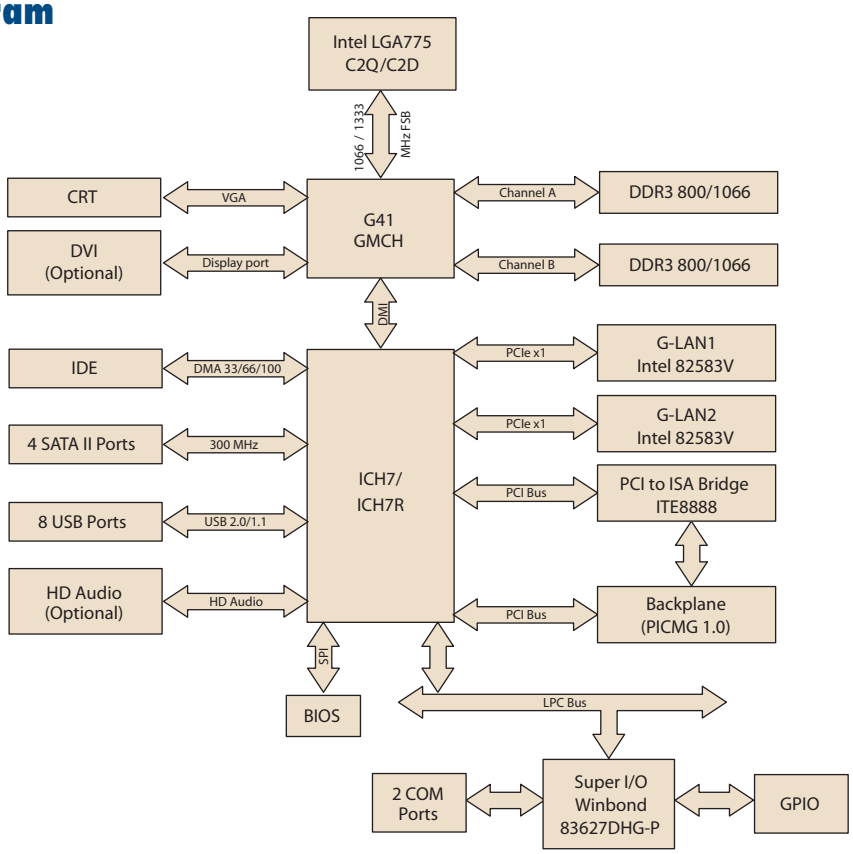
Utilities: Monitoring, Embedded Security ID, eSOS (Requires BIOS customization)

CE FCC RoHS COMPLIANT 2002/95/EC

Specifications

Processor System	CPU (45nm/65nm)	Intel Core 2 Quad	Intel Core 2 Duo	Intel Pentium	Intel Celeron	
	Max Speed	Q9650 3.0 GHz	E8500 3.16 GHz	E6500 2.93 GHz	E1500 2.2 GHz	
	L2 Cache	12 MB	6 M	8 M	512 KB	
	Chipset	Intel G41 + ICH7/ICH7R (only for G2 SKU)				
	BIOS	AMI 16 Mb SPI Flash				
	FSB	800/1066/1333 MHz				
Bus	PCI	32 bit/33 MHz PCI				
	ISA	HISA (ISA High Driver)				
Memory	Technology	Dual-channel DDR3 800/1066 MHz DIMMs				
	Max. Cap.	8 GB				
	Socket	240-pin DIMM x 2				
Graphics	Controller	Intel Graphics Media Accelerator X4500				
	VRAM	Shared with system memory up to 352 MB				
	Video Output	15-Pin VGA D-sub Connector x1/DVI connector x1 (optional)				
Ethernet	Interface	10/100/1000 Mbps				
	Controller	Intel 82583 V				
	Connector	RJ-45 with LED Connector x 2 (G2 SKU), x1 (VG SKU)				
SATA	Bandwidth	300 MB/s				
	Channel	4 ports				
	RAID	0, 1, 5, 10 (only for G2 SKU)				
EIDE	Mode	ATA 100/66/33				
	Channel	1 (Supports up to 2 IDE devices; Master device is alternative for CF socket)				
	CF	(Optional)				
I/O Interface	USB 2.0	8 ports by pin header(VG SKU); 6 ports by pin header/1 port on bracket I/O (G2 SKU)				
	Serial	2 RS-232 on board pin-headers, plus for ports of RS-485 with auto-flow control by module (optional, Advantech P/N: PCA-COM485-00A1E)				
	Parallel	1 (EPP/ECP/SPP)				
	FDD	1				
	PS/2	1 (for mouse and keyboard, Y cable is included in the package)				
Watchdog Timer	Output	System reset				
	Interval	Programmable, 1~255 sec/min				
Miscellaneous	Audio Output	Intel High Definition audio interface (requires an audio extension module P/N: PCA-AUDIO-HDA1E)				
Power Requirement	CPU	Configuration1: Core 2 Quad Q9400 (3.0 G, 95 W) + DDR3 1066 2 G x2				
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Curent	5.14 A	4.04 A	0 A	0.17 A	0 A	0 A
	CPU	Configuration 2: Core2 Duo E8400 (3.0G, 65W) + DDR3 1066 2 GB x2					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Curent	3.63 A	3.4 A	0 A	0.15 A	0 A	0 A
Environment		Operating			Non-Operating		
	Temperature	0 ~ 60° C(32 ~ 140° F), (operating humidity: 40° C @ 85% RH Non-Condensing)			-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

Block Diagram



Ordering Information

Part Number	LAN	VGA	COM	SATA	S/W RAID	USB	DVI	CF
PCA-6011VG-00A1E	Single GbE	Yes	2	4	-	8	No (Optional)	No (Optional)
PCA-6011G2-00A1E	Dual GbE	Yes	2	4	Yes	7	No (Optional)	No (Optional)

Optional Accessories

Part Number	Description
1750000332	LGA 775 CPU cooler for 115 W TDP CPUs
PCA-AUDIO-HDA1E	Audio extension module
1701090401	Single COM Cable Kitt
PCA-COM485-00A1E	4 x 422/485 COM module

Packing List

Part Number	Description	Quantity
1701400452	IDE HDD cable	x 1
1700008461	USB cable with 4 ports	x 1
1703150102	Serial ATA HDD power cable	x 2
1700003194	Serial ATA HDD data cable	x 2
1700060202	Y-cable for PS/2 mouse & keyboard	x 1
1701260305	Printer + COM cable	x 1
9689000068	Jumper pack	x 1
-	Warranty card	x 1
-	Startup manual	x 1
-	Utility CD	x 1

Bracket View



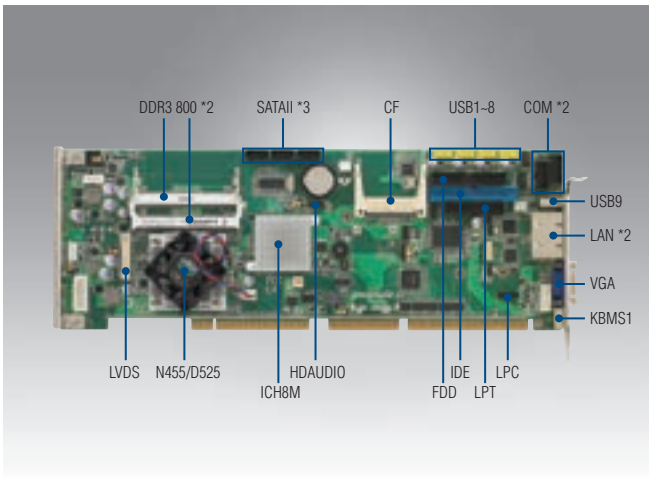
PCA-6011G2-00A1E



PCA-6011VG-00A1E

PCA-6012

Intel® Atom™ N455/D525 SBC with VGA/Dual GbE LAN



Features

- Ultra low power, fanless N455 CPU and maximum 2 GB DDR3 800 memory (Only for N SKU)
- Dual Core™ high performance D525 CPU and maximum 4 GB DDR3 800 memory (Only for D SKU)
- Optional module for 4 x RS-485 w/auto-flow control
- Supports embedded software APIs and utilities

Software APIs: Watchdog, H/W Monitor, Brightness, GPIO, Backlight On/Off, CPU Speed, System Throttling

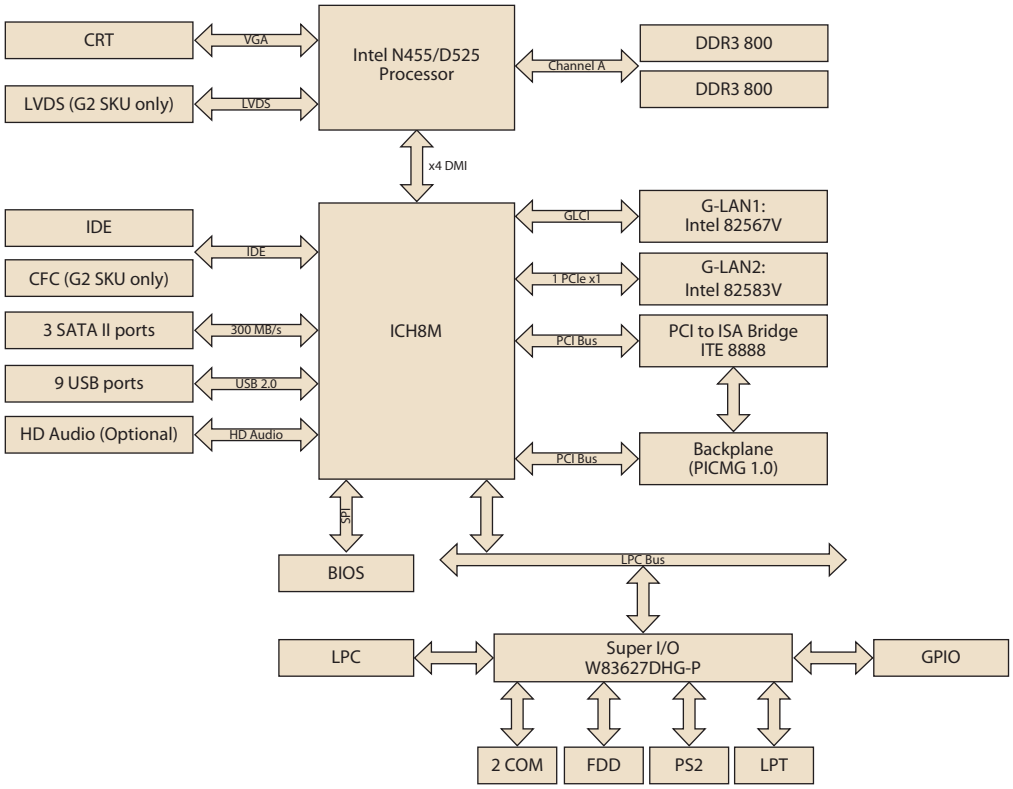
Utilities: BIOS flash, Monitoring, Flash Lock, Embedded Security ID, eSOS (Requires BIOS Customization)

CE FCC

Specifications

Processor System	CPU	Intel Atom N455			Intel Atom D525		
	Speed	1.66 GHz			1.8 GHz		
	L2 Cache	512 KB			1 MB		
	Chipset	Intel ICH8M					
	BIOS	AMI 16Mb SPI Flash					
Bus	PCI	32-bit/33 MHz PCI					
	ISA	HISA (ISA High Drive)					
Memory	Technology	Dual channel DDR3 800 MHz DIMMs					
	Max. Cap.	2 GB			4 GB		
	Socket	204-pin SODIMM x 2					
Graphics	Controller	Embedded Gen3.5+ GFX Core technology, Direct X 9/Pixel Shader 2.0 compliant					
	VRAM	Shared with system memory up to 224 MB					
	Video Interface	15-pin VGA D-sub connector x1/LVDS pin header x 1 (G2 SKU only, supports single channel 18-bit LVDS)					
	Video Output	VGA: Supports up to SXGA 1400 x 1050 @ 60 Hz for Atom N455 VG SKU, up to 2048 x 1536 @ 60 Hz for Atom D525 G2 SKU LVDS: Supports 18-bit single channel and up to WXGA 1366 x 768 or 1280 x 800 (G2 SKU only)					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	LAN1: Intel 82567V, LAN2: Intel 82583V					
	Connector	RJ-45 with LED Connector x2 (G2 SKU), x1 (VG SKU)					
SATA 2	Max. Transfer Rate	300 MB/s					
	Channel	3					
EIDE	Mode	ATA 100/66/33					
	Channel	1 (Supports up to 2 IDE devices; Master device is alternative for CF socket)					
I/O Interface	USB 2.0	8 ports by pin header (VG SKU); 8 ports by pin header and 1 port on bracket I/O (G2 SKU)					
	Serial	2 RS-232 onboard pin-headers, plus four ports of RS-485 with auto-flow control by module (optional, Advantech P/N: PCA-COM485-00A1E)					
	Parallel	1 (EPP/ECP)					
	GPIO	1 (8-bit)					
	FDD	1					
	PS/2	1 (for mouse and keyboard, Y cable is included in the package)					
Watchdog Timer	Output	System reset					
	Interval	Programmable, 1~255 sec/min					
Miscellaneous	Audio Output	Intel High Definition audio interface (requires an audio extension module, P/N: PCA-AUDIO-HDA1E)					
Power Requirement	Configuration	Atom D525 CPU 1.8 GHz + DDR3 1333 2G x2 SODIMM; Storage: One SATA HDD					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	0.44 A	3.71 A	0 A	0.15 A	0 A	0 A
	Configuration	Atom N455 CPU 1.66 GHz + DDR3 1333 1G x2 SODIMM; Storage: One SATA HDD					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	0.16 A	2.81 A	0 A	0.13 A	0 A	0 A
Environment		Operating			Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 85% RH Non-Condensing)			-40 ~ 85° C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

Block Diagram



Ordering Information

P/N	CPU	Fan-Less	RAM	LAN	VGA	LVDS	FDD	SATA	USB	CF
PCA-6012VG-00A1E	Atom™ N455	Yes	Socket to 2G	Single GbE LAN	Yes	-	1	3	8	-
PCA-6012G2-00A1E	Atom™ D525	No	Socket to 4G	Dual GbE LAN	Yes	Yes	1	3	9	1

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	Audio extension module
1701090401	Single COM Cable Kitt
PCA-COM485-00A1E	4 x RS-422/RS-485 COM module

Packing List

Part Number	Description	Quantity
1960046526N001	CPU Cooler for Atom™ D525CPU (Only for G2 SKU)	x1
1701400452	IDE HDD cable	x 1
1700008461	USB cable with 4 ports	x 1
1703150102	Serial ATA HDD power cable	x 2
1700003194	Serial ATA HDD data cable	x 2
1700060202	Y-cable for PS/2 mouse & keyboard	x 1
1701260305	Printer + COM cable	x 1
9689000068	Jumper pack	x 1
-	Warranty card	x 1
-	Startup manual	x 1
-	CD with driver utility and manual (in PDF format)	x 1

Bracket View



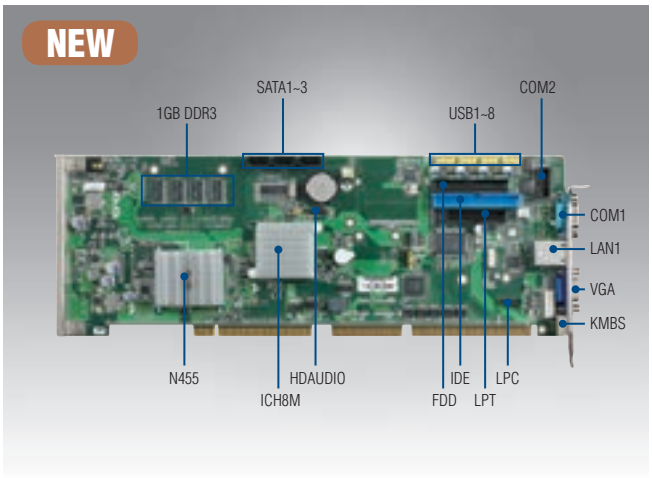
PCA-6012VG-00A1E



PCA-6012G2-00A1E

PCA-6013

Intel® Atom™ N455 SBC with On-board DDR3/ Anti-surge VGA, GbE LAN



Surge protection LV.3

Features

- Ultra low power, fanless N455 CPU and maximum 2 GB DDR3 667 memory
- Memory anti-vibration through 1GB on board memory and SO-DIMM mounting holes
- IE61000-4-5 LV.3 anti-surge certificated rear I/O: LAN, COM ports and optional module COM-485 w/ 4x RS-485

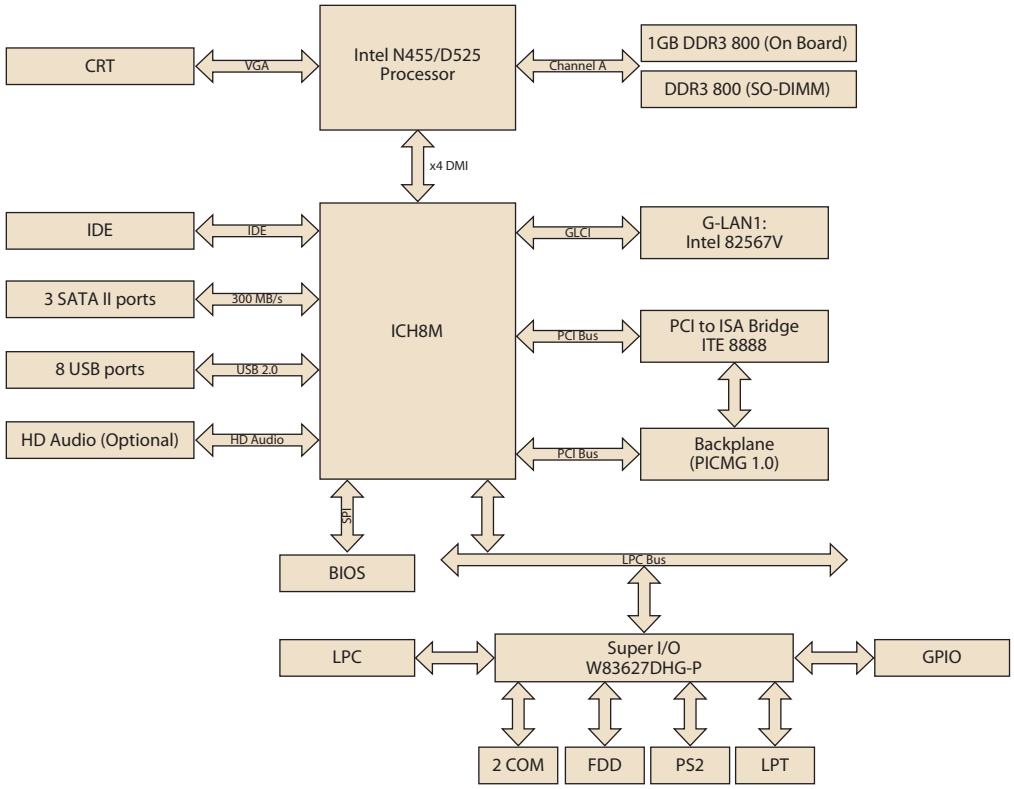
Software APIs: Watchdog, H/W Monitor, Brightness, GPIO, Backlight On/Off, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring, Flash Lock, Embedded Security ID, eSOS (Requires BIOS Customization)

Specifications

Processor System	CPU	Intel Atom N455					
	Speed	1.66 GHz					
	L2 Cache	512 KB					
	Chipset	Intel ICH8M					
	BIOS	AMI 16Mb SPI Flash					
Bus	PCI	32-bit/33 MHz PCI					
	ISA	HISA (ISA High Drive)					
Memory	Technology	Dual channel DDR3 667 Mhz DIMMs					
	Max. Cap.	2 GB					
	Layout	1G on-board and 204 pin SODIMM x1					
Graphics	Controller	Embedded Gen3.5+ GFX Core technology, Direct X 9/Pixel Shader 2.0 compliant					
	VRAM	Shared with system memory up to 224 MB					
	Video Interface	15-pin VGA D-sub connector x1/LVDS pin header x 1					
	Video Output	VGA: Supports up to SXGA 1400 x 1050 @ 60 Hz for Intel Atom N455					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	LAN1: Intel 82567V					
	Connector	RJ45 with LED Connector x1 with IEC61000-4-5 Lv.3 anti-surge protection					
SATA 2	Max. Transfer Rate	300 MB/s					
	Channel	3					
EIDE	Mode	ATA 100/66/33					
	Channel	1 (Supports up to 2 IDE devices; Master device is alternative for CF socket)					
I/O Interface	USB 2.0	8 ports by pin header					
	Serial	2 RS-232 onboard pin-headers, plus four ports of RS-485 with auto-flow control by module (optional, Advantech P/N: PCA-COM485-00A1E)					
	Parallel	1 (EPP/ECP)					
	GPIO	1 (8-bit)					
	FDD	1					
	PS/2	1 (for mouse and keyboard, Y cable is included in the package)					
Watchdog Timer	Output	System reset					
	Interval	Programmable, 1~255 sec/min					
Miscellaneous	Audio Output	Intel High Definition audio interface (requires an audio extension module, P/N: PCA-AUDIO-HDA1E)					
Power Requirement	Configuration	Atom N455 CPU 1.66 GHz + DDR3 1333 1G x2 SODIMM; Storage: One SATA HDD					
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V
	Current	0.16 A	2.1 A	0 A	0.13 A	0 A	0 A
Environment		Operating			Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 85% RH Non-Condensing)			-40 ~ 85° C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

Block Diagram



Ordering Information

P/N	CPU	Fan-Less	RAM	LAN	VGA	LVDS	FDD	SATA	USB	CF
PCA-6013VG-00A1E	Intel® Atom™ N455	Yes	1G onboard + 1 SODIMM to 2G	Single GbE LAN	Yes	-	1	3	8	-

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	Audio extension module
1701090401	Single COM Cable Kitt
PCA-COM485-00A1E	4 x RS-422/RS-485 COM module

Packing List

Part Number	Description	Quantity
1701400452	IDE HDD cable	x 1
1700008461	USB cable with 4 ports	x 1
1703150102	Serial ATA HDD power cable	x 2
1700003194	Serial ATA HDD data cable	x 2
1700060202	Y-cable for PS/2 mouse & keyboard	x 1
1701260305	Printer + COM cable	x 1
9689000068	Jumper pack	x 1
-	Warranty card	x 1
-	Startup manual	x 1
-	CD with driver utility and manual (in PDF format)	x 1

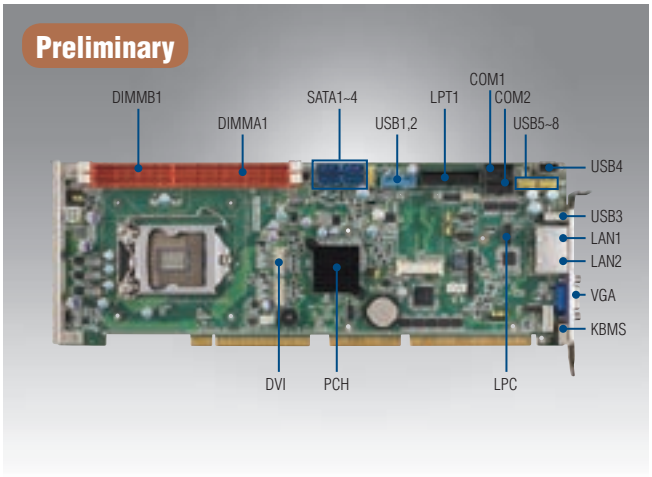
Bracket View



PCA-6013VG-00A1E

PCA-6028

LGA1150 Intel® Core™ i7/i5/i3/Pentium SBC with VGA/DVI/Dual GbE LAN



Features

- Supports Intel® Core™ i7/i5/i3/Pentium LGA1150 processors with H81
- Dual Channel (Non-ECC) DDR3 1333/1600 up to 16 GB
- Supports USB 3.0, SATA3.0
- Supports CRT and 1 x DVI-D(optional) display
- Supports Advantech LPC modules.
- Supports SUSIAccess and Embedded Software APIs

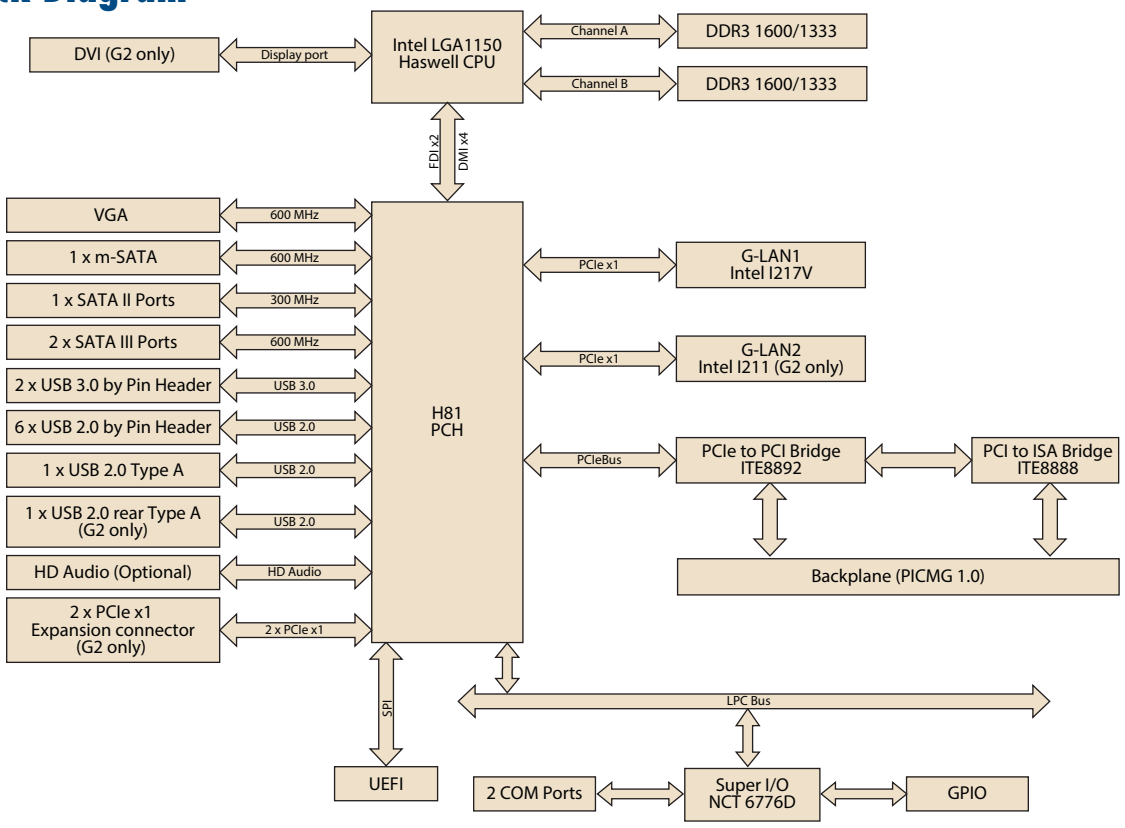
Software APIs: Watchdog, H/W Monitor, GPIO

Utilities: Monitoring

Specifications

Processor System	CPU	i7-4770S	i7-4770TE	i5-4570S	i5-4570TE	i3-4330	i3-4330TE
	Base Frequency	3.1GHz	2.3GHz	2.9GHz	2.7GHz	3.5GHz	2.4GHz
	L3 Cache	8MB	8M	6MB	4MB	3MB	3MB
	SKU/Chipset	Intel H81					
	BIOS	AMI 128Mbit SPI Flash					
Bus	ISA	HISA (ISA High Driver)					
	PCI	32 bit/ 33 MHz PCI					
Memory	Technology	Dual channel (Non-ECC) DDR3 1333/1600					
	Max. Cap.	16 GB (8 GB per DIMM)					
	Socket	DDR3 240-pin DIMM x 2					
Graphics	Controller	Chipset integrated Intel HD Graphics					
	VRAM	Shared system memory is subject to OS					
	CRT	Supports resolution up to 2048 x 1536 pixel at 60Hz					
	DVI-D	Supports resolution up to 1920 x 1200 pixel at 60Hz					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	LAN 1: Intel I217V LAN 2: Intel I211 (Only in G2 Sku)					
	Connector with LED	RJ45 x 1 (VG sku); RJ45 x 2(G2 sku)					
SATA	Channel	SATA 3.0 x 2 (600 MB/sec), SATA2.0 x 2 (300MB/sec)					
Rear I/O	USB 2.0	1 (Only in G2 sku)					
	Ethernet	1 (VG sku); 2 (G2 sku)					
	VGA	1					
	PS/2	1 (PS/2 Y cable supports 1 x keyboard and 1 x mouse)					
Internal Connector	USB	Up to 8x USB2.0 (6x Pin header, 1x Type A, 1x Rear in G2 sku only) 2x USB3.0 (Pin header)					
	SATA	4(1x SATA2.0, 2x SATA3.0, 1x mSATA)					
	DVI-D	1 (Pin header)					
	COM	2					
	Parallel	1					
	IrDA	1					
	GPIO	8-bit					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1-255 sec					
Miscellaneous	Audio	Intel High Definition audio interface (required an audio extension module P/N: PCA-AUDIO-HDA1E)					
Power Requirement	Test Environment	Core i7-4770S DDR3 1600 8GB x 2					
	Voltage	+12V	+5V	+3.3V	+5Vsb	-12V	-5V
	Current	TBD					
Environment		Operating			Non-operating		
	Temperature/Humidity	0 ~ 60° C(32~140° F); Depends on CPU frequency and cooler solution Operating humidity: 40° C @ 85% RH Non-Condensing			-40 ~ 85°C and 60° C @ 95% RH Non-Condensing		
Physical	Dimensions	338 mm (L) x 122 mm (W) (13.3" x 4.8")					

Block Diagram



Ordering Information

Part Number	LAN	VGA	DVI-D	COM	SATA	USB	m-SATA
PCA-6028VG-00A1E	1	Yes	Optional	2	3 (1 x 2.0 + 2 x 3.0)	9 (2 x 3.0 + 7 x 2.0)	1
PCA-6028G2-00A1E	2	Yes	1	2	3 (1 x 2.0 + 2 x 3.0)	10 (2 x 3.0 + 8 x 2.0)	1

Optional Accessories

Part Number	Description
1960047831N001	PCA-6028 optimized CPU Cooler (2U)
PCA-AUDIO-HDA1E	Audio module
PCA-TPM-00A1E	TPM module(Trust Platform management)
1700020277-01	2 ports USB 3.0 cable W/ BKT(30cm)
1700021831-01	DP to DVI-D cable w/ BKT

Packing List

Part Number	Description	Quantity
1700003194	Serial ATA HDD data cable	x2
1703150102	Serial ATA HDD power cable	x2
1701260305	COM + printer ports cable kit	x1
1700060202	Keyboard and mouse Y-cable	x1
1700008461	4-port USB cable kit	x1
9689000068	Jumper package	x1
2190000902	Warranty Card	x1
2006602800	Startup manual	x1
2066602800	Utility CD	x1

Bracket View



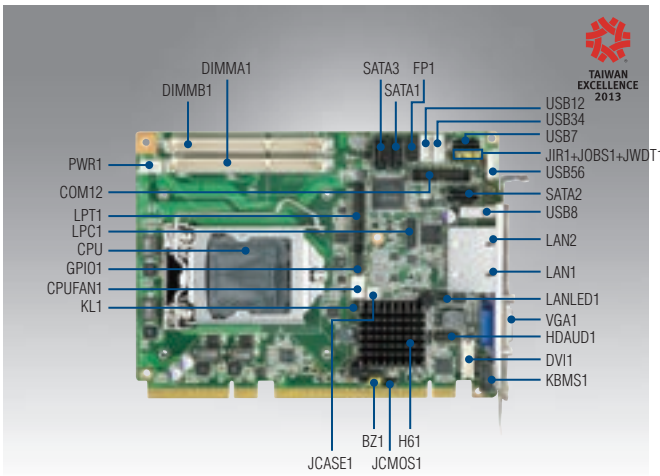
PCA-6028G2-00A1E



PCA-6028VG-00A1E

PCE-3026

LGA 1155 Intel® Core™ i7/i5/i3 Half-size SHB with PCIe/VGA/DVI/Dual GbE LAN



Features

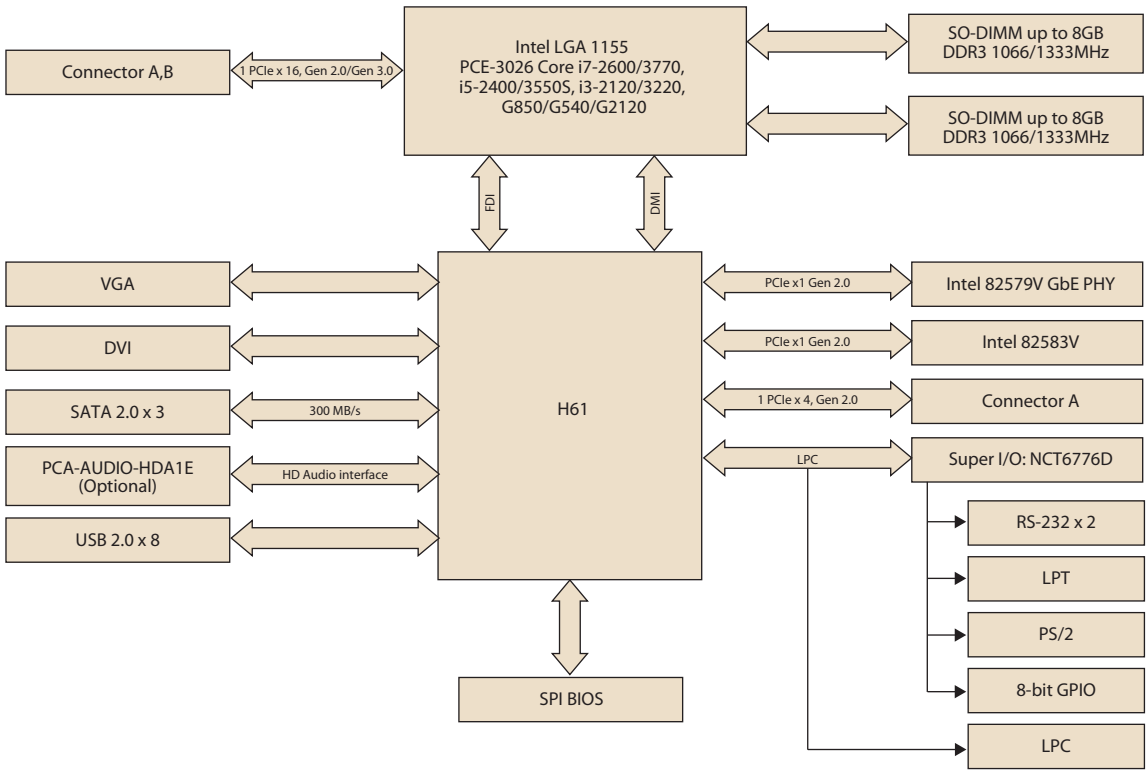
- Complies with PICMG 1.3
- Supports LGA 1155 Intel® Core™ i7/i5/i3 processor
- Intel® H61
- Dual channel 1066/1333 MHz SO-DIMM up to 16 GB
- Three SATA 2.0 ports
- Supports dual 10/100/1000 Mbps Ethernet
- Supports one VGA and one DVI

Software APIs: GPIO, SMBus, Watchdog, H/W Monitor

Specifications

Processor System	CPU	Core i7-3770	Core i7-2600	Core i5-3550S	Core i5-2400	Core i3-3220	Core i3-2120	Pentium G2120	Pentium G850	Celeron G540
	Base Frequency	3.4 GHz	3.4 GHz	3.0GHz	3.1GHz	3.3GHz	3.3GHz	3.1GHz	2.9GHz	2.5GHz
	L3 Cache	8 MB	8 MB	6 MB	6 MB	3 MB	3 MB	3 MB	3 MB	2 MB
	Chipset	Intel H61								
	BIOS	AMI 64Mb SPI Flash								
BUS	PCI Express	One x16 & four x1 to backplane								
Memory	Technology	Dual channel DDR3 1066/1333 MHz SO-DIMM (Non ECC)								
	Max. Capacity	16 GB (8 GB per DIMM)								
	Socket	204-pin SODIMM x 2								
Graphics	Chipset Integrated	Chipset integrated Intel HD Graphics								
	Video Output	One DB-15 VGA output, One DVI out put								
Ethernet	Interface	10/100/1000 Mbps								
	Controller	GbE LAN1: Intel 82579V GbE PHY, GbE LAN2: Intel 82583V								
	Connector	RJ-45 x 2								
SATA	Max. Data Transfer Rate	300 MB/s (SATA 2.0)								
I/O Interface	USB	8 USB 2.0 480 Mbps (6 onboard, 1 on rear I/O, 1 type A onboard)								
	Serial	2 RS-232, and 4 RS-485 (optional: PCA-COM485-00A1E)								
	Parallel	1 (SPP/EPP/ECP)								
	PS/2	1								
Watchdog Timer	Output	System reset								
	Interval	Programmable 1 ~ 255 sec/ min								
Miscellaneous	Audio Output	HD audio interface (requires an audio extension module P/N: PCA-AUDIO-HDA1E)								
Power Requirement	Test environment	Core i5-2400 (3.1 GHz) + DDR3 1333 4 GB x 2								
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V			
	Current	4.67 A	1.58 A	0.02 A	0.21 A	0 A	0 A			
Environment		Operating			Non-Operating					
	Temperature	0 ~ 60° C (32 ~ 140° F) (operation humidity: 40° C @ 85% RH Non-Condensing)			-40° C - 85° C and 60° C @ 95% RH Non-Condensing					
Physical Characteristics	Dimensions (W x D)	167.64 mm x 126.39 mm (6.6" x 4.98")								

Block Diagram



Ordering Information

Part Number	VGA	DVI	GbE LAN	USB	SATA	COM
PCE-3026G2-00A1E	Yes	1*	Dual	8	3	2 x RS-232 4 x RS-485 (optional)

* For DVI display, optional DVI cable (1700008822) is required.

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	Audio extension module with HD audio interface
PCA-TPM-00A1E	Trusted platform module compliant with TCG 1.2
PCA-COM485-00A1E	4 x RS-422/485 module
PCA-COM232-00A1E	4 x RS-232 module
1700008822	DVI cable
1960047831N001	2U CPU cooler for i7-3770, i7-2600, i5-3550S, i5-2400, i3-3220, i3-2120, G2120, G850, G540
1960053207N001	1.5U CPU cooler for i7-2600, i5-3550S, i5-2400, i3-3220, i3-2120, G2120, G850, G540
1960053065N001	1U blower for i3-3220, i3-2120,G2120, G850,G540

Bracket View



PCE-3026

Compatible Backplane and Chassis

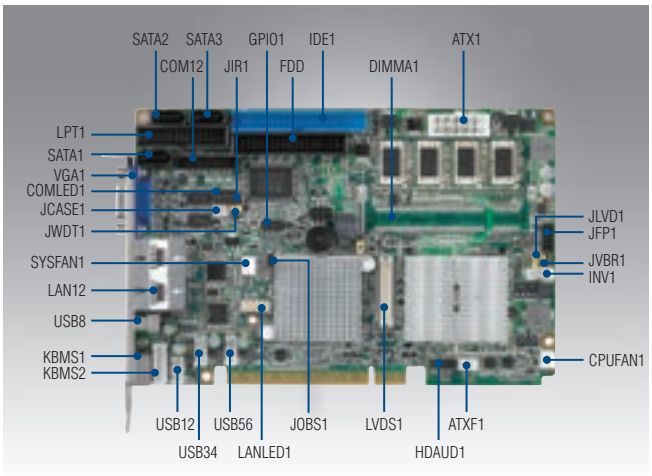
Backplane Model	PCI	PCIe x16	PCIe x4	PCIe x1	Compatible Chassis
PCE-3B03-00A1E	-	1	1	-	IPC-3026/ IPC-6806S
PCE-3B06-00A1E	-	1	-	4	IPC-3026/ IPC-6806S
PCE-3B06-03A1E	3	1	-	1	IPC-3026/ IPC-6806S

Packing List

Part Number	Description	Quantity
1700002223	Printer (parallel) port cable	1
1700003194	Serial ATA HDD data cable	1
1703150102	Serial ATA HDD power cable	1
1700008762	2-port COM cable kit	1
1700014398	4-port USB cable kit	1
1703040100	Power converter	1

PCI-7031

Intel® Atom™ N450/D510 PCI Half-size SBC with Onboard DDR2/VGA/LVDS/Dual GbE/SATA/COM



Features

- Ultra low power, fanless Intel® Atom™ processor N450 CPU and 1 GB onboard DDR2 667 memory (Only for N SKU)
- Dual Core™ high performance D510 CPU and maximum 2 GB DDR2 667 memory (Only for D SKU)
- VGA/LVDS dual video outputs
- Optional module for 4 x RS-485 w/auto-flow control
- Supports embedded software APIs and Utilities

Software APIs: Watchdog, H/W Monitor, Brightness, GPIO, Backlight On/Off, CPU Speed, System Throttling

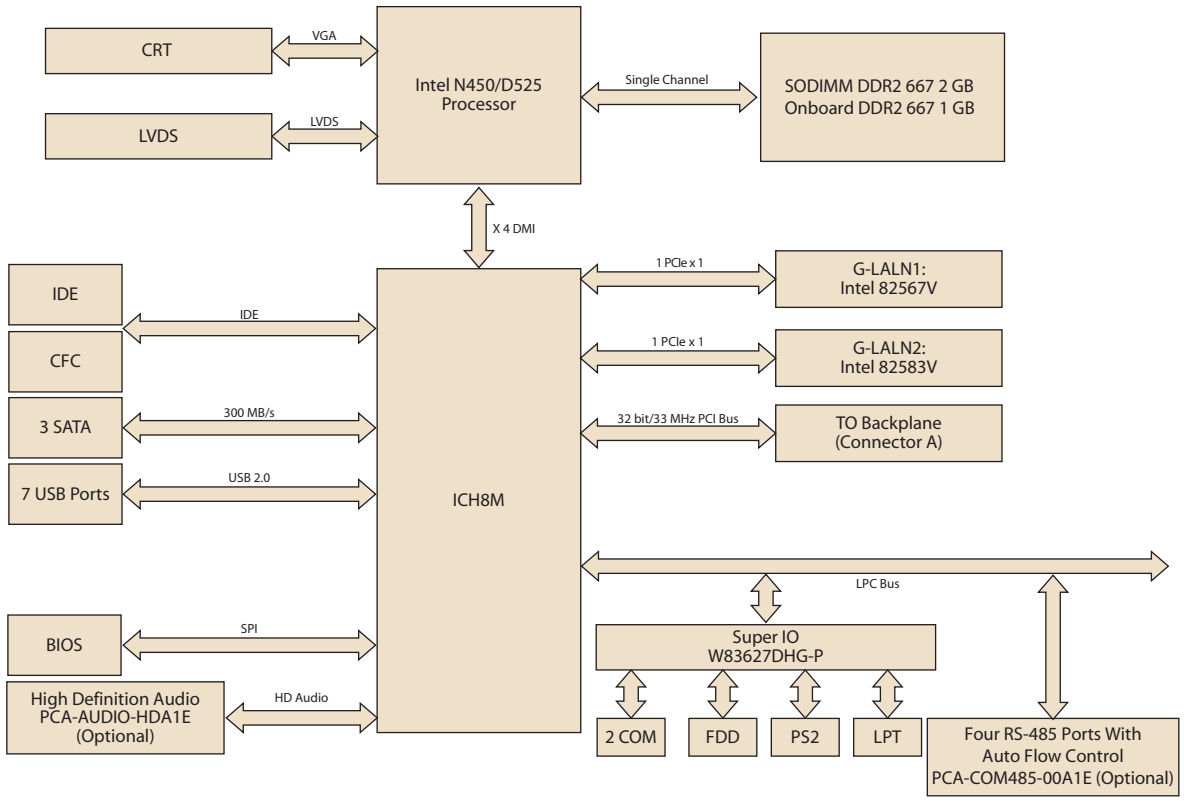
Utilities: BIOS flash, Monitoring, Flash Lock, Embedded Security ID, eSOS (Requires BIOS Customization)

Note: eSOS needs ODM BIOS available by request

Specifications

Processor System	CPU	Intel Atom N450	Intel Atom D510
	Speed	1.66 GHz	1.66 GHz
	L2 Cache	512 KB	1 MB
	Chipset	ICH8M	
	BIOS	AMI 16Mb SPI Flash	
Bus	PCI-Express	-	
	PCI	Four 32 bit/33 MHz PCI Masters to Backplane	
Memory	Technology	Single channel DDR2 667 MHz	
	Max. Cap.	1 GB onboard for N SKU; max 2 GB SODIMM for D SKU	
	Socket	No socket for N SKU; 200-pin SODIMM x 1 for D SKU	
Graphics	Onboard	Embedded Gen3.5+ GFX Core technology, DirectX 9/Pixel Shader 2.0 compliant	
	VRAM	Shared 224 MB	
	Video Interface	15-pin VGA D-sub connector x1/Onboard LVDS pin header x 1 (supports single channel 18-bit LVDS)	
	Video Output	VGA: Supports up to SXGA 1400 x 1050 @ 60 Hz for N SKU, up to 2048 x 1536 @ 60 Hz for D SKU LVDS: Supports 18-bit single channel and up to WXGA 1366 x 768 or 1280 x 800 for both N and D SKUs Dual Display: VGA + LVDS, supports extended mode and clone mode for both N and D SKUs	
Ethernet	Interface	10/100/1000 Mbps	
	Controller	LAN1: Intel 82567V	
		LAN2: Intel 82583V	
	Connector	RJ-45 with LED Connector x 2	
SATA	Max. Transfer Rate	300 MB/s	
	Channel	3	
EIDE	Mode	ATA 100/66/33	
	Channel	1 (supports up to 2 IDE devices)	
I/O Interface	USB 2.0	7 ports on the SHB	
	Serial	Two RS-232 onboard pin-headers, plus four four RS-485 ports with auto-flow control by module (Optional, Advantech P/N: PCA-COM485-00A1E)	
	Parallel	1 (EPP/ECP)	
	FDD	1	
	PS/2	1 (for mouse and keyboard, an Y cable is included in the package)	
Watchdog Timer	Output	System reset	
	Interval	Programmable, 1~255 sec/min	
Miscellaneous	Audio Output	Intel High Definition audio interface (requires a audio extension module, P/N: PCA-AUDIO-HDA1E)	
Environment		Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F) (operating humidity: 40° C @ 85% RH Non-Condensing)	-40 ~ 85° C and 60° C @ 95% RH Non-Condensing
Physical	Dimensions	185 mm (L) x 122 mm (W) (7.3" x 4.8")	

Block Diagram



Ordering Information

Model Name	CPU	Memory	Fanless	VGA	LVDS	SATA	USB	COM	CF
PCI-7031D-S6A1E	Atom™ D510	One SODIMM Socket 2 GB DDR2 667 No Onboard RAM	No	Yes	Yes	3	7	2	Yes
PCI-7031N-S6A1E	Atom™ N450	No SODIMM Socket Onboard 1 GB DDR2 667	Yes	Yes	Yes	3	7	2	Yes

Optional Accessories

Part Number	Description
PCA-COM485-00A1E	Extension module for four RS-422/485 ports with auto-flow control function
PCA-AUDIO-HDA1E	Extension module for 7.1 channel High Definition audio

Bracket View



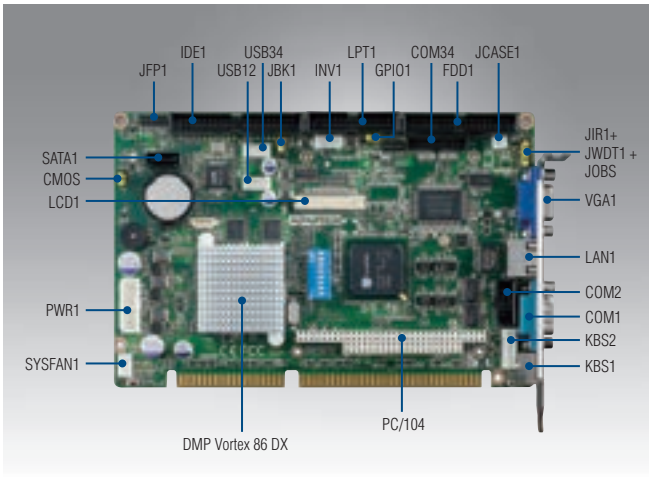
PCI-7031D-S6A1E
PCI-7031N-S6A1E

Packing List

Part Number	Description	Quantity
960046526N001	CPU cooler for Atom™ D510 CPU (only available for D SKU)	x 1
1700003194	Serial ATA HDD data cable	x 1
1703150102	Serial ATA HDD power cable	x 1
1701260301	Printer (parallel) port cable kit	x 1
1700008762	Dual COM ports cable kit	x 1
1700002343	ATX feature cable	x 1
1700014398	4-port USB cable kit	x 1
1700060202	Y cable for PS/2 keyboard and PS/2 mouse	x 1
1700000265	AT/ATX PSU 20-Pin to 12-Pin Cable Kit	x 1
9689000068	Jumper pack	x 1
-	Warranty card	x 1
-	PCI-7031 startup manual	x 1
-	CD with driver utility and manual (in PDF format)	x 1

PCA-6743

DM&P Vortex86DX ISA Half-size SBC with VGA/ TTL/ LAN/ USB/ PC/104/ CFC/ COM



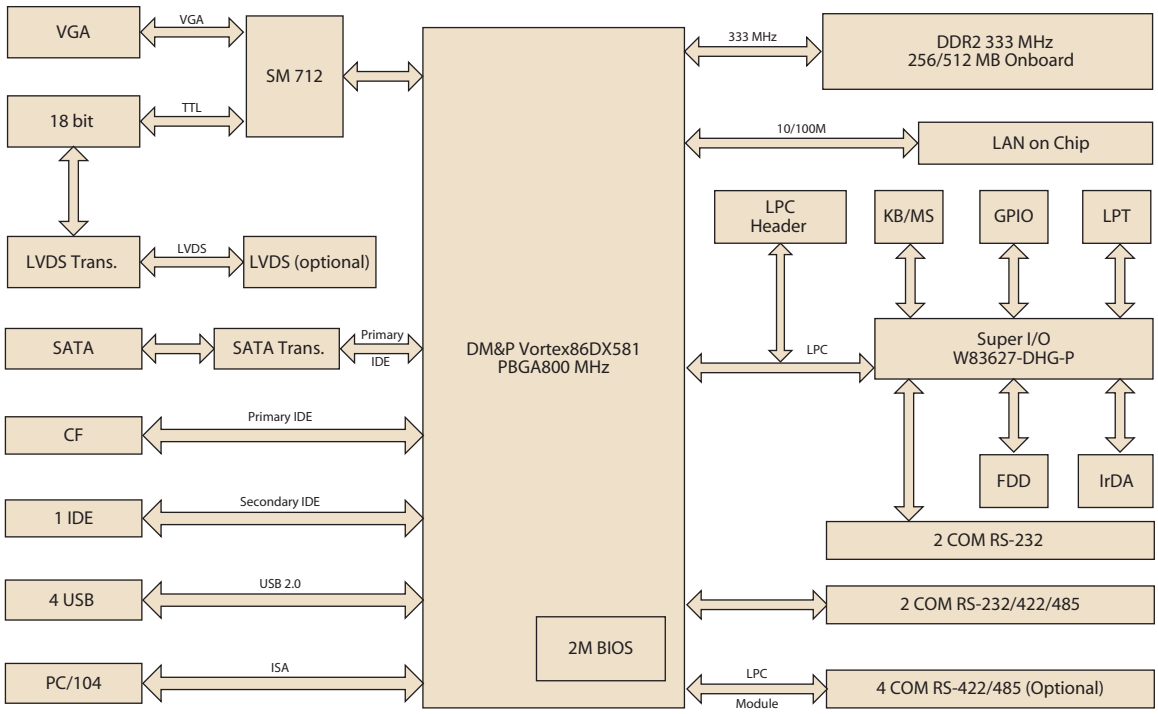
Features

- Ultra low power, fanless DM&P Vortex86DX processor and 512/256 MB onboard DDR2 memory
- VGA+LCD dual video outputs
- FDD/ PC/104/ COM supported
- Optional module for 4 COM485 w/auto-flow control

Specifications

Processor System	CPU	DM&P Vortex86DX	
	Max. Speed	800 MHz	
	L1 Cache	16 KB I/D-Cache	
	L2 Cache	256 KB	
	Chipset	DM&P Vortex86DX	
	BIOS	Award integrated in DM&P Vortex86DX	
Bus	ISA	Full 16-bit ISA Bus signal	
Memory	Technology	Default onboard DDR2 256MB (For VE SKU) Default onboard DDR2 512MB (For F SKU)	
	Socket	-	
Graphics	Controller	Chipset integrated VGA controller VGA mode: SM712 graphics chip supports 1024 x 768 @ 24-bit true color LCD mode: SMI SM712 2D graphics chip supports 1024 x 768 @ 18-bit TFT	
	VRAM	Shared 4 MB	
	LVDS	18 bit LVDS (optional)	
	TTL	Up to 24-bit TTL for TFT LCD	
	Dual Display	Supports VGA+LCD simultaneous display	
Ethernet	Interface	10/100 Mbps	
	Controller	LAN on Vortex86DX	
	Connector	RJ-45 x 1	
EIDE	Mode	UDMA 100	
	Channel	1 (2 IDE devices from secondary IDE)	
SATA (150 MB/s)	Port	1 (F SKU)	
I/O Interface	USB	4 (USB 2.0 ports)	
	Serial	F SKU: 2 RS-232/422/485 (1 Real I/O and 1 Pin header) + 2 RS-232 (with Pin header) VE SKU: 2 RS-232 (1 Real I/O and 1 Pin header) Optional: PCA-COM485; Add 4 RS-422/485 with Auto-Flow Control (Need to check if IRQ is available or not)	
	Parallel	1 (EPP/ECP/SPP)	
	FDD	1	
	GPIO	8-bit 4 in/4 out	
	PS/2	1 (6-pin DIN socket on bracket for PS/2 keyboard and mouse, 6-pin wafer box connector for keyboard only)	
Watchdog Timer	Output	System reset/IRQ11	
	Interval	Programmable, 1~255 sec/min	
Miscellaneous	Audio Output	-	
	Solid State Disk	Compact Flash socket (Type I/II) from primary master	
Power Requirement	Voltage	+12 V	+5 V
	Current	0.04 A	1.44 A
Environment		Operating	Non-Operating
	Temperature	0 ~ 60° C (32 ~ 140° F) (operating humidity: 40° C @ 85% RH Non-Condensing)	-40° C ~ 85° C and 60° C @ 95% RH Non-Condensing
Physical	Dimensions	185 mm (L) x 122 mm (W) (7.3" x 4.8")	

Block Diagram



Ordering Information

P/N	VGA	TTL	LVDS	SATA	COM	PC104	LPT	FDD	Onboard RAM
PCA-6743VE-Q0A2E	1	1	Optional	-	2 RS-232	-	1	1	256 MB
PCA-6743F-Q0A2E	1	1	Optional	1	2 RS-232 2 RS-232/422/485	1	1	1	512 MB

Optional Accessories

Part Number	Description
PCA-COM485-00A1E	4 x RS-422/485 COM module

* Please check the IRQ resource availability before add on the module.

Packing List

Part Number	Description	Quantity
1700008762	Dual-COM port cable kit for COM3-4 (2.00 mm) (for F SKU)	x 1
1700014398	4-port USB cable kit (2.0 mm pitch)	x 1
1700060202	Y cable for PS/2 keyboard, PS/2 mouse	x 1
1701260305	COM2 (2.54 mm) +LPT (2.54 mm) cable (for F SKU)	x 1
1700003194	SATA HDD data cable	x 1
1703150102	SATA HDD power cable	x 1

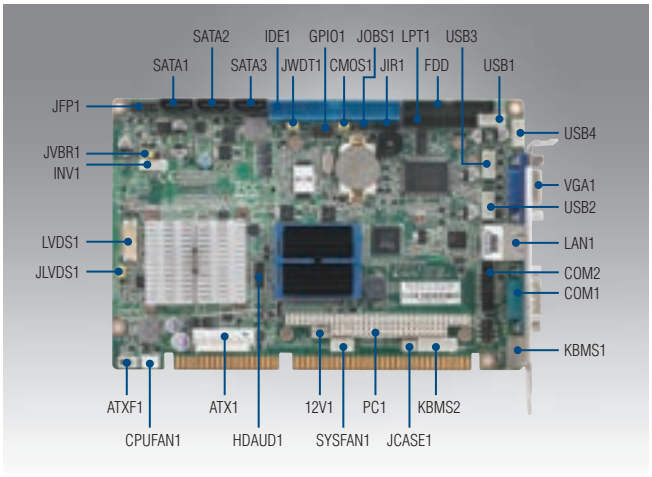
Bracket View



PCA-6743VE-Q0A2E
PCA-6743F-Q0A2E

PCA-6782

Intel® Atom™ N455/D525 ISA Half-size SBC with VGA/LVDS/GbE LAN/SATA/COM/ CFC/FDD and PC/104



Features

- Ultra low power, fanless N455 CPU and maximum 2 GB DDR2 667 memory (Only for N SKU)
- Dual Core™ high performance D525 CPU and maximum 2 GB DDR2 667/800 memory (Only for D SKU)
- VGA/LVDS dual video outputs
- Optional module for 4 x RS-485 w/auto-flow control
- Supports embedded software APIs and utilities

Software APIs: Watchdog, H/W Monitor, Brightness, GPIO, Backlight On/Off, CPU Speed, System Throttling

Utilities: BIOS flash, Monitoring, Flash Lock, Embedded Security ID, eSOS (Requires BIOS Customization)

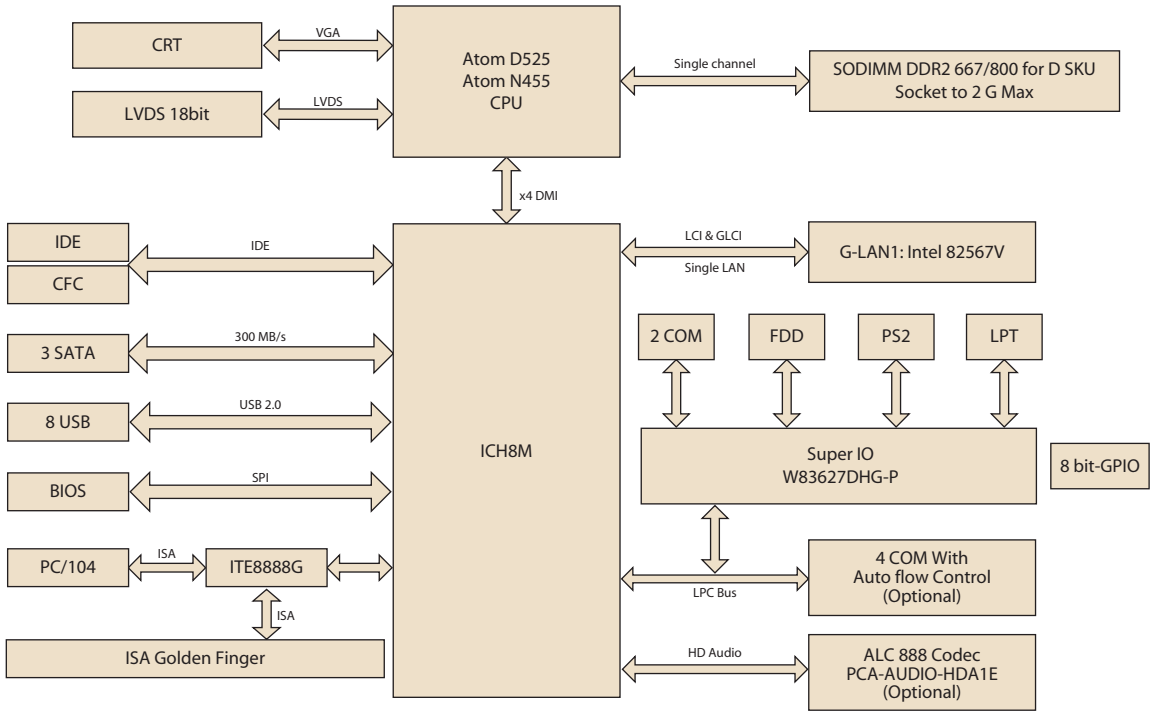
SUSIAccess Remote Device Management

CE FCC

Specifications

Processor System	CPU	Intel Atom N455			Intel Atom D525			
	Speed	1.66 GHz			1.8 GHz			
	L2 Cache	512 KB			1 MB			
	Chipset	Intel ICH8M						
	BIOS	AMI 16Mb SPI Flash						
Bus	PCI	N/A						
	ISA	16-bit/Gold Finger						
Memory	Technology	Single channel DDR2 667 MHz			Single channel DDR2 667/800 MHz			
	Max. Cap.	max 2 GB SODIMM			max 2 GB SODIMM			
	Socket	200-pin DIMM x 1			200-pin DIMM x 1			
Graphics	On board	Embedded Gen3.5+ GFX Core technology, Direct X 9/Pixel Shader 2.0 compliant						
	VRAM	Shared 224 MB						
	Video Interface	15-pin VGA D-sub connector x1/Onboard LVDS pin header x 1 (supports single channel 18-bit LVDS)						
	Video Output	VGA: Supports up to SXGA 1400 x 1050 @ 60 Hz for N SKU, up to 2048 x 1536 @ 60 Hz for D SKU LVDS: Supports 18-bit single channel and up to WXGA 1366 x 768 or 1280 x 800 for both N and D SKUs Dual Display: VGA + LVDS, supports extended mode and clone mode for both N and D SKUs						
Ethernet	Interface	10/100/1000 Mbps						
	Controller	LAN1: Intel 82567V						
	Connector	RJ-45 with LED Connector x1						
SATA 2	Max. Transfer Rate	300 MB/s						
	Channel	3						
EIDE	Mode	ATA 100/66/33						
	Channel	1 (Supports up to 2 IDE devices)						
I/O Interface	USB 2.0	8 ports on the SHB						
	Serial	Two RS-232 onboard pin-headers, plus four ports of RS-485 with auto-flow control by module (optional, Advantech P/N: PCA-COM485-00A1E)						
	Parallel	1 (EPP/ECP)						
	GPIO	1 (8-bit)						
	FDD	1						
	PS/2	1 (for mouse and keyboard, a Y cable is included in the package)						
Watchdog Timer	Output	Interrupt, system reset						
	Interval	Programmable, 1~255 sec/min						
Miscellaneous	Audio Output	Intel High Definition audio interface (requires an audio extension module, P/N: PCA-AUDIO-HDA1E)						
Power Requirement	Test Equipment	Atom D525 CPU 1.8 GHz; Memory: One of 2 GB DDR2 667 MHz SODIMM; Storage: One SATA HDD						
	Test Program	Hot CPU pro 4.22						
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V	Total
	Current	0.46 A	2.41 A	0 A	0.01 A	0 A	0 A	17.62 W
	Test Equipment	Atom N455 CPU 1.66 GHz; Memory: One of 2 GB DDR2 667 MHz SODIMM; Storage: One SATA HDD						
	Test Program	Hot CPU pro 4.22						
	Voltage	+12 V	+5 V	+3.3 V	+5 VSB	-12 V	-5 V	Total
	Current	0.13 A	2.19 A	0 A	0.01 A	0 A	0 A	12.56 W
Environment		Operating			Non-Operating			
	Temperature	0 ~ 60° C (32 ~ 140° F) (Operational humidity: 40° C @ 85% RH Non-Condensing)			-40 ~ 85° C and 60° C @ 95% RH Non-Condensing			
Physical	Dimensions	185 mm (L) x 122 mm (W) (7.3" x 4.8")						

Block Diagram



Ordering Information

P/N	CPU	Fan-Less	LAN	PC104	LVDS	FDD	SATA	USB	RAM
PCA-6782D-S8A1E	Atom™ D525	No	Single GbE LAN	Yes	Yes	1	3	8	Socket to 2G
PCA-6782N-S6A1E	Atom™ N455	Yes	Single GbE LAN	Yes	Yes	1	3	8	Socket to 2G

Optional Accessories

Part Number	Description
PCA-COM485-00A1E	Extension module for four ports of RS-422/485 with auto-flow control function
PCA-AUDIO-HDA1E	Extension module for 7.1 channel High Definition audio
1701340603	FDD cable

Bracket View



PCA-6782D-S8A1E
PCA-6782N-S6A1E

Packing List

Part Number	Description	Quantity
1960046526N001	CPU Cooler for Atom™ D510 CPU (Only Available for D SKU)	x 1
1700003194	Serial ATA HDD data cable	x 2
1703150102	Serial ATA HDD power cable	x 2
1700008954	Print port & COM port cable	x 1
1700002343	ATX Feature Cable	x 1
1700014398	4-port USB cable kit	x 1
1700060202	Y cable for PS/2 keyboard and PS/2 mouse	x 1
1703070101	ATX Power Cable 20P/7P 10 cm	x 1
1703080101	AT Power Cable	x 1
9689000002	Jumper Pack	x 1
-	Warranty card	x 1
-	PCA-6782 Startup Manual	x 1
-	CD with driver utility and manual (in PDF format)	x 1

PICMG1.3 Full-Size SHB Backplanes

Server Grade Backplanes

Compatible with PCE-7000 Series System Host Board

1U Butterfly Backplanes

PCE-7B03V-01A1E

- 3-slot Butterfly BP for 1U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x8
- PCI-X slot: N/A
- PCI slot: One 32/33
- Compatible with IPC chassis: ACP-1320, ACP-1010



PCE-7B03V-00A1E

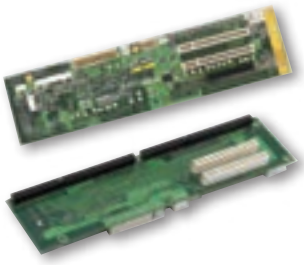
- 3-slot Butterfly BP for 1U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: Two x8
- PCI-X slot: N/A
- PCI slot: N/A
- Compatible with IPC chassis: ACP-1320, ACP-1010



2U Butterfly Backplanes

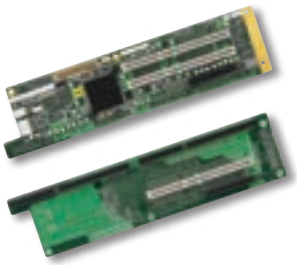
PCE-7B06V-04A1E

- 6-slot Butterfly BP for 2U chassis
- Segment: 1
- One CPU card slot
- PCIe slot: One x8
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: ACP-2000EBP and IPC-602EBP



PCE-7B06V-30A1E

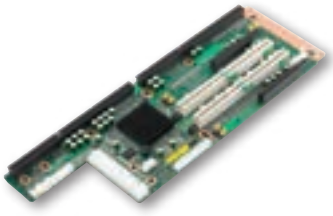
- 6-slot Butterfly BP for 2U chassis
- Segment: 1
- One CPU card slot
- PCIe slot: Two x8
- PCI-X slot: Two 64/100; one 64/133
- PCI slot: N/A
- Compatible with IPC chassis: ACP-2000EBP and IPC-602EBP



5-slot Wallmount Chassis Backplanes

PCE-7B05-20A1E

- 5-slot BP for 5-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: Two x8
- PCI-X slot: Two 64/133
- PCI slot: N/A
- Compatible with IPC chassis: IPC-6025



6-slot Wallmount Chassis Backplanes

PCE-7B06-04A1E

- 6-slot BP for 6-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: One x8
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-6606, and IPC-6806W



PCE-7B06-40A1E

- 6-slot BP for 6-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: One x8
- PCI-X slot: Four 64/100
- PCI slot: N/A
- Compatible with IPC chassis: IPC-6606, and IPC-6806W



8-slot Wallmount Chassis Backplanes

PCE-7B08-04A1E



- 8-slot BP for 8-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: Two x8; One x4
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-6608 and IPC-6908

14-slot Rackmount Chassis Backplanes

PCE-7B10-04A1E



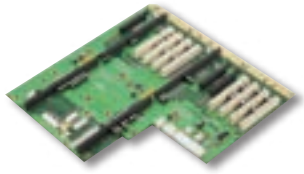
- 10-slot BP for 14-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: Five x4
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

PCE-7B13-64B1E



- 13-slot BP for 14-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: Two x8
- PCI-X slot: Two 64/100; Four 64/66
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

PCE-7B13D-04A1E



- 13-slot BP for 14-slot chassis
- Segments: 2
- **Each segment:**
  One CPU card slot
  PCIe slot: One or Two x8
  PCI-X slot: N/A
  PCI slot: Four 32/33
  Compatible with IPC chassis: ACP-4010

PCE-7B13-07A1E



- 13-slot BP for 14-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: Two x8, Three x4
- PCI-X slot: N/A
- PCI slot: Seven 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

20-slot Rackmount Chassis Backplanes

PCE-7B19-88A1E



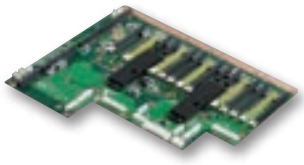
- 19-slot BP for 20-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: Two x8
- PCI-X slot: Eight 64/66
- PCI slot: Eight 32/33
- Compatible with IPC chassis: IPC-623, ACP-5360 and ACP-7360

PCE-7B16Q-02A1E



- 16-slot BP for 20-slot chassis
- Segments: 4
- **Each segment:**
  One CPU card slot
  PCIe slot: One x8
  PCI-X slot: N/A
  PCI slot: Two 32/33
  Compatible with IPC chassis: IPC-623, ACP-5360, ACP-7360

PCE-7B17-00A1E



- 17 slot BP for 20-slot chassis
- Segments:1
- One CPU card slot
- PCIe slot: five x8, eleven x4
- PCI-X slot: N/A
- PCI slot: N/A
- Compatible with IPC chassis: IPC-623, IPC-622

PICMG1.3 Full-Size SHB Backplanes

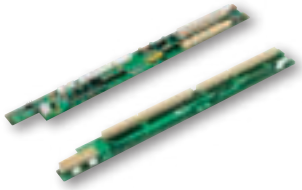
Mainstream Backplanes

RoHS COMPLIANT 2002/95/EC

Compatible with PCE-5000 Series System Host Board

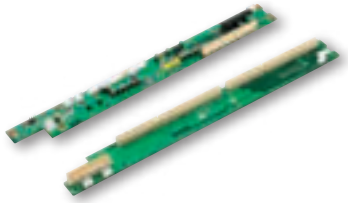
1U Butterfly Backplanes

PCE-5B03V-01A1E



- 3-slot Butterfly BP for 1U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: N/A
- PCI slot: One 32/33
- Compatible with IPC chassis: ACP-1320, ACP-1010

PCE-5B03V-00A1E



- 3-slot Butterfly BP for 1U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; One x4
- PCI-X slot: N/A
- PCI slot: N/A
- Compatible with IPC chassis: ACP-1320, ACP-1010

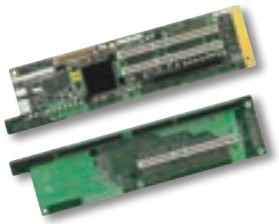
2U Butterfly Backplanes

PCE-5B06V-04A1E



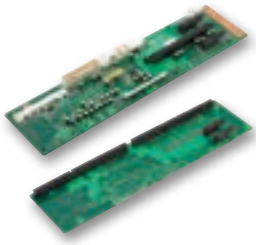
- 6-slot Butterfly BP for 2U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: ACP-2000EBP and IPC-602EBP

PCE-5B05V-30A1E



- 5-slot Butterfly BP for 2U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: Two 64/100; one 64/133
- PCI slot: N/A
- Compatible with IPC chassis: ACP-2000EBP and IPC-602EBP

PCE-5B06V-00A1E



- 6-slot Butterfly BP for 2U chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; Four x1
- PCI-X slot: N/A
- PCI slot: N/A
- Compatible with IPC chassis: ACP-2000EBP and IPC-602EBP

5-slot Wallmount Chassis Backplanes

PCE-5B05-02A1E



- 5-slot BP for 5-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; One x4
- PCI-X slot: N/A
- PCI slot: Two
- Compatible with IPC chassis: IPC-6025

PCE-5B04-20A1E



- 4-slot BP for 5-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: Two 64/133
- PCI slot: N/A
- Compatible with IPC chassis: IPC-6025

PCE-5B05-04A1E



- 5-slot BP for 5-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: N/A
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC-6025

PCE-5B05-03A1E



- 5 slot BP for 5 slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: N/A
- PCI slot: Three PCI 32/33
- Compatible with IPC chassis: IPC-6025

6-slot Wallmount Chassis Backplanes

PCE-5B06-00A1E



- 6-slot BP for 6-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; Four x1
- PCI-X slot: N/A
- PCI slot: N/A
- Compatible with IPC chassis: IPC-6606, and IPC-6806W

PCE-5B06-04A1E



- 6-slot BP for 6-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-6606, and IPC-6806W

PCE-5B06-40A1E



- 6-slot BP for 6-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: Four 64/100
- PCI slot: N/A
- Compatible with IPC chassis: IPC-6606, and IPC-6806W

PCE-5B06-03A1E



- 6 slot BP for 6 slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; One x4
- PCI-X slot: N/A
- PCI slot: Three PCI 32/33
- Compatible with IPC chassis: IPC-6606, and IPC-6806W

8-slot Wallmount Chassis Backplanes

PCE-5B07-04A1E



- 7-slot BP for 8-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; One x4
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-6608 and IPC-6908

PCE-5B08-02A1E



- 8-slot BP for 8-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; Four x1
- PCI-X slot: N/A
- PCI slot: Two 32/33
- Compatible with IPC chassis: IPC-6608 and IPC-6908

10-slot Wallmount Chassis Backplanes

PCE-5B09-06A1E



- 9-slot BP for 10-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; One x4
- PCI-X slot: N/A
- PCI slot: Six 32/33
- Compatible with IPC chassis: IPC-7132, IPC-510, IPC-610, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

PCE-5B09-04A1E



- 9-slot for 10-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16, three x4
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-7132, IPC-510, IPC-610, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

14-slot Rackmount Chassis Backplanes

PCE-5B10-04A1E



- 10-slot BP for 14-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; Four x1
- PCI-X slot: N/A
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320 and ACP-4360

PCE-5B12-64B1E



- 12-slot BP for 14-slot Chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: Two 64/100; Four 64/66
- PCI slot: Four 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

PICMG1.3 Full-Size SHB Backplanes

14-slot Rackmount Chassis Backplanes

PCE-5B13-08A1E



- 13-slot BP for 14-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16; Three x1
- PCI-X slot: N/A
- PCI slot: Eight 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, and ACP-4360

PCE-5B12D-04A1E



- 12-slot BP for 14-slot chassis
- Segments: 2
- **Each segment:**
  One CPU card slot
  PCIe slot: One x16
  PCI-X slot: N/A
  PCI slot: Four 32/33
  Compatible with IPC chassis: ACP-4010

PCE-5B12-07A1E



- 13-slot BP for 14-slot chassis
- Segment: 1
- One CPU card slot
- PCIe slot: One x16, Three x4
- PCI-X slot: 0
- PCI slot: Seven 32/33
- Compatible with IPC chassis: IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4320, ACP-4360, ACP-4010

20-slot Rackmount Chassis Backplanes

PCE-5B18-88A1E



- 18-slot BP for 20-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: One x16
- PCI-X slot: Eight 64/66
- PCI slot: Eight 32/33
- Compatible with IPC chassis: IPC-623, ACP-5360 and ACP-7360

PCE-5B16Q-02A1E



- 16-slot BP for 20-slot chassis
- Segments: 4
- **Each segment:**
  One CPU card slot
  PCIe slot: One x16
  PCI-X slot: N/A
  PCI slot: Two 32/33
  Compatible with IPC chassis: IPC-623, ACP-5360, ACP-7360

PCE-5B12-00A1E



- 12-slot BP for 20-slot chassis
- Segments: 1
- One CPU card slot
- PCIe slot: Ten x16 and one x4
- PCI-X slot: N/A
- PCI slot: N/A
- Compatible with IPC chassis: IPC-623, IPC-622

PCI/ISA Backplanes

1U Butterfly Backplanes

Compatible with IPC Chassis: ACP-1010/ACP-1320

PCA-6103P2V-0A2E

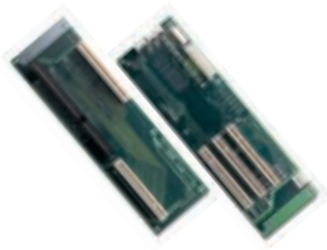


- Segments: 1
- Slots: 2 PCI, 1 CPU
- PCI bus: 32-bit/33 MHz
- Size: 40 x 400 mm (1.57" x 15.75")
- Ordering Information: 989K610302E

2U Butterfly Backplanes

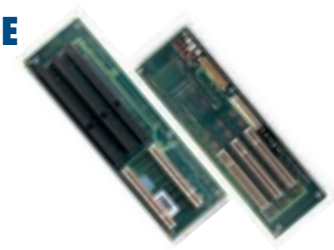
Compatible with IPC Chassis: ACP-2000/IPC-602

PCA-6105P4V-0B3E



- Segments: 1
- Slots: 4 PCI, 1 PICMG
- PCI bus: 32-bit/33 MHz
- Size: 80 x 260 mm (3.15" x 10.23")
- Ordering Information: 989K610512E

PCA-6106P3V-0B2E

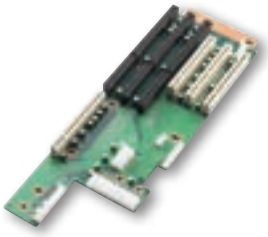


- Segments: 1
- Slots: 1 ISA, 3 PCI, 2 PICMG
- PCI bus: 32-bit/33 MHz
- Size: 80 x 260 mm (3.15" x 10.23")
- Ordering Information: 989K610622E

5-slot PCI/ISA Backplanes

Compatible with IPC Chassis: IPC-6025

PCA-6105P3-5A1E



- Segments: 1
- Slots: 1 ISA, 2 PCI, 1 PICMG, 1 PCI/ISA
- Size: 106.5 mm x 327.66 mm (4.19" x 12.9")
- Ordering Information: PCA-6105P3-5A1E

PCI/ISA Backplanes

6-slot PCI/ISA Backplanes

Compatible with IPC Chassis: IPC-6806/IPC-6606/IPC-6006

PCA-6106P4-0A2E

- Segments: 1
- Slots: 4 PCI, 2 PICMG
- Size: 142 x 270 mm (5.59" x 10.63")
- Ordering Information: PCA-6106P4-0A2E



PCA-6106P3-0D2E

- Segments: 1
- Slots: 2 ISA, 2 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 142 x 270 mm (5.59" x 10.63")
- Ordering Information: PCA-6106P3-0D2E



PCA-6106-0B2E

- Segments: 1
- Slots: 6 ISA
- Size: 142 x 175 mm (5.59" x 6.89")
- Ordering Information: PCA-6106-0B2E



8-slot PCI/ISA Backplanes

Compatible with IPC Chassis: IPC-6908/IPC-6608

PCA-6108P6-0B4E

- Segments: 1
- Slots: 1 ISA, 5 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 180 x 260 mm (7.09" x 10.24")
- PCI bridge: Tsi352-66CQY
- Primary PCI: 3 slots; Secondary PCI: 3 slots
- Ordering Information: PCA-6108P6-0B4E



PCA-6108P4-0C2E

- Segments: 1
- Slots: 3 ISA, 3 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 180 x 260 mm (7.09" x 10.24")
- Ordering Information: PCA-6108P4-0C2E



PCA-6108E-0C2E

- Segments: 1
- Slots: 8 ISA
- Size: 180 x 190 mm (7.09" x 7.48")
- Ordering Information: PCA-6108E-0C2E



PCA-6108-0B2E

- Segments: 1
- Slots: 8 ISA
- Size: 222 x 171 mm (8.74" x 6.73")
- Only for commercial PC chassis (baby AT size)
- Ordering Information: PCA-6108-0B2E



14-slot PCI/ISA Backplanes

Compatible with IPC Chassis: ACP-4000, ACP-4010, ACP-4320, ACP-4360, IPC-510, IPC-610, IPC-611 and IPC-630

PCA-6114P12-0B3E



- Segments: 1
- Slots: 1 ISA, 11 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 315 x 300 mm (12.4" x 11.8")
- PCI bridge: Pericom PI7C8150BMAE
- Primary PCI: 3 slots;
  Secondary PCI: 9 slots
- Ordering Information: PCA-6114P12-0B3E

PCA-6114P7-0D3E



- Segments: 1
- Slots: 4 ISA, 6 PCI, 3 PICMG, 1 PCI/ISA
- Size: 315 x 260 mm (12.4" x 10.24")
- PCI bridge: Tsi352-66CQY
- Primary PCI: 3 slots; Secondary PCI: 4 slots
- Ordering Information: PCA-6114P7-0D3E

PCA-6114P4-0C2E



- Segments: 1
- Slots: 8 ISA, 4 PCI, 2 PICMG
- Size: 315 x 260 mm (12.4" x 10.24")
- Ordering Information: PCA-6114P4-0C2E
- When choosing to install in ACP-4320, 4360 and IPC-510 chassis, 1U cooler is required

PCA-6113P4R-0C2E



- Segments: 1
- Slots: 7 ISA, 4 PCI, 2 PICMG
- Size: 315 x 260 mm (12.4" x 10.24")
- Ordering Information: PCA-6113P4R-0C2E

PCA-6115-0B2E



- Segments: 1
- Slots: 15 ISA
- Size: 326 x 190 mm (12.83" x 7.48")
- Compatible with IPC-615
- Ordering Information: PCA-6115-0B2E

PCA-6114-0B2E



- Segments: 1
- Slots: 14 ISA
- Size: 315 x 175 mm (12.4" x 6.89")
- Ordering Information: PCA-6114-0B2E

PCA-6114P10-0B2E



- Segments: 1
- Slots: 2 ISA, 10 PCI, 2 PICMG
- Size: 315 x 260 mm (12.4" x 10.24")
- PCI bridge: Pericom PI7C8150BMAE
- Primary PCI: 3 slots;
  Secondary PCI: 7 slots
- Ordering Information: PCA-6114P10-0B2E

PCA-6113DP4-0A2E



- Segments: 2
- Slots: 2 ISA, 7 PCI, 1 PICMG/
  PCI, 3 PICMG
- Size: 315 x 260 mm (12.4" x 10.24")
- Ordering Information: PCA-6113DP4-0A2E
- Compatible with IPC Chassis: Only for ACP-4010.

PCI/ISA Backplanes

20-slot PCI/ISA Backplanes

Compatible with IPC Chassis : IPC-623, IPC-622, ACP-7360, ACP-5360

PCA-6120DP4-0B2E

- Segments: 2
- Slots: 7 ISA, 6 PCI, 2 PICMG/PCI, 4 PICMG
- Size: 420 x 260 mm (16.42" x 10.24")
- Ordering Information: PCA-6120DP4-0B2E



PCA-6116QP2-0B2E

- Segments: 4
- Slots: 1 ISA, 8 PCI, 7 PICMG
- Size: 417 x 260 mm (16.42" x 10.24")
- Ordering Information: PCA-6116QP2-0B2E



PCA-6120P18-0A2E

- Segments: 1
- Slots: 1 ISA, 17 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 417 x 260 mm (16.42" x 10.24")
- PCI bridge: Three Pericom PI7C8150BMAE
- Secondary: 6 slot/6 slot/6 slot
- Ordering Information: PCA-6120P18-0A2E



PCA-6119P17-0B2E

- Segments: 1
- Slots: 16 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 417 x 260 mm (16.42" x 10.24")
- PCI bridge: Dual Pericom PI7C8150BMAE
- Primary PCI: 2 slots; Secondary PCI: 8 slots + 7 slots
- Ordering Information: PCA-6119P17-0B2E



PCA-6119P7-0B3E

- Segments: 1
- Slots: 10 ISA, 7 PCI, 2 PICMG
- Size: 417 x 260 mm (16.42" x 10.24")
- PCI bridge: Tsi352-66CQY
- Primary PCI: 3 slots; Secondary PCI: 4 slots
- Ordering Information: PCA-6119P7-0B3E



PCA-6120P12-0A2E

- Segments: 1
- Slots: 7 ISA, 11 PCI, 1 PICMG/PCI, 1 PICMG
- Size: 417 x 260 mm (16.42" x 10.24")
- PCI bridge: Pericom PI7C8150BMAE
- Primary PCI: 3 slots; Secondary PCI: 9 slots
- Ordering Information: PCA-6120P12-0A2E



PCA-6120P4-0B2E

- Segment: 1
- Slots: 14 ISA, 4 PCI, 2 PICMG
- Size: 417 x 260 mm (16.42" x 10.24")
- Ordering Information: PCA-6120P4-0B2E



PCA-6120Q-0B2E

- Segment: 4
- Slots: 5-5-5-5 ISA
- Size: 417 x 200 mm (16.42" x 7.87")
- Ordering Information: PCA-6120Q-0B2E



Backplanes Compatible with Half-Size SBCs

PCI/ISA Backplanes

PCI-7110P3S6-00A1E

- Segment: 1
- Slots: 3 PCI, 6 ISA
- Size: 185 x 240 mm (7.28" x 9.45")
- Compatible With IPC chassis: IPC-619S
- Ordering Information: PCI-7110P3S6-00A1E

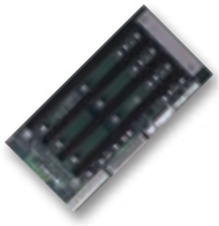
Note: Used for PCI series half-size SBCs



Pure ISA Backplanes

PCA-6104-0C2E

- Segments: 1
- Slots: 4 ISA
- Size: 94.7 x 186 mm (3.7" x 7.3")
- Ordering Information: PCA-6104-0C2E



PCA-6106-0B2E

- Segments: 1
- Slots: 6 ISA
- Size: 142 x 175 mm (5.59" x 6.89")
- Ordering Information: PCA-6106-0B2E



PCA-6108E-0C2E

- Segments: 1
- Slots: 8 ISA
- Size: 180 x 190 mm (7.09" x 7.48")
- Ordering Information: PCA-6108E-0C2E



PCA-6108-0B2E

- Segments: 1
- Slots: 8 ISA
- Size: 222 x 171 mm (8.74" x 6.73")
- Only for commercial PC chassis (baby AT size)
- Ordering Information: PCA-6108-0B2E



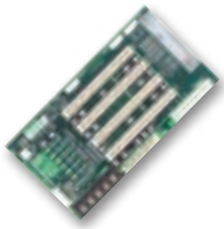
Backplanes Compatible with Half-Size SBCs

Pure PCI Backplanes

Only Compatible with Half-size CPU Cards

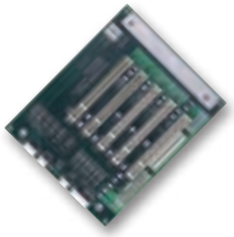
PCA-6104P4-0B2E

- Segments: 1
- Slots: 4 PCI
- Size: 110 x 180 mm (4.3" x 7")
- Ordering Information: PCA-6104P4-0B2E



PCA-6105P5-0B2E

- Segments: 1
- Slots: 5 PCI
- Size: 143 x 155 mm (5.6" x 6")
- Compatible with IPC chassis: IPC-6806S, IPC-6606, IPC-6006S
- Ordering Information: PCA-6105P5-0B2E



PCA-6108P8-0A2E

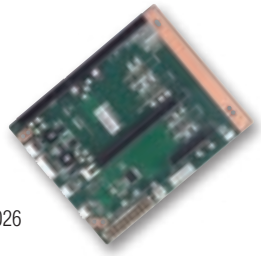
- Segments: 1
- Slots: 8 PCI
- Size: 182 x 185 mm (7.2" x 7.3")
- Compatible With IPC Chassis: IPC-6608, IPC-6908
- Ordering Information: PCA-6108P8-0A2E



PICMG 1.3 Half-size SHB Backplanes

PCE-3B03-00A1E

- 3 slot backplane for 6-slot chassis
- Segments:1
- One CPU card slot
- PCIe slot: One x 16, One x4
- Size: 142 x 176 mm
- Compatible with IPC-chassis: IPC-6806S, IPC-3026
- Ordering information: PCE-3B03-00A1E



PCE-3B06-00A1E

- 6 slot backplane for 6-slot chassis
- Segments:1
- One CPU card slot
- PCIe slot: One x16, four x1
- Size: 142 x 176 mm
- Compatible with IPC chassis: IPC-6806S, IPC-3026
- Ordering information: PCE-3B06-00A1E



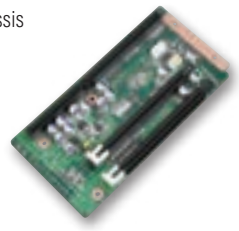
PCE-3B06-03A1E

- 6 slot backplane for 6-slot chassis
- Segments:1
- One CPU card slot
- PCIe slot: One x16, One x1
- PCI slot: Three 32/33
- Size: 142 x 176 mm
- Compatible with IPC chassis: IPC-6806S, IPC-3026
- Ordering information: PCE-3B06-03A1E



PCE-3B03A-00A1E

- 3 slot backplane for compact-sized wall-mount chassis
- segments:1
- One CPU card slot
- PCIe slot: One x16, One x4
- Size: 173 x 86.3 mm
- Compatible with IPC-3012
- Ordering information: PCE-3B03A-00A1E



13

Industrial Computer Peripherals

SNMP-1000-B	Intelligent SNMP/HTTP System Manager	*13-2*
PCA-5612	Industrial PCI Graphics Card with Low Power Consumption	*13-4*
Power Supplies		*13-5*
CPU Coolers		*13-8*
Keyboards		*13-10*
Accessories		*13-11*

To view all of Advantech's Industrial Computer Peripherals, please visit www.advantech.com/products.



SNMP-1000-B

Intelligent SNMP/HTTP System Manager



Features

- Monitoring system fans, temperature, voltage, power supply, CPU fan, CPU temperature, Vcore, watchdog timer, etc.
- Standalone system monitoring: no driver needed, OS-independent
- Remote alarm notification through SNMP/HTTP, e-mail or pager
- Easy status monitoring through Ethernet using a browser
- Highly reliable: function will keep working even if the system or power fails
- Modular design eases system integration and customization

Introduction

The SNMP-1000-B is a platform independent system management module that can detect system operating conditions and notify users to take necessary action to avert system failure through multiple communication protocols. With the SNMP-1000-B installed, system monitoring and management can be integrated into an existing SNMP-based network management environment. The SNMP-1000-B also has a built-in web-based administration interface which allows users to monitor system operation from any place with Internet connectivity. The SNMP-1000-B adds another dimension of reliability to your most critical applications.

Powerful, Easy to Use

The SNMP-1000-B can detect a wide variety of internal system conditions, including temperature, voltage, fan rotation, power supply or CPU operations such as watchdog timer output. Through its I2C interface it can even monitor CPU temperature and voltages of Advantech's full-sized CPU cards. Depending on the alarm severity or user setup, it can generate several different alarm outputs, including SNMP traps, e-mails, paging, acoustic signals, system resets, and digital output. Through the easy-to-use web-based user interface, users can set the alarm criteria and select alarm outputs for each sensor input independently to meet user requirements. The backup battery enables the SNMP-1000-B to perform its alarm function even during total system power failure.

Web-Enabled, No Driver Needed

The onboard 10/100 Mbps Fast Ethernet interface enables the SNMP-1000-B to be connected to your existing network, independent from the system's connection. It supports multiple network protocols such as TCP/IP, SNMP, HTTP and Telnet, allowing you to manage your systems simply by using a web browser. No special software driver is needed thus eliminating compatibility issues with different operating systems.

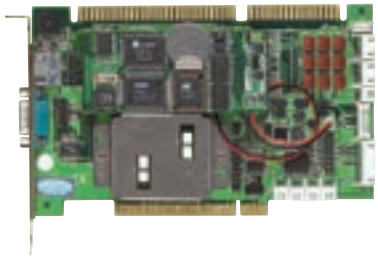
Online Upgrade and Batch Setup

You can upgrade the firmware online by using the included setup utility. There is no need to go to a remote site and disassemble the chassis to collect each SNMP-1000-B module or card for firmware upgrade. The setup utility also supports "batch setup" function, which allows you to save a configuration and duplicate it to many other SNMP-1000-B modules and cards. This function saves tremendous time and effort when you have a number of SNMP-1000-B units installed in your environment.

Flexible Modular Hardware Design

The modular design of the SNMP-1000-B allows it to be easily customized to fit into any system. The ultra compact module is only 41 mm wide and 94 mm long (1.61" x 3.70"). It can be mounted on standard or customized carrier boards to plug into any standard PCI/ISA slot.

Optional



SNMP-1000-E1B1E



SNMP-1000-E2B1E

Firmware Specifications

System Status Monitoring and Management	Real-time health status monitoring: Provides real-time status display in HTTP/Java graphical format
	History log up to 600 records. Data can be downloaded through network or sent by e-mail
	Display alarm event records
Alarm Notification	E-mail: Can set up to 4 addresses to receive e-mails
	SNMP trap: Notify up to 8 SNMP administrators
	Pager notification: Dial out through external modem to send messages to up to 8 pagers
	Audible alarm sound
Supported Protocols	TCP, UDP, IP, ICMP, DHCP, BOOTP, ARP, SNMP, HTTP, Telnet
Management Function	Web-based remote configure, control and monitor
	Remote reset, power down and power up
	Remote digital output signal control
	Remote message display control
	Firmware upgrade from serial port and Ethernet port
	Modem dial in (console mode only)

Sensor Specifications

Voltage	Input	+5 V_{DC}, -5 V_{DC}, +5 V_{SB}, +3.3 V_{DC}, +12 V_{DC}, -12 V_{DC}
Temperature	Input	9 (one for on-board sensor, 8 for external sensors)
	Sensor	LM75
	Interface	I2C
	Range	-30 ~ 125° C (-22 ~ 257° F)
Fan Speed	Input	9 (7 for SNMP-1000-E2B1E)
	Range	700 ~ 10000 rpm
Power	Input	4 (1 for SNMP-1000-E2B1E)
	Range	High > 2.4 V_{DC}, Low < 0.8 V_{DC}
CPU Card Health	Interface	I2C
	Input	CPU Vcore, CPU fan, CPU temperature (up to 2 CPUs), +5 V_{DC}, -5 V_{DC}, VI/O, +12 V_{DC}, -12 V_{DC}
	Compatibility	PCA-6186, 6187, 6008, 6010, 6011, 6012 PCE-5120, 5124, 5125, 5126 AIMB-742
Digital Input/ Output	Input	8 (SNMP-1000-E1B1E only)
	Output	4 (3 for SNMP-1000-E2B1E)

System Specifications

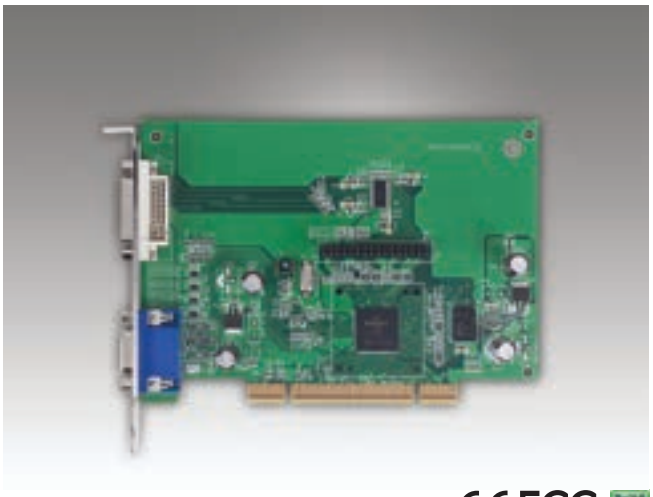
Processor System	CPU	80188 compatible	
Environment	Firmware	512 KB Embedded Flash ROM	
	Memory	512 KB SRAM	
Ethernet	Interface	10/100 Mbps	
Serial Port	Interface	RS-232	
	Baud Rate	9600 bps	
Miscellaneous	Buzzer Support	Yes	
	Detect Time-out Signal of System	Yes	
	Watchdog Timer	Yes	
Battery	Charge Time	3 hr	
	Battery Type	Li-ion	
	Capacity	1800 mAh (fully charged gives 45 ~ 50 minutes operation, depending on system configuration)	
	Battery Life	1 year @ 20° C, 80% capacity after 500 cycles of charge and discharge	
Power Requirements	Typical	5 V @ 550 mA	
		Operating	Non-Operating
	Temperature	0 ~ 60° C (-32 ~ 140° F)	-20 ~ 70° C (4 ~ 158° F)
	Humidity	-	5 ~ 95% RH non-condensing
Physical Characteristics	Dimensions	Kernel module: 40.5 x 93 mm (1.59" x 3.66")	
		Carrier board: 55 x 115 mm (2.17" x 4.53")	
		PCI/ISA I/O extension module: 175 x 107 mm (6.89" x 4.21")	

Ordering Information

Part Number	Description
SNMP-1000-E1B1E	SNMP/HTTP system manager development kit, including the kernel module mounted on a PCI/ISA carrier board, 3 sets of temperature sensors, and cables
SNMP-1000-E2B1E	SNMP/HTTP system manager card for ACP series chassis, including the kernel module * Compatible with Advantech chassis series: IPC-622, IPC-623, IPC-7143, IPC-7220 and all ACP series chassis (except ACP-1010BP with limited condition)

PCA-5612

Industrial PCI Graphics Card with Low Power Consumption



CE FCC

Features

- Industrial graphics card with long-term support
- 32 MB DDR2 SDRAM
- Supports mirror mode dual display
- Supports VGA and DVI outputs

Specifications

Processor System	GPU	XGI Volari Z9s	
Bus	PCI	PCI 2.2	
Memory	Memory Clock	250 MHz	
	Memory Interface	16-bit	
	Memory Size	32 MB DDR2 SDRAM	
Video Output	CRT	1600 x 1200, up to 60 Hz vertical rate	
	DVI	Single Link TMDS up to UXGA (1600 x 1200 @ 60 Hz).	
Display Mode	Dual Display	CRT + DVI in Windows XP/2K/Linux, supporting mirror only, NOT supporting extended mode	
Power Requirement	Voltage	+3.3V	+5V
	Typical Current	0.658A	0.294A
Environment	Temperature	Operating	Non-Operating
		0 ~ 60° C (32 ~ 140° F)	-20 ~ 70° C (-4 ~ 158° F)
Physical	Dimensions	150 x 105 mm (5.91" x 4.13")	
OS Support		Windows XP/2K, Linux, Unix, FreeBSD	

Ordering Information

Part Number	VGA	TV-Out	DVI
PCA-5612-00A1E	Yes	-	Yes

Packing List

Part Number	Quantity
PCA-5612 Industrial VGA card	x 1
PCA-5612 Startup Manual	x 1
Warranty Certificate	x 1
CD with driver utility	x 1

Power Supplies

80 Plus Redundant Power Supplies





Model Name	1757004393-01	RPS-500ATX-ZBE	1757004476-01
Form Factor	Mini Redundant	2U Redundant	2U Redundant
Wattage	500W 1+1	500W 1+1	700W 1+1
Input Range	100 ~ 240 V_{AC} 50 ~ 60 Hz 8 ~ 4 A	100 ~ 240 V_{AC} 50 ~ 60 Hz 7 ~ 3.5 A	100 ~ 240 V_{AC} 50 ~ 60 Hz 10 ~ 5 A
Outputs	+3.3 V @ 20 A (0.1 A min) +5 V @ 20 A (0.1 A min) +12 V1 @ 16 A (0.5 A min) +12 V2 @ 16 A (0.5 A min) +12 V3 @ 16 A (0.5 A min) -5 V @ 0.3 A +12 V @ 0.5 A +5 Vsb @ 3 A	+3.3 V @ 20 A (0.5 A min) +5 V @ 25 A (0.5 A min) +12 V @ 40.2 A (0 A min) -12 V @ 0.5 A (0.1 A min) +5 Vsb @ 3.52 A (0.25 A min)	+3.3 V @ 25 A (0 A min) +5 V @ 25 A (0 A min) +12 V @ 56 A (0.5 A min) -12 V @ 0.3 A (0 A min) +5 Vsb @ 4.5 A (0 A min)
MTBF (hrs)	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C
Dimensions (H x W x D)	84 x 150 x 190 mm (3.3" x 5.91" x 7.48")	84 x 85 x 217 mm (3.3" x 3.34" x 8.54")	84 x 76 x 250 mm (3.3" x 2.99" x 9.84")
Safety	UL, TUV, CB, CCC	UL, TUV, CB, CCC	UL, TUV, CB, CCC
Compatible Chassis	ACP-4000, ACP-4010, ACP-4320, ACP-4360, IPC-610, IPC-611, HPC-7442	HPC-7242	HPC-7242

Redundant Power Supplies







Model Name	RPS-300ATX-ZE	1757001137	1757001757 1757001760	1757001758 1757001761	1757001759 1757001677
Wattage	300W	250W	460W	570W 2+1	810W 3+1
Input Range	100 ~ 240 V_{AC} 60 ~ 50 Hz 6 ~ 3 A	100 ~ 240 V_{AC} 50 ~ 60 Hz 6 ~ 3 A	100 ~ 240 V_{AC} 47 ~ 63 Hz 8 ~ 4 A	115 ~ 230 V_{AC} 60 ~ 50 Hz 12 ~ 6 A	115 ~ 230 V_{AC} 60 ~ 50 Hz 15 ~ 7.5 A
Outputs	+5 V @ 25 A (3 A min) +3.3 V @ 18 A (1 A min) +12 V @ 16 A (2 A min) -12 V @ 0.5 A, -5 V @ 0.5 A +5 Vsb @ 2 A	+5 V @ 25 A (2 A min) +3.3 V @ 15 A (1 A min) +12 V @ 16 A (1 A min) -12 V @ 0.5 A -5 V @ 0.5 A +5 Vsb @ 2 A (0.1 A min)	+5 V @ 40 A (5 A min) +3.3 V @ 30 A (1 A min) +12 V @ 32 A (2.5 A min) -12 V @ 1 A, -5 V @ 0.8 A +5 Vsb @ 2 A	+5 V @ 50 A (6 A min) +3.3 V @ 40 A (2 A min) +12 V @ 34 A (3 A min) -12 V @ 1 A, -5 V @ 1 A +5 Vsb @ 1.2 A	+5 V @ 75 A (9 A min) +3.3 V @ 60 A (3 A min) +12 V @ 51 A (4.5 A min) -12 V @ 1.5 A, -5 V @ 1.5 A +5 Vsb @ 1.6 A
MTBF (hrs)	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C
Dimensions (H x W x D)	86 x 150 x 185 mm (3.39" x 5.91" x 7.28")	85 x 82 x 230 mm (3.34" x 3.22" x 9.05")	1757001757: 106 x 354 x 185.8 mm (4.17" x 13.94" x 7.31") 1757001760: 183 x 167 x 187.8 mm (7.20" x 6.57" x 7.39")	1757001758: 95 x 356 x 230 mm (3.74" x 14.02" x 9.06") 1757001761: 200.6 x 164 x 230 mm (7.90" x 6.46" x 9.06")	1757001759: 95 x 356 x 230 mm (3.74" x 14.02" x 9.06") 1757001677: 200.6 x 164 x 230 mm (7.90" x 6.46" x 9.06")
Safety	UL, CB, CCC	UL, CB, CCC	UL, CB, CCC	UL, CB, CCC	UL, CB, CCC
Compatible Chassis	ACP-2000, ACP-4000, ACP-4010, ACP-4320, IPC-610, IPC-611, IPC-6908, IPC-7220, IPC-7143	ACP-2010MB, ACP-2320MB	1757001757: ACP-7360, IPC-622 1757001760: ACP-5360, IPC-623	1757001758: ACP-7360 1757001761: ACP-5360, IPC-623	1757001759: ACP-7360 1757001677: ACP-5360, IPC-623
Single Power Module P/N	1757930060G	1757000600	1757946008G: ACP-7360, IPC-622 1757000228G: ACP-5360, IPC-623	1757930057G: ACP-7360 1757000126G: ACP-5360, IPC-623	1757930057G: ACP-7360 1757000126G: ACP-5360, IPC-623

Power Supplies

80 Plus PS/2 Power Supplies



Model Name	PS8-250ATX-ZE	PS8-300ATX-ZBE	PS8-400ATX-ZE	PS8-500ATX-ZE	PS8-700ATX-ZE
Wattage	250W	300W	400W	500W	700W
Input Range	100 ~ 240 V_{AC} 60 ~ 50 Hz 4 ~ 2 A	100 ~ 240 V_{AC} 47 ~ 63 Hz 8 ~ 4 A	100 ~ 240 V_{AC} 60 ~ 50 Hz 6 ~ 3 A	100 ~ 240 V_{AC} 60 ~ 50 Hz 8 ~ 4 A	100 ~ 240 V_{AC} 60 ~ 50 Hz 12 ~ 6 A
Outputs	+3.3 V @ 20 A (0 A min) +5 V @ 21 A (0.5 A min) +12 V1 @ 16 A (0.5 A min) +12 V2 @ 16 A (0.5 A min) -12 V @ 0.3 A -5 V @ 0.3 A +5 Vsb @ 2.5 A	+3.3 V @ 16 A (0 A min) +5 V @ 19 A (0.5 A min) +12 V @ 11 A (0.1 A min) +12 Vcpu @ 11.5A (0.1 A min) -12 V @ 0.3 A -5 V @ 0.3 A +5 Vsb @ 2 A	+3.3 V @ 21 A (0.1 A min) +5 V @ 20 A (0.2 A min) +12 V1 @ 16 A (0.1 A min) +12 V2 @ 16 A (0.5 A min) -12 V @ 0.5 A -5 V @ 0.3 A +5 Vsb @ 3 A	+3.3 V @ 24 A (0.1 A min) +5 V @ 20 A (0.2 A min) +12 V1 @ 16 A (0.1 A min) +12 V2 @ 16 A (0.5 A min) -12 V @ 0.5 A -5 V @ 0.3 A +5 Vsb @ 3 A	+3.3 V @ 24 A (1.5 A min) +5 V @ 30 A (1 A min) +12 V1 @ 16 A (1 A min) +12 V2 @ 16 A (1 A min) +12 V3 @ 16 A (1 A min) +12 V4 @ 16 A (0.5 A min) -12 V @ 0.5 A -5 V @ 0.5 A +5 Vsb @ 4 A
MTBF (hrs)	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C	100,000 @ 25° C
Dimensions (H x W x D)	86 x 150 x 140 mm (3.39" x 5.91" x 5.51")	86 x 150 x 140 mm (3.39" x 5.91" x 5.51")	86 x 150 x 140 mm (3.39" x 5.91" x 5.51")	86 x 150 x 140 mm (3.39" x 5.91" x 5.51")	86 x 150 x 140 mm (3.39" x 5.91" x 5.51")
Safety	UL, TUV, CB, CCC	UL, TUV, CB, CCC	UL, TUV, CB, CCC	UL, TUV, CB, CCC	UL, TUV, CB, CCC
Compatible Chassis	IPC-510, IPC-602, IPC-610, IPC-611, IPC-619, ACP-2000, IPC-6606, IPC-6608, IPC-6908	IPC-510, IPC-610, IPC-611, IPC-619, ACP-2000, ACP-4000, ACP-4010, ACP-4320, ACP-4360, IPC-6606, IPC-6608, IPC-5122, IPC-6908, IPC-7130, IPC-7132	IPC-510, IPC-610, IPC-611, IPC-619, ACP-2000 ACP-4000, ACP-4010, ACP-4320, ACP-4360, IPC-6606, IPC-6608, IPC-5122, IPC-6908, IPC-7130, IPC-7132	IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, ACP-4360	IPC-510, IPC-610, IPC-611, ACP-4000, ACP-4010, ACP-4320, ACP-4360

PS/2 DC Power Supplies



Model Name	PS-300ATX-DC48E
Wattage	300W
Input Range	72 ~ 36 V_{DC}, 15 A
Outputs	+5 V @ 30 A (0.3 A min) +3.3 V @ 28 A (0.3 A min) +12 V @ 15 A (0.2 A min) -12 V @ 0.8 A, -5 V @ 0.3 A, +5 Vsb @ 2 A
MTBF (hrs)	100,000 @ 25C
Dimensions (H x W x D)	86 x 150 x 140 mm (3.39" x 5.91" x 5.51")
Safety	UL, TUV, CB, CCC
Compatible Chassis	ACP-2000, ACP-4000, ACP-4320, ACP-4360, IPC-602, IPC-610, ACP-4010

Small Form Factor Power Supplies



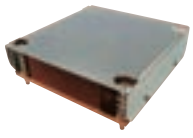
Model Name	1757000007G	1757000105G	1757004392-01	1757000160G 1757000229G 1757000263	1757001458 1757001798
Form Factor	2U	2U	2U	1U	1U
Wattage	300 W	400W	500W	300W	400W
Input Range	100 ~ 240 V_{AC} 47 Hz ~ 63 Hz 6 ~ 3 A	100 ~ 240 V_{AC} 47 Hz ~ 63 Hz 8 ~ 5 A	100 ~ 240 V_{AC} 50 ~ 60 Hz 8 ~ 4 A	100 ~ 240 V_{AC} 63 ~ 47 Hz 6 ~ 3 A	100 ~ 240 V_{AC} 47 Hz ~ 63 Hz 8 ~ 5 A
Outputs	+5 V @ 35 A (3 A min) +3.3 V @ 20 A (1 A min) +12 V @ 16 A (2 A min) -12 V @ 0.5 A -5 V @ 0.5 A +5 Vsb @ 2 A	+5 V @ 25 A (3 A min) +3.3 V @ 20 A (1 A min) +12 V @ 28 A (2 A min) -12 V @ 0.5 A -5 V @ 0.5 A +5 Vsb @ 2 A	+3.3 V @ 20 A (0.3 A min) +5 V @ 20 A (1.0 A min) +12 V1 @ 16 A (0.5 A min) +12 V2 @ 16 A (1.0 A min) +12 V3 @ 16 A (1.0 A min) -12 V @ 0.5 A (0 A min) +5 Vsb @ 3 A (0 A min)	+5 V @ 25 A (3 A min) +3.3 V @ 14 A (1 A min) +12 V @ 16 A (2 A min) -12 V @ 1 A, -5 V @ 0.5 A +5 Vsb @ 2 A	+5 V @ 25 A (3 A min) +3.3 V @ 20 A (1 A min) +12 V @ 28 A (2 A min) -12 V @ 0.5 A, -5 V @ 0.5 A +5 Vsb @ 2 A
MTBF (hrs)	98,000 @ 25C	100,000 @ 25C	100,000 @ 25° C	100,000 @ 25C	100,000 @ 25C
Dimensions (H x W x D)	70 x 100 x 200 mm (27.56" x 3.94" x 7.87")	70 x 100 x 215 mm (27.56" x 3.94" x 8.46")	70 x 100 x 240 mm (2.76" x 3.94" x 9.44")	40 x 100 x 205 mm (1.57" x 3.94" x 8.07")	40.5 x 100 x 225 mm (1.59" x 3.94" x 8.86")
Safety	UL, CB, CCC	UL, CB, CCC	UL, TUV, CB, CCC	UL, CB, CCC	UL, CB, CCC
Compatible Chassis	ACP-2010MB, ACP-2320MB	ACP-2010MB, ACP-2320MB	HPC-7242	1757000160G: IPC-603MB, IPC-6806W, ACP-1010BP/1320BP 1757000229G: IPC-5120, IPC-7120 1757000263: ACP-1010MB/1320MB	1757001458: ACP-1320MB 1757001798: ACP-1320BP



Model Name	1757000209G	1757000557 1757001457 1757001797	1757000878	1757001847
Form Factor	1U	1U	FLEX	FLEX
Wattage	150W	250W	180 W	270 W
Input Range	100 ~ 240 V_{AC} 63 Hz ~ 47 Hz 4 ~ 2 A	100 ~ 240 V_{AC} 50 Hz ~ 60 Hz 4 ~ 2 A	100 ~ 240 V_{AC} 50 Hz ~ 60 Hz 4 ~ 2 A	100 ~ 240 V_{AC} 50 Hz ~ 60 Hz 5 ~ 3 A
Outputs	+5 V @ 14 A (2 A min) +3.3 V @ 10 A (1 A min) +12 V @ 6 A (1 A min) -12 V @ 0.8 A -5 V @ 0.5 A +5 Vsb @ 1.5 A	+5 V @ 23 A (3 A min) +3.3 V @ 14 A (1 A min) +12 V @ 16 A (2 A min) -12 V @ 0.5 A -5 V @ 0.2 A +5 Vsb @ 2 A	+5 V @ 16 A (0.3 A min) +3.3 V @ 14 A (0.3 A min) +12 V @ 14 A (0.3 A min) -12 V @ 0.5 A +5 Vsb @ 2 A	+5 V @ 18 A (0.5 A min) +3.3 V @ 16 A (0.5 A min) +12 V1 @ 16 A (1 A min) +12 V2 @ 10 A (1 A min) -12 V @ 0.8 A +5 Vsb @ 2.5 A
MTBF (hrs)	84,000 @ 25C	110,000 @ 25C	100,000 @ 25C	100,000 @ 25C
Dimensions (H x W x D)	40 x 100 x 190 mm (1.57" x 3.94" x 7.48")	40 x 100 x 190 mm (1.57" x 3.94" x 7.48")	40 x 81.5 x 150 mm (1.57" x 3.21" x 5.91")	40 x 81.5 x 150 mm (1.57" x 3.21" x 5.91")
Safety	UL, CB, CCC	UL,CB, CCC	UL, TUV, CB, CCC	UL, TUV, CB, CCC
Compatible Chassis	IPC-6806S	1757001457: ACP-1010MB/1320MB 1757001797: ACP1010BP/1320BP 1757000557: IPC-5120/7120	ARK-6610 ARK-6620 ARK-6622	IPC-6025

CPU Coolers

Intel LGA1150/1155/1156

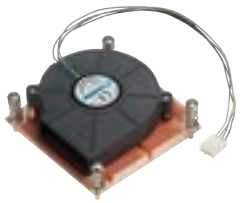








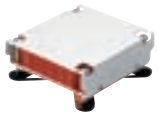
Model Name	1960049408N001	1960047831N001	1960047669N001	1960047670N001
Thermal Dispatch Performance	Intel LGA1156/1155/1150 73W (up to Core i5-660)	Intel LGA1156/1155/1150 95W	Intel LGA1156/1155/1150 95W	Intel LGA1156 95W
Fan	-	7 cm/35.5CFM 5400+/- 10% RPM	8 cm/57.5 CFM 4500+/- 10% RPM	8 cm/57.5 CFM 4500+/- 10% RPM
Heatsink Material	Copper	Copper	Aluminum & Copper heart	Aluminum & Copper
Heatsink Dimensions	85 × 85 × 26 mm (3.35" x 3.35" x 1.02")	83 x 83 x 39.26 mm (3.27" x 3.27" x 1.54")	90 x 90 x 35 mm (3.54" x 3.54"x 1.38")	90 x 90 x 35 mm (3.54" x 3.54"x 1.38")
Dimensions	-	83 x 83 x 55.73mm (3.27" x 3.27" x 2.17")	120 x 120 x 77 mm (4.72" x 4.72" x 3.03")	120 x 120 x 77 mm (4.72" x 4.72" x 3.03")
Weight	611 g	582 g	500 g	500 g
Minimum Chassis Height	1U	2U	4U	4U
Recommended Chassis	ACP-1010/1320	Backplane version of chassis	Motherboard version of chassis	mini-ITX Motherboard version of chassis
Supported Boards	AIMB-580/701/780/781/782/784; PCE-5125/5126/5127/7127/5026 ASMB-584/781/782/784	AIMB-580/581/582; PCE-5125/5126/5127/5026/ 7127/5128 ASMB-584/781/782/784	AIMB-580/581/582/701/780/781/ 782/784; ASMB-584/781/782/784	AIMB-280





Model Name	1960053065N001	1960053207N001
Thermal Dispatch Performance	Intel LGA1155 65W i3-2120, i3-3220, G2120, G850, G540	Intel LGA1155 I7-2600, i5-3550S, i5-2400, i3-3220, i3-2120, G2120, G850, G540
Fan	77 x 75 x 15.4 mm/11.83 CFM 5500+/- 10% RPM	9 cm/45.09 CFM 4400 +/- 10% RPM
Heatsink Material	Copper	Aluminum & Copper
Heatsink Dimensions	84 x 84 x 13 mm (3.32" x 3.32" x 0.51")	92.9 x 92.2 x 46 mm (3.67" x 3.67" x 1.82")
Dimensions	84 x 84 x 28 mm (3.32" x 3.32" x 1.11")	92.9 x 92.2 x 46 mm (3.67" x 3.67" x 1.82")
Weight	382g	250g
Minimum Chassis Height	1U	1.5U
Recommended Chassis	IPC-3026, IPC-3012	IPC-3026, IPC-3012
Supported Board	PCE-3026; AIMC-3200/3420	PCE-3026; AIMC-3200/3420

Intel Pentium 4 LGA775





Model Name	1960013266T000	1750000332	1750000334
Thermal Dispatch Performance	Pentium 4: Up to 3.4 GHz (90 nm, 84 W, L2: 1 MB) Core 2 Duo: Up to 3.33 GHz (65 nm, 65 W, L2: 4 MB)	Pentium 4: Up to 3.8 GHz (90 nm, 115 W, L2: 1 MB) Core 2 Duo: Up to 3.33 GHz (65 nm, 65 W, L2: 4 MB) Core 2 Quad: Up to 3 GHz (45 nm, 95 W, L2: 12 MB)	Pentium 4: Up to 3.8 GHz (90 nm, 115 W, L2: 1 MB) Core 2 Duo: Up to 3.33 GHz (65 nm, 65 W, L2: 4 MB)
Fan	-	7 cm / 35.5 CFM 5,400 ± 10% RPM	8 cm / 57.7 CFM 4,500 ± 10% RPM
Heatsink Material	Copper	Copper	Aluminum fins & copper heart
Heatsink Dimensions	80 x 80 x 27 mm (3.15" x 3.15" x 1.06")	83 x 83 x 15 ~ 39 mm (3.27" x 3.27" x 0.59" ~ 1.54")	90 x 90 x 32 mm (3.54" x 3.54" x 1.26")
Dimensions	90 x 82.4 x 26 mm (3.54" x 3.24" x 1.02")	83 x 83 x 55 mm (3.27" x 3.27" x 2.17")	110 x 110 x 67 mm (4.33" x 4.33" x 2.64")
Weight	554 g	560 g	550 g
Minimum Chassis Height	1U	2U	4U
Recommended Chassis	ACP-1320 series	Backplane version of chassis	Motherboard version of chassis
Supported Boards	AIMB-766/764/762, PCA-6194/6011/6010, PCE-5124	PCA-6194/6011/6010, PCE-5124	AIMB-256/566/564/562769/767/766/764/763/762

Intel Xeon LGA1366



Part number	1960055362N021
Thermal Dispatch Performance	Up to 95W
Fan	6cm / 38.8CFM, 6800 ± 10% RPM
Heatsink Material	Aluminum Fins & Cu Block with 3 Heat Pipes
Heatsink Dimensions	90.0 x 90.0 x 63.9 mm
Dimensions	90.0 x 90.0 x 65.6 mm
Weight	396g
Minimum Chassis Height	2U
Supported Boards	ASMB-310 series
Remark	-

Intel Xeon LGA1356



Part number	1960055362N011
Thermal Dispatch Performance	Up to 95W
Fan	6cm / 38.8CFM, 6800 ± 10% RPM
Heatsink Material	Aluminum Fins & Cu Block with 3 Heat Pipes
Heatsink Dimensions	90.0 x 90.0 x 63.9 mm
Dimensions	90.0 x 90.0 x 65.6 mm
Weight	413g
Minimum Chassis Height	2U
Supported Boards	ASMB-820 series
Remark	-

Intel Xeon LGA2011





Part number	1960055362N001	1960058073N001	1960060221N001
Thermal Dispatch Performance	Up to 95W	Up to 95W	Up to 130W
Fan	6cm / 38.8CFM 6800 ± 10% RPM	7cm / 39.5CFM 5400 ± 10% RPM	-
Heatsink Material	Aluminum Fins & Cu Block with 3 Heat Pipes	Aluminum Extrusion Fins	Aluminum Fins & Cu Base with 2 Heat Pipes
Heatsink Dimensions	90.0 x 90.0 x 63.9 mm	102.0 x 71.2 x 45.5 mm	105.5 x 70.0 x 25.5 mm
Dimensions	90.0 x 90.0 x 65.6 mm	102.0 x 71.2 x 62.0 mm	105.5 x 70.0 x 25.5 mm
Weight	413g	477g	177g
Minimum Chassis Height	2U	2U	1U
Supported Boards	ASMB-920 series	ASMB-822/922 series	ASMB-822/922 series
Remark	Square type	Narrow type	Narrow type

Special CPU Coolers



Model Name	1750000400
Thermal Dispatch Performance	Pentium 4: Up to 3.8 GHz (90 nm, 115 W, L2: 1 MB)
Fan Speed	7 cm / 35.5 CFM 5,400 ± 10% RPM
Heatsink Material	Copper
Dimensions	89 x 74 x 51 mm (3.50" x 2.91" x 2.01")
Weight	672 g
Minimum Chassis Height	2U
Supported Boards	Only for PCE-5120/5020
Remarks	-

Keyboards



KBD-6307

105-key Keyboard with Touchpad

- 105-key, supports Windows key
- Built-in pressure activated touchpad, fully compatible with Windows, supporting plug & play
- Spiral cable with PS/2 keyboard & mouse connector
- Dimensions (W × H × D): 392 × 26 × 255 mm (15.4" × 1" × 10")
- Weight: 2 kg (8.8 lb)
- CE compliant
- Language: English
- P/N: KBD-6307



KBD-6312

Rackmount 105-key Keyboard with Touchpad

- 105-key, supports Windows key
- Built-in pressure activated touchpad, fully compatible with Windows, supporting plug & play
- Spiral cable with PS/2 keyboard & mouse connector
- 19" rackmount
- Height: 1U (44.4 mm, 1.75")
- Ball-bearing slide rail with handle and lock
- Dimensions (W x H x D): 482 x 44.4 x 360 mm (19" x 1.75" x 14.2")
- Language: English
- P/N: KBD-6312 (beige keyboard / beige rack)
  KBD-6312-BLK (beige keyboard / black rack)



KBD-RMK

Rackmount Keyboard Drawer

- 19" rackmount
- Height: 1U (44.4 mm, 1.75")
- Ball-bearing slide rail with handle and lock
- Compatible with KBD-6304, KBD-6305 and KBD-6307
- 2 mounting brackets and 4 screws included
- Dimensions (W x H x D): 482 x 44.4 x 360 mm (19" x 1.75" x 14.2")
- Weight: 1.5 kg (3.3 lb)
- CE compliant
- P/N: KBD-RMK (beige), KBD-RMK-BLK (black)



PCA-6302

Compact 104-key Keyboard

- 104-key with tactile response
- AT & PS/2 compatible
- Over 20 million life cycles
- Spiral cable with 6-pin PS/2 keyboard connector (not including PS/2 to 5-pin DIN PC/AT adapter)
- Dimensions (W x H x D): 400 × 40 × 188 mm (15.7" × 1.6" × 7.4")
- Language: English, Chinese
- P/N: PCA-6302, PCA-6302C



KBD-6304

Compact 88-key Keyboard

- 88-key with membrane structure
- PC/AT, PS/2, DOSV compatible
- 5 million life cycles
- Spiral cable with 6-pin PS/2 keyboard connector (not including PS/2 to 5-pin DIN PC/AT adapter)
- Dimensions (W x H x D): 287 x 29 x 140 mm (11.3" × 1.14" × 5.5")
- Weight: 0.5 kg (1.1 lb)
- CE, FCC, UL, CSA, CNS compliant
- Language: English, Chinese
- P/N: KBD-6304 (English), KBD-6304C (Chinese)



KBD-6305

Compact 88-key Keyboard with Touchpad

- 88-key with membrane structure
- PC/AT, PS/2, DOSV compatible
- Built-in touchpad for pointing input device
- 5 million life cycles
- Spiral cable with PS/2 keyboard & mouse connector (not Including PS/2 to PC/AT and PS/2 to DB-9 adapters)
- Dimensions (W x H x D): 289 x 27 x 227 mm (11.4" × 1.06" × 8.9")
- Weight: 0.8 kg (1.76 lb)
- CE, FCC, UL, CSA, CNS compliant
- Language: English
- P/N: KBD-6305

Accessories

Slide Rail



For 1U rackmount chassis

- 26" P/N: 9680006902
- Maximum acceptable load: 25kg
- 1 pair included



For 2U and higher rackmount chassis

- 26" P/N: 9680006905
- Maximum acceptable load: 45kg
- 1 pair included

Industrial Disk Tray/Bay



IDT-5101

Shockproof industrial hard disk drive tray with cooling fan and optional front USB and PS/2 interfaces

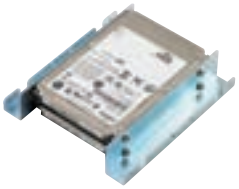
- Accepted HDD: 1 x 3.5" (only for 9.5mm thickness)
- Cooling Fan: 1 x 4 cm
- Material: Heavy duty steel plate with coating
- Color (Codes): Gray (414U), Black (4C2X)
- Dimensions (W x H x D): 148.5 x 42.6 x 171 mm (5.85" x 1.68" x 6.73")
- Weight: 400 g (0.88 lb)
- P/N: IDT-5101, IDT-5101-BLK, IDT-5121, IDT-5121-BLK with dual USB & PS/2



989K008733

A frame to securely fix a 3.5" HDD in a 5.25" drive bay

- Dimensions (W x H x D):



989K008734

A frame to securely fix two 2.5" HDDs in a 3.5" drive bay

- Dimensions (W x H x D):



IDT-3120E

Mobile rack for converting a 3.5" drive bay to dual 2.5" SATA HDD trays

- Accepted HDD: 2 x 2.5" SATA HDD (only for HDD thickness with 9.6 mm)
- Material: stainless steel
- Dimensions (W x H x D): 25.4 x 101.6 x 147.5 mm

* Does not support 2.5" SAS HDD



IDT-5230E

Mobile rack for converting dual 5.25" drive bays to three 3.5" SAS/SATA HDD trays

- Accepted HDD: 3 x 3.5" SAS/SATA HDD
- Cooling Fan: 1 x 8 cm
- Material: stainless steel
- Dimensions (W x H x D): 86 x 148 x 224.7 mm

Accessories





Model Name	1700008462	1700008461	1700100170	1700003195	1700100301	1700002204
Description	USB cable with four ports		USB cable with dual ports		USB cable with dual ports	
Length	30.5 cm (12.01")	30.5 cm (12.01")	17.5 cm (6.89")	17.5 cm (6.89")	27 cm (11.92")	27 cm (11.92")
Pins	10	9	10	9	10	9
Supported Models	AIMB-750 (A1E), AIMB-740, PCA-6002, PCA-6178, PCA-6186, PCA-6187, PCA-6190	AIMB-762, AIMB-763, AIMB-764, AIMB-766, AIMB-767, AIMB-769, AIMB-780, AIMB-781, AIMB-782, PCA-6008, PCA-6010, PCA-6011, PCA-6194, PCE-5124, PCE-5125, PCE-5126, PCE-5127	AIMB-750 (A1E), AIMB-740, PCA-6002, PCA-6178, PCA-6186, PCA-6187, PCA-6190	AIMB-762, AIMB-763, AIMB-764, AIMB-766, AIMB-767, AIMB-769, AIMB-780, AIMB-781, AIMB-782, PCA-6008, PCA-6010, PCA-6011, PCA-6194, PCE-5124, PCE-5125, PCE-5126, PCE-5127	AIMB-750 (A1E), AIMB-740, PCA-6002, PCA-6178, PCA-6186, PCA-6187, PCA-6190	AIMB-762, AIMB-763, AIMB-764, AIMB-766, AIMB-767, AIMB-769, AIMB-780, AIMB-781, AIMB-782, PCA-6008, PCA-6010, PCA-6011, PCA-6194, PCE-5124, PCE-5125, PCE-5126, PCE-5127



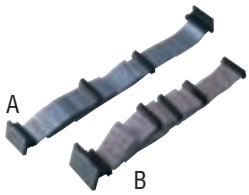

Model Name	1700008822	1700021831-01
Description	24-pin to 20-pin DVI cable with bracket	A Cable DP to DVI 24+5P(F)/2*10P-1.25+G-TEM W/BKT
Length	30 cm	30 cm
Supported Models	PCE-5125, PCE-5126, PCE-5026, PCE-5127, PCE-7127, ASMB-782	PCE-5128/7128, PCA-6028

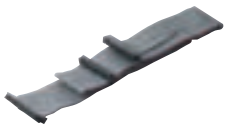




Model Name	1700060202	1700060201	1701260305
Description	Y-cable for PS/2 mouse & keyboard for CPU card	Y-cable for PS/2 mouse & AT keyboard for CPU card	Serial and parallel ports with cables and bracket

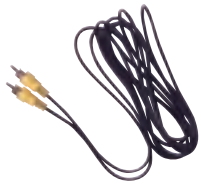


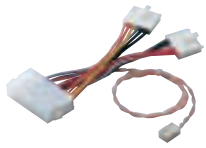




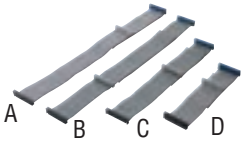
Model Name	1700006915	1700006916	A. 1701680670	B. 1700000182	1700340640
Function	Cable to activate front door LED board on ACP-4000MB chassis	Cable to activate front door LED board on IPC-610MB-H chassis	68-pin SCSI LVDS cable; 2 male connectors & terminators	68-pin SCSI LVDS cable; 5 male connectors & 1 terminator	FDD cable for two 3.5" FDD
Length			67 cm (26.38")	125 cm (49.21")	
Supported Models	AIMB-542, 562, 564, 763	AIMB-542, 562, 564, 763			

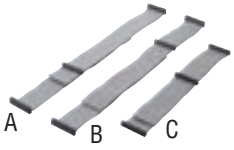




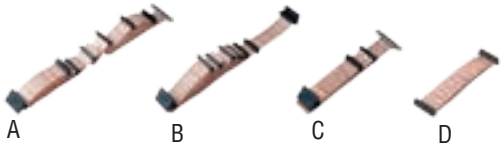


Model Name	1700003194	1700000136	1700000137	1700030500	1700000450
Description	SATA Cable 7-pin, 180D w/lock	S-Video cable	AV cable	ATX connector cable from CPU card to backplane	ATX to AT power converter
Length	60 cm (23.62")	180 cm (70.87")	180 cm (70.87")	-	-





Model Name	A. 1701400973	B. 1701400972	C. 1701400652	D. 1701400452	A. 1701400971	B. 1701400970	C. 1701400607
Description	HDD cable, ATA 66/100				HDD cable, ATA 33		
Length	62 + 35 cm (24.41" + 13.78")	82 + 15 cm (32.28 + 5.91")	45 + 20 cm (17.72" + 7.87")	45 cm (17.72")	62 + 35 cm (24.41" + 13.78")	82 + 15 cm (32.28" + 5.91")	60 cm (23.62")



Model Name	A. 1701681790	B. 1701681560	C. 1701681100	D. 1701680550
Description	68-pin SCSI LVDS cable, F-6M-T, for RAID-500U3	68-pin SCSI LVDS cable, T-6M-T	68-pin SCSI LVDS cable, F-M-M-T	68-pin SCSI LVDS cable, F-M-M-T
Length	179 cm (70.47")	156 cm (61.42")	110 cm (43.31")	53 cm (20.87")

Advantech Panel PC Platform



ADVANTECH

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The ideal solution for information terminals, ecommerce terminals and human-machine interfaces.

- Multi-functional Panel PC-High computing power, multiple I/O, AC power-in, PCI/PCIe expansion
- Fanless Panel PC-Slim, fanless, low power consumption, wide ranging DC-input, PCI/PCIe expansion



PPC-L62T
6.5" Fanless Panel PC with Intel® Atom™ N455 Processor

NEW



PPC-3100/3120
10.4"/12.1" Fanless Panel PC with Intel® Atom™ D2550 Processor



PPC-L158T
15" Fanless Panel PC with Intel® Atom™ Dual-Core Processor

NEW



PPC-6150/6170
15"/17" Panel PC with Intel® Core™ i3 / i5 / Celeron® Processor

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Fanless and Multi-functional Panel PCs

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Fanless Panel PC Selection Guide

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Selection Guide

Model Name		Fanless Panel Computer		
		PPC-L62T	PPC-3100	PPC-L128T
CPU Board		PCM-8205	PCM-8206	PCM-8201
Processor		Intel Atom N455 (1.66 GHz)	Intel Atom Dual core D2550 (1.86 GHz)	Intel Atom N270 1.6 GHz
Memory	Size	512 MB ~ 2 GB DDR3 SDRAM	Maximum 4GB DDR3 1066	DDR2 533 Up to 2 GB
	Module Type	204-pin SODIMM x 1	204-pin SODIMM x 1	200-pin SODIMM x1
2nd Cache Memory		512 KB	1MB	512 KB
SSD/Type		Supports one CFast socket	Supports 1 x internal mSATA	Supports one CompactFlash Type II, socket
Display	Size/Type	6.5" TFT LCD, LED Backlight	10.4" TFT LCD, LED backlight	12.1" Color TFT LCD
	Max. Resolution	640 x 480	800 x 600	1024 x 768
	Max. Colors	262 K	262 k	262 K
	Pixel Pitch (mm)	0.207 x 0.207	0.264 x 0.264	0.240 x 0.240
	Brightness (cd/m^2)	700	400	450/600
	Viewing Angle	160°/140°	160°/140°	160°/160°
	Brightness Control	Yes	Yes	Yes
	Simultaneous Mode	Yes	Yes	Yes
	Backlight MTBF	50,000 hrs	30,000 hrs	50,000 hours
VGA	Chipset	Intel N455 + Intel ICH8M	Intel D2550 Integrated	Intel 945GSE + Intel ICH7M
HDD/Type		Optional 1 x 2.5" drive bay	1 x 2.5" internal SATA drive bay	1 x 2.5" internal SATA drive bay
DVD-ROM, DVD+/- RW Drive Option		-	-	Optional
I/O Ports		2 x COM ports, 2 x GbE LAN, 4 x USB, Audio line out	4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPIO port (8 pin programable)	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 GPIO port 1 VGA Port; PS/2 Mouse and Keyboard, Line-in/ Line-out/ Mic-in Built-in 1W x 2 speakers, USB 2.0 ports x 4
Bus Expansion		1 x miniPCIe	1 x miniPCIe	Optional 1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot
Network (LAN)		2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)
Power	Input Voltage	15 ~ 24 V_{DC}	12~30 V_{DC}	12 ~ 24 V_{DC}
Touchscreen	Technology	Resistive	Resistive	Resistive
	Light Transmission	81%	81%	80%
	OS Support	Windows CE, XPE, XP, WIN 7	Windows XPE, WES7, WEC7	Windows XPE/XP Pro, Vista, WES7, CD6.0
	Durability (Touches)	36 million	36 million	35 million
Watchdog Timer		255 Level	255 Level	255 Level
Working Temperature		0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0-45°C (32-113°F)
Front Panel Protection		IP65 compliant	IP65 Ccompliant	IP65 compliant
Certification		CE. FCC Class B, BSMI, CCC, UL	CE. FCC Class B, UL, BSMI, CCC	CE. FCC Class B, UL, BSMI, CCC, CB, VCCI
Dimensions (W x H x D)		202 x 148 x 49 mm (7.9" x 5.82" x 1.92")	275 x 220 x 68 mm (10.83" x 8.74" x 2.68")	340.5 x 269.3 x 70.5 mm (13.41" x 10.6 x 2.78")
Weight		1.5 kg (3.3lb)	3.0 kg (6.6lb)	3.63 kg (7.98 lb)
Page		14-4	14-6	14-10

NEW





NEW



Fanless Panel Computer		
PPC-3120	**PPC-L157T**	**PPC-L158T**
PCM-8206	PCM-8201	PCM-8204
Intel Atom Dual core D2550 (1.86 GHz)	Intel Atom N270 1.6 GHz	Intel Atom Dual core D525 1.8G
Maximum 4GB DDR3 1066	DDR2 533 Up to 2 GB	DDR3 800 MHz up to 4 GB (2 GB each socket)
204-pin SODIMM x 1	200-pin SODIMM x1	204-pin SODIMM x 2
1MB	512 KB	1 MB
Supports 1 x internal mSATA	Supports one CompactFlash Type II, socket	Supports one CFast Type II, socket
12.1" Color TFT LCD, LED backlight	15" Color TFT LCD	15" Color TFT LCD, LED backlight
1024 x 768	1024 x 768	1024 x 768
262 K	262 K	262 K
0.240 x 0.240	0.297 x 0.297	0.297 x 0.297
600	350	350
160°/160°	160°/130°	160°/130°
Yes	Yes	Yes
Yes	Yes	Yes
50,000 hours	50,000 hours	50,000 hours
Intel D2550 Integrated	Intel 945GSE + Intel ICH7M	Intel D525 + Intel ICH8M
1 x 2.5" internal SATA drive bay	1 x 2.5" internal SATA drive bay	1 x 2.5" internal SATA drive bay
-	Optional	Optional
4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPIO port (8 pin programable)	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 GPIO port 1 VGA Port ; PS/2 Mouse and Keyboard, Line-in/ Line-out/ Mic-in Built-in 1W x 2 speakers, USB 2.0 ports x 4	4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, 1 x RS-232/ GPIO (8 channels, TTL level) 4 x USB 2.0 ports Mic in/ Line out, 1W speaker - 2 x Gigabit Ethernet ports 1 x D-SUB VGA port 1 x PS/2 mouse and 1 x keyboard interface
Optional 1 x expansion slot for PCI/PCIe card 1 x miniPCIe slot	Optional 1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot	1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot
2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)	2 x 10/100/1000 Mbps (RJ-45)
12 ~ 30 V_{DC}	12 ~ 24 V_{DC}, 15 ~ 24 V_{DC} with battery pack	AC Model: 100W 100 ~ 250 V_{AC}/50 ~ 60 Hz DC Model: 90W 15 ~ 24 V_{DC}
Resistive	Resistive	Resistive
80%	80%	80%
Windows XPE, WES7, WEC7	Windows XPE/XP Pro, Vista, WES7	Windows XPE/XP Pro, Vista, WES7, CE6.0
35 million	35 million	35 million
255 Level	255 Level	255 Level
0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32-122°F); 0 ~ 35°C with battery	0 ~ 50°C (32-122°F); 0 ~ 35°C with battery
IP65 compliant	IP65 compliant	IP65 compliant
CE. FCC Class B, UL, BSMI, CCC,	CE. FCC Class B, UL, BSMI, CCC, CB, VCCI	CE. FCC Class B, UL, BSMI, CCC, CB, VCCI
325 x 253.8 x 58.4 mm (12.79" x 10" x 2.3")	396.5 x 317.6 x 74.8 mm (15.6" x 12.5" x 2.95")	396.5 x 317.6 x 74.8 mm (15.6" x 12.5" x 2.95")
3.0 kg (6.6lb)	6 kg (13.2 lb)	6 kg (13.2 lb)
14-8	14-12	14-14

PPC-L62T

6.5" Fanless Panel PC with Intel® Atom™ N455 Processor



Features

- 6.5" TFT VGA LCD (LED Backlight)
- Intel® Atom™ N455 CPU on board
- System memory up to 2GB DDR3 SDRAM
- One CFast socket
- Fanless design and compact size
- Aluminum front bezel
- Dual Gigabit LAN support
- Adjust RS-232/422/485 through BIOS
- Automatic data flow control over RS-485

Introduction

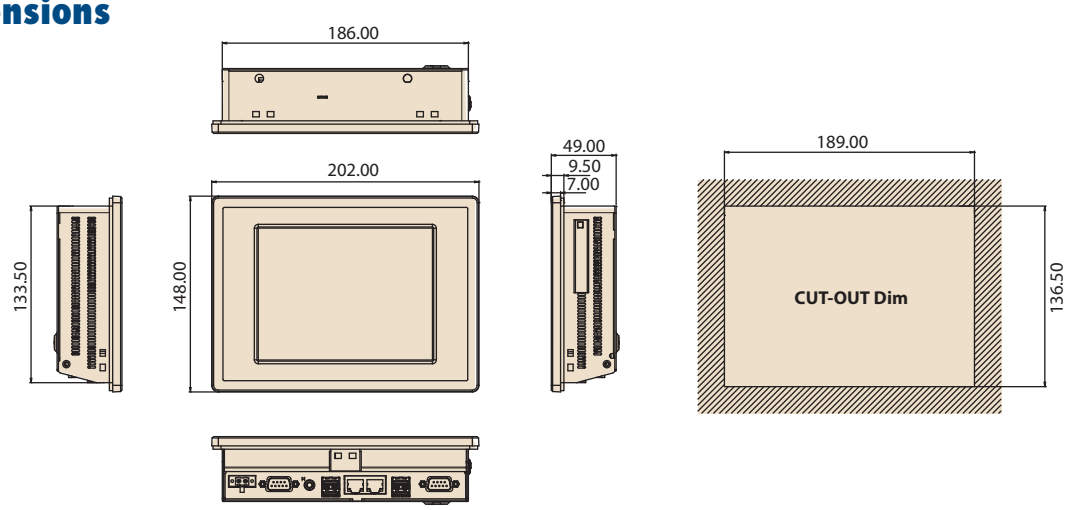
The PPC-L62T is a 6.5" industrial-grade Panel PC for compact applications for machine builders. The PPC-L62T is highly reliable because of its fanless design. The IP65 compliant alumimum front bezel provides excellent protection especially in harsh environments (water and dust). The Dual Gigabit LAN provides reliable communication between mechine and control unit and the teaming function enhances fault tolerance and load balancing. PPC-L62T supports the most popular operating systems, such as Microsoft Windows XP, XP Embedded and Windows CE 6.0.

Specifications

Processor system	CPU	Intel Atom N455 1.66GHz Single Core CPU on board
	Memory	SODIMM x 1, DDR3 667, Max 2GB
	2nd Cache Memory	512 KB
	Chipset	Intel ICH8M
	SSD	CFast*1
	HDD	1 x 2.5" external SATA HDD module (Optional)
	I/O Ports	2 x Serial ports: RS-232x1;RS-232/422/485 x1; 4 x USB; 1 x Line-out
	Bus Expansion	1x MINI PCIe
	Network (LAN)	2 x 10/100/1000Mbps Ethernet
	Watchdog Timer	255 timer levels; setup by software
	Dimensions (W x H x D)	202 x 148 x 49 mm (7.9" x 5.82" x 1.92")
	Weight	1.5 kg (3.30 lb)
OS Support	OS Support	Win XPE, Win XP Pro, WES7 32 bit, Win CE 6.0
Power Supply	Input Voltage	15-24VDC
LCD Display	Display Type	6.5" TFT LCD (LED Backlight)
	Max. Resolution	640 x 480
	Colors	262K
	Dot Size (mm)	0.207 x 0.207
	Viewing Angle	80 (left), 80 (right), 70 (up), 70 (down)
	Luminance	700
	Brightness Control	Yes (by BIOS)
	Operating Temperature	-30 ~ 85°C (-22 ~ 185°F)
	Backlight Lifetime	50, 000 hrs
Touchscreen	Touch Type	Analog Resistive 5 wires
	Resolution	2048 x 2048
	Light Transmission	81%
	Controller	RS-232 interface
	Software Driver Supports	Windows 7, XP, CE
	Durability (Touches)	36 million

Dimensions

Unit: mm



Specifications

Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Shock	Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class B
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

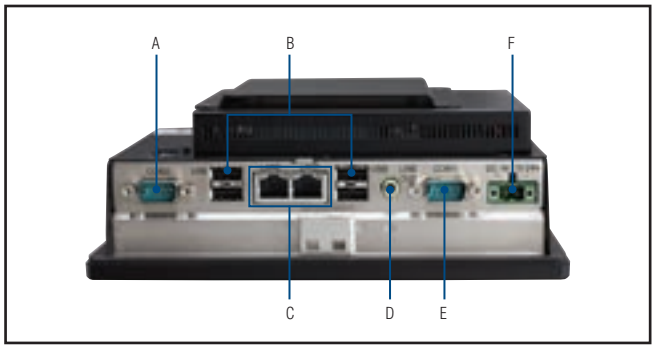
Ordering Information

Part No.	Description
PPC-L62T-R80-AXE	Fanless Atom N455 PPC w/6.5" LCD+Res T/S+2LAN
PPC-L62T-080-AXE	Fanless Atom N455 PPC w/6.5" LCD+2LAN (w/o T/S)

Accessories

Part No.	Description
PS-DC19-L157E	19 V_{DC} power adapter module for PPC-L128/ PPC-L157T
1700001524	POWER Cord 3P UL 10A 125V 180cm
170203183C	POWER Code 3P Europe (WS-010+083)183cm
1700008921	POWER CORD 3P/3P POWER SUPPLY 1.8M PSE
PPC-L62T-HDD-EXPE	HDD kit for PPC-L62T
PPC-L62T-WLANE	Wireless LAN Module for PPC-L62T
2070011145	Image WES09 PPC-L62T V4.0 24 multi-languages with SUSI Access
PPC-ARM-A03	PPC ARM VESA Standard
PPC-174T-WL-MTE	Wall mount kit for PPC series
2070011174	Image CE6.0 Pro PPC-L62T V1.0 (ENG) with SUSI
2070011418	Image CE6.0 Pro PPC-L62T V1.0 (JPN) with SUSI
2070011441	Image CE6.0 Pro PPC-L62T V1.0 (Traditional Chinese) with SUSI
2070011675	Image WES7E PPC-L62T V5.1.4 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access

I/O Appearance



A. Serial Port (RS-232/422/485)
B. USB 2.0 x 4
C. 10/100/1000 Ethernet x 2
D. Audio Line-out
E. Serial Port(RS-232)
F. DC inlet

PPC-3100

10.4" Fanless Panel PC with Intel® Atom™ D2550 Processor



Features

- 10.4" TFT SVGA LED Panel with resistive touchscreen
- Embedded Intel® Atom™ processor D2550 1.86 GHz
- System memory up to 4 GB DDR3 1066 SDRAM
- Supports one internal SATA 2.5" HDD and 1 x mSATA socket
- Fanless design and low power consumption
- Automatic data flow control over RS-485
- Adjust RS-232/422/485 through BIOS
- COM1/COM2 pin9 RI/5V/12V adjustable through BIOS
- LED backlight Auto dimming

Introduction

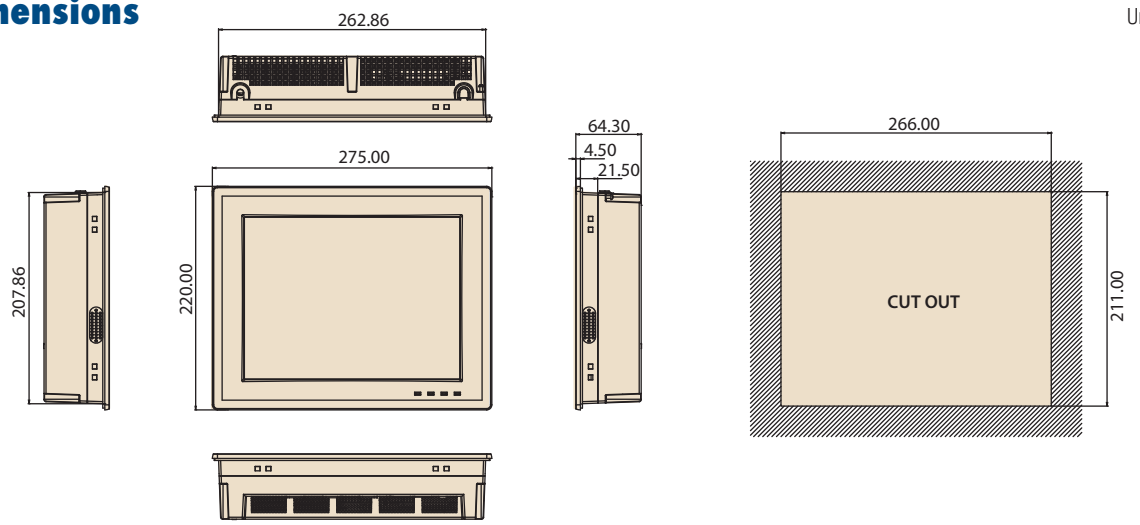
PPC-3100 is a new 10.4" Panel PC equipped with an Intel Atom processor D2550. Meeting high demands of harsh environments, the fanless design makes PPC-3100 more reliable in different kinds of applications for the machine building industry. In addition, the dual GbE LAN, 4 x serial ports, 4 x USB ports, and GPIO connector make it easier to connect to devices and be integrated into specific solutions. With a user friendly design it comes with an LED indicator on the front panel for power on/off, storage access, and LAN active status.

Specifications

Processor System	CPU	Intel Atom D2550 1.86 GHz 10W Dual Core CPU on board
	Memory	SODIMM x 1, DDR3 1066, Max 4 GB, 2 GB DDR3 pre-installed
	2nd Cache Memory	1 MB
	Chipset	Intel NM10
	Storage	mSATA*1
	HDD	1 x 2.5" SATA HDD Bay (Internal)
	I/O Ports	4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB 2.0 ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPIO port (8 pin programable)
	Bus Expansion	1x MINI PCIe
	Network (LAN)	2 x 10/100/1000 Mbps Ethernet
	Speaker	2 x 1W speakers
	Watchdog Timer	255 timer levels; setup by software
	Dimensions (W x H x D)	275 x 220 x 64.3 mm (10.83" x 8.74" x 2.53")
	Weight	2.5 kg (5.51 lb)
OS Support	OS Support	Win XPE, Win XP Pro, WES7 32 bit, Win CE 7.0
Power Supply	Input Voltage	DC 12 ~ 30 V
LCD Display	Display Type	10.4" TFT LCD (LED Backlight)
	Max. Resolution	800 x 600
	Colors	262K
	Dot Size (mm)	0.264 x 0.264
	Viewing Angle	80 (left), 80 (right), 70 (up), 70 (down)
	Luminance(cd/m2)	400
	Brightness Control	Yes
	Operating Temperature	-20 ~ 70°C (-4 ~ 158°F)
	Backlight Lifetime	30, 000 hrs (typical)
Touchscreen	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
	Light Transmission	81+/-3%
	Controller	RS-232 interface
	Software Driver Support	Windows 7, XP, CE
	Durability (Touches)	36 million

Dimensions

Unit: mm



Specifications

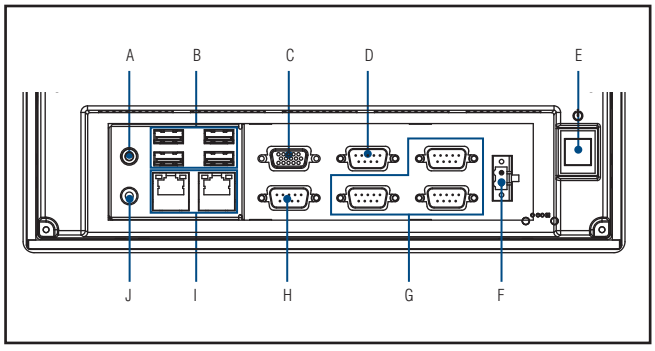
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Shock	Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class B
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

Ordering Information

Part No.	Description
PPC-3100-R2GAE	Atom D2550 Fanless Panel PC with 10.4" SVGA LED backlight, 2 GB DDR3 pre-installed
PPC-3100-R4GAE	Atom D2550 Fanless Panel PC with 10.4" SVGA LED backlight, 4 GB DDR3 pre-installed
PPC-3100-X2GAE	Atom D2550 Fanless Panel PC with 10.4" SVGA LED backlight, w/o touch, 2 GB DDR3 pre-installed
PS-DC19-L157E	19V power adapter module
1700001524	Power cord 3P UL 10A 125V 1.8m
170203183C	Power cord 3P Europe (WS-010+083)183cm
1700008921	Power cord 3P/3P Power supply 1.8M PSE
* PPC-174T-WL-MTE	Wall mount kit for PPC series
* PPC-ARM-A03	PPC ARM VESA Standard
PPC-3100-VESAE	PPC-3100 VESA bracket
PPC-3100-WLANE	PCIe Half Mini Card WLAN module for PPC-3100 series
2070011747	Image XPE WES2009 PPC-3100 V4.3.1 24 multi-languages with SUSI Access
2070011748	Image WES7E PPC-3100 V5.1.3.1 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access

* if you order Wall mount kit or ARM, please also order PPC-3100-VESAE at the same time.

I/O



A. MIC in
B. 4 x USB
C. VGA
D. RS-232/422/485
E. Power S/W
F. DC-in
G. 3 x RS-232
H. GPIO
I. 2 x GbE
J. LINE out

PPC-3120

12.1" Fanless Panel PC with Intel® Atom™ D2550 Processor



Features

- 12.1" TFT XGA LED Panel with resistive touchscreen
- Embedded Intel® Atom™ processor D2550 1.86 GHz
- System memory up to 4 GB DDR3 1066 SDRAM
- Supports one internal SATA 2.5" HDD and 1 x mSATA socket
- Optional PCI/PCIe x1 expansion kit
- Fanless design and low power consumption
- Automatic data flow control over RS-485
- Adjust RS-232/422/485 through BIOS
- COM1/COM2 pin9 RI/5V/12V adjustable through BIOS
- LED backlight Auto dimming

Introduction

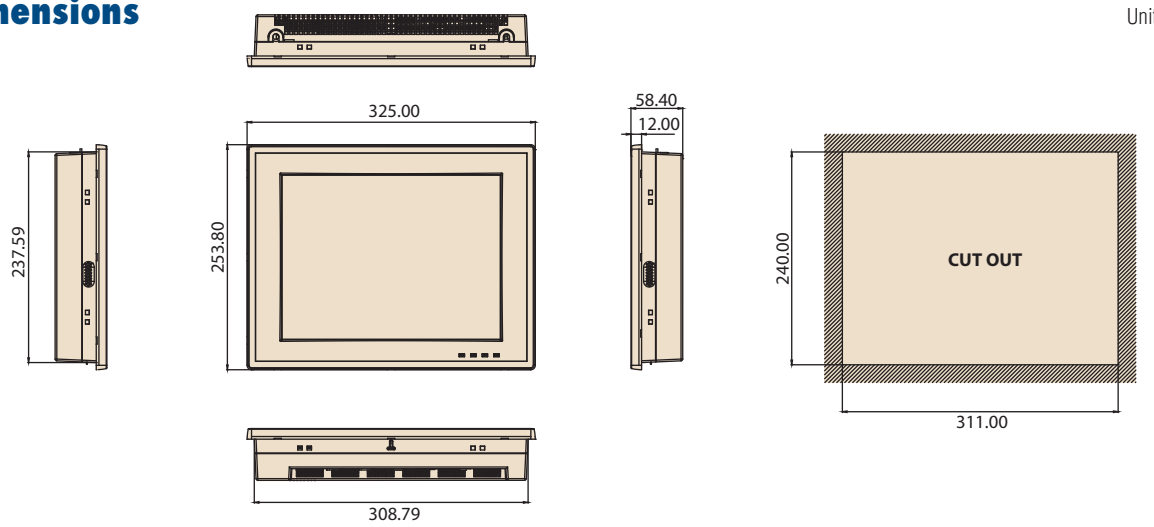
The PPC-3120 is a new 12.1" Panel PC equipped with an Intel Atom processor D2550. Meeting high demands of harsh environments, the fanless design makes PPC-3120 more reliable in different kinds of applications for the machine building industry. In addition, the dual GbE LAN, 4 x serial ports, 4 x USB ports, and GPIO connector make it easier to connect to devices and be integrated into specific solutions. With a user friendly design it comes with an LED indicator on the front panel for power on/off, storage access, and LAN active status.

Specifications

Processor System	CPU	Intel Atom D2550 1.86 GHz 10W Dual Core CPU on board
	Memory	SODIMM x 1, DDR3 1066, Max 4 GB
	2nd Cache Memory	1 MB
	Chipset	Intel NM10
	Storage	mSATA*1
	HDD	1 x 2.5" SATA HDD Bay (Internal)
	I/O Ports	4 x Serial ports: 3 x RS-232, 1x RS-232/422/485 (Adjustable through BIOS) 4 x USB 2.0 ports 1 x Line-out, 1x MIC-in 1 x DB15 VGA 1 x DB9 GPIO port (8 pin programable)
	Bus Expansion	1x MINI PCI-e (Standard), 1 x PCI / 1 x PCI-e through riser (Optional)
	Network (LAN)	2 x 10/100/1000 Mbps Ethernet
	Speaker	2 x 1W speakers
	Watchdog Timer	255 timer levels; setup by software
	Dimensions (W x H x D)	325 x 253.8 x 58.4 mm (12.79" x 10" x 2.3")
	Weight	3.3 kg (7.27 lb)
OS Support	OS Support	Win XPE, Win XP Pro, WES7 32 bit, Win CE 7.0
Power Supply	Input Voltage	DC 12 ~ 30 V
LCD Display	Display Type	12.1" TFT LCD (LED Backlight)
	Max. Resolution	1024 x 768
	Colors	262K
	Dot Size (mm)	0.24 x 0.24
	Viewing Angle	80 (left), 80 (right), 80 (up), 80 (down)
	Luminance (cd/m^2)	600
	Brightness Control	Yes
	Operating Temperature	-30 ~ 80°C (-22 ~ 176°F)
	Backlight Lifetime	50,000 hrs (typical)
Touchscreen	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
	Light Transmission	81+/-3%
	Controller	RS-232 interface
	Software Driver Support	Windows 7, XP, CE
	Durability (Touches)	36 million

Dimensions

Unit: mm



Specifications

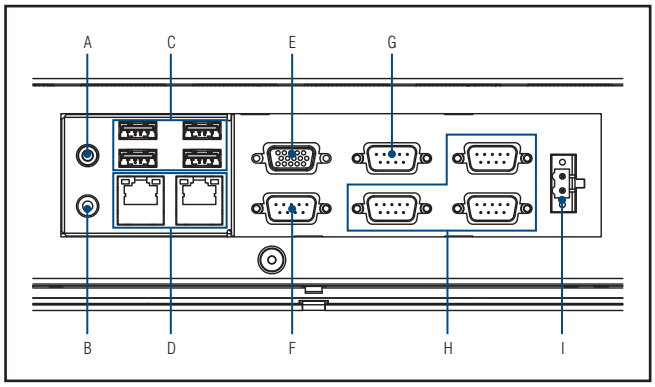
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Shock	Operating 10 G peak acceleration (11 ms duration), follow IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64
	EMC	BSMI, CE, FCC Class B
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

Ordering Information

Part No.	Description
PPC-3120-R2GAE	Atom D2550 Fanless Panel PC with 12.1" XGA LED backlight, 2 GB DDR3 pre-installed
PPC-3120-R4GAE	Atom D2550 Fanless Panel PC with 12.1" XGA LED backlight, 4 GB DDR3 pre-installed
PPC-3120-X2GAE	Atom D2550 Fanless Panel PC with 12.1" XGA LED backlight, w/o touch, 2 GB DDR3 pre-installed
PS-DC19-L157E	19V power adapter module
1700001524	Power cord 3P UL 10A 125V 1.8m
170203183C	Power cord 3P Europe (WS-010+083)183cm
1700008921	Power cord 3P/3P Power supply 1.8M PSE
* PPC-174T-WL-MTE	Wall mount kit for PPC series
* PPC-ARM-A03	PPC ARM VESA Standard
* PPC-3100-STANDE	Desktop Stand for PPC-3100 series
PPC-3100-VESAE	PPC-3100 VESA bracket module
PPC-3100-WLANE	PCIe Half Mini Card WLAN module for PPC-3100 series
PPC-3120-EXPE	Add-on box for PCI or PCIe expansion (include PCI / PCIe riser card)

* if you order Wall mount kit / ARM / Desktop stand, please also order PPC-3100-VESAE at the same time.

I/O



A. MIC in
B. Line Out
C. USB 2.0 x 4
D. 10/100/1000 Mbps Ethernet x 2
E. VGA Port
F. DIO Port
G. RS-232/422/485 x 1
H. RS-232 x 3
I. DC Inlet

PPC-L128T

12.1" Fanless Panel PC with Intel® Atom™ N270 Processor



Features

- 12.1" TFT XGA LCD with optional resistive touchscreen
- Embedded Intel® Atom™ processor N270 1.6 GHz
- Supports up to 2 GB DDR2 SDRAM
- Supports one internal SATA 2.5" HDD
- Supports 4 USB 2.0 ports, Dual Gigabit Ethernet
- Optional PCI/PCIe x 1 expansion kit
- Fanless and ultra-low power consumption
- Automatic data flow control over RS-485 (COM2)

Introduction

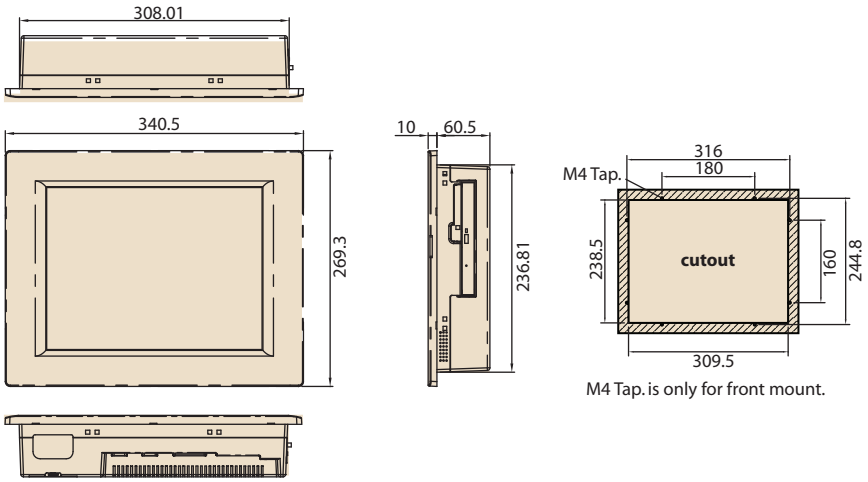
The PPC-L128T is 12.1" Fanless panel PC that delivers high performance while consuming low power. The PPC-L128T operates with low noise and provides display resolutions up to 1024 x 768 (XGA) pixels. The PPC-L128T is equipped with dual Gigabit Ethernet connectors supporting either failover or LAN teaming. Advantech's customization services and optional accessories including wireless modules, battery packs, and SATA optical devices, allowing system integrators to design tailor-made solutions for a host of industrial applications. And PPC-L128T optionally supports a sunlight readable display, making it suitable for outdoor use.

Specifications

Processor System	CPU	Intel Atom Processor N270 1.6 GHz	
	CPU Front Side Bus	533 MHz	
	Chipset	Intel 945GSE + Intel ICH7M	
	Secondary Cache	512 KB L2 Cache	
	Memory	200-pin DDR2 533 SODIMM x1 Up to 2 GB	
	DVD+/-RW	Optional (989KL128T00E)	
	SSD	Supports one CompactFlash Type II, socket	
	HDD	One internal SATA interface- 2.5" Type	
	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)	
	Fully Integrated I/O and Speakers	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 GPIO port 1 VGA Port ; PS/2 Mouse and Keyboard Line-in/ Line-out/ Mic-in Built-in 1W x 2 speakers, USB 2.0 ports x 4	
	Bus Expansion	1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot	
	Front Panel Protection	IP65 compliant	
	Weight	3.63 kg (7.98 lb)	
	Dimensions (W x H x D)	340.5 x 269.3 x 70.5 mm (13.41" x 10.6 x 2.78")	
OS Support		Win XPE, Win XP Pro, WES7 32 bit, CE 6.0 for R81 only	
Power Supply		12 ~ 24 V_{DC}	
LCD Display		PPC-L128T-R80 series	PPC-L128T-R81 series
	Display Type	12.1" Color TFT LCD	12.1" Color TFT LCD (LED backlight)
	Max. Resolution	1024 x 768	1024 x 768
	Colors	262 K	262 K
	Pixel Pitch (mm)	0.240 x 0.240	0.240 x 0.240
	Viewing Angle	160°/160°	160°/160°
	Luminance (cd/m²)	450	600
	Brightness Control	N/A	Yes (by BIOS)
	Backlight Lifetime	50,000 hours	50,000 hours
Touchscreen (optional)	Type	Analog Resistive 5 wires (ELO)	Analog Resistive 5 wires (AMT), Anti-Corrosive type
	Resolution	2048 x 2048	2048 x 2048
	Light Transmission	80 %	80 %
	Controller	USB Interface	RS-232 Interface (COM4)
	Durability (Touches)	35 million	35 million
Environmental Specifications	Operating Temperature	0-45°C (32-113°F)	
	Relative Humidity	10 ~ 95 % @ 40°C, non-condensing	
	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27	
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64	
	EMC	CE, FCC Class B, BSMI	
	Safety	CE CB, UL, BSMI, CCC , VCCI	

Dimensions

Unit: mm

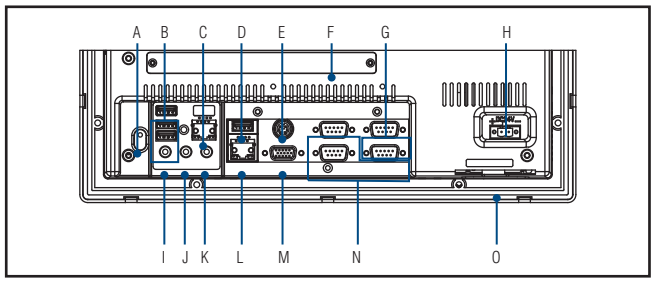


M4 Tap. is only for front mount.

Ordering Information

Part NO	Description
PPC-L128T-081-XE	Intel Atom processor N270 1.6 GHz Fanless panel PC with 12.1" TFT LCD (LED backlight)
PPC-L128T-R81-XE	PPC-L128T-081-XE with resistive touchscreen (LED backlight)
PPC-L128T-080-XE	Intel Atom processor N270 1.6 GHz fanless panel PC with 12.1" TFT LCD
PPC-L128T-R80-XE	PPC-L128T-080-XE with resistive touchscreen
PPC-L128T-R80-WXE	PPC-L128T-080-XE with resistive touchscreen (White)
PPC-L128T-RXPE0E	PPC-L128T w1G Memory/ Windows XPE XPE on 160G HDD
PPC-ARM-A03	VESA Stand ARM for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-L126 STAND	Stand desktop stand for PPC-L126T/PPC-L127T
PPC-L128-EXPE	PCI/PCIe expansion kit for PPC-L128
PS-DC19-L157E	19V DC power adapter module for PPC-L128/PPC-L157
1700001524	Power cord 3P UL 10A 125V 1.8M
170203183C	POWER Code 3P Europe (WS-010+083)183cm
1700008921	POWER CORD 3P/3P POWER SUPPLY 1.8M PSE
989KL128T00E	Slim type DVD-RW Module for PPC-L128
989KL128T02E	Wireless LAN module for PPC-L128T
2070008770	XPE WES2009 PPC-L128T V4.0 24 multi-languages with SUSI Access (R80)
2070010364	CE 6.0 Pro PPC-L128T V1.3 (ENG) with SUSI (R81)
2070010549	XPE WES2009 PPC-L128T V4.0 24 multi-languages with SUSI Access (R81)
2070010816	WES7P SP1 x86 PPC-L128T V5.1 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access (R81)
2070010817	WES7E SP1 x86 PPC-L128T V5.1 (ENG) with SUSI Access (R81)

I/O Appearance



A. Main power switch
B. USB 2.0 x 3
C. Ethernet jack
D. USB 2.0
E. PS/2 mouse and keyboard
F. PCI/PCIe expansion slot cover
G. GPIO port
H. DC inlet
I. Line-in jack
J. Line-out jack
K. Mic-in jack
L. Ethernet jack
M. VGA port
N. Serial ports
O. Battery door cover

PPC-L157T

15" Fanless Panel PC with Intel® Atom™ N270 Processor



Features

- 15" TFT XGA LCD with optional resistive touchscreen
- Embedded Intel® Atom™ processor N270 1.6 GHz
- System memory up to 2 GB DDR2 SDRAM
- Supports one internal SATA 2.5" HDD
- Supports six USB 2.0 ports (4 external/ 2 internal), Dual Gigabit Ethernet
- Optional PCI/PCIe x 1 expansion kit
- Fanless and ultra-low power consumption
- Optional smart battery module
- Automatic data flow control over RS-485 (COM2)

Introduction

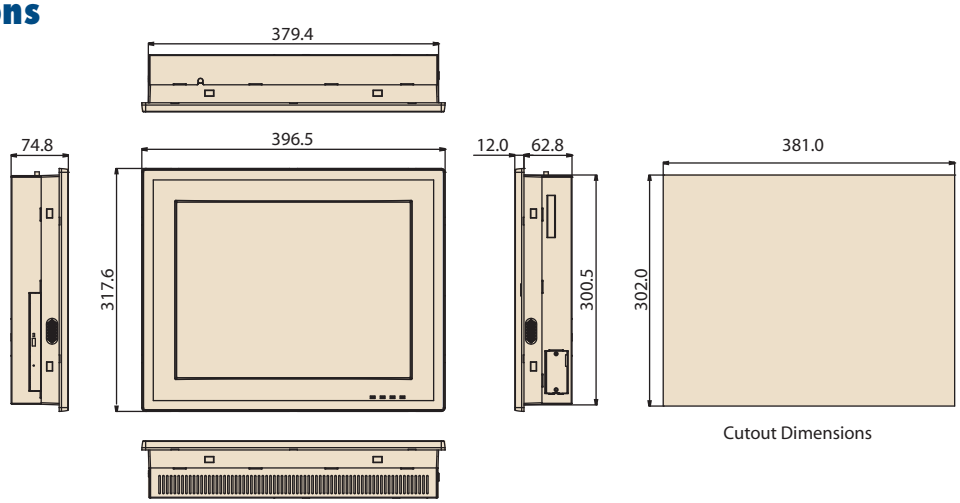
The PPC-L157T is a 15" Fanless panel PC that delivers high performance while consuming low power. The PPC-L157T operates with low noise and provides display resolutions up to 1024 x 768 (XGA) pixels. The PPC-L157T is equipped with dual Gigabit Ethernet connectors supporting either failover or LAN teaming. Advantech's customization services and optional accessories including wireless modules, battery packs, and SATA optical devices, allow system integrators to design tailor-made solutions to a host of industrial applications.

Specifications

Processor System	CPU	Intel Atom Processor N270 1.6 GHz	
	CPU Front Side Bus	533 MHz	
	Chipset	Intel 945GSE + Intel ICH7M	
	Secondary Cache	512 KB L2 Cache	
	Memory	200-pin DDR2 533 MHz SODIMM x1 Up to 2 GB, Compatible with 667 MHz	
	DVD+/-RW	989KL15702E	
	SSD	Supports one CompactFlash Type II, socket	
	HDD	One internal SATA interface- 2.5" Type	
	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)	
	Fully Integrated I/O and Speakers	3 Serial Ports: RS-232 x 2, RS-232/422/485 x 1; 1 GPIO port 1 VGA Port ; PS/2 Mouse and Keyboard Line-in/ Line-out/ Mic-in Built-in 1W x 2 speakers, USB 2.0 ports x 4	
	Bus Expansion	1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot	
	Front Panel Protection	IP65 compliant	
	Weight	6 kg (13.2 lb)	
	Dimensions (W x H x D)	396.5 x 317.6 x 74.8 (15.6" x 12.5" x 2.95")	
OS Support		Win XPE / Win XP Pro / WES7 32 bit / Windows 7 32bit	
Power Supply		12 -24 Vdc, 15-24 VDC with battery pack	
LCD Display	Display Type	15" Color TFT LCD (CCFL backlight for R80, LED backlight for R81)	
	Max. Resolution	1024 x 768	
	Colors	262 K	
	Pixel Pitch (mm)	0.297 x 0.297	
	Viewing Angle	160°/130°	
	Luminance (cd/m^2)	350	
	Backlight Lifetime	50,000 hours	
Touchscreen (optional)	Type	Analog Resistive 5 wires (ELO) (for R80)	Analog Resistive 5 wires (AMT), Anti-Corrosive type (for R81)
	Resolution	2048 x 2048	2048 x 2048
	Light Transmission	80 %	80 %
	Controller	USB Interface	RS-232 Interface (COM4)
	Durability (Touches)	35 million	35 million
Environmental Specifications	Operating Temperature	0-50°C (32-122°F); 0-35°C with battery pack	
	Relative Humidity	10 ~ 95 % @ 40°C, non-condensing	
	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27	
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64	
	EMC	CE, FCC Class B, BSMI	
	Safety	CE CB, UL, BSMI, CCC , VCCI	

Dimensions

Unit: mm



Ordering Information

Part NO	Description
PPC-L157T-080-XE	Intel Atom processor N270 1.6 GHz fanless panel PC with 15" TFT LCD
PPC-L157T-R80-XE	PPC-L157T-080-XE with resistive touchscreen
PPC-L157T-RXPE0E	PPC-L157T with 1G memory/Windows XPE on 160G HDD
PPC-ARM-A03	VESA Stand ARM for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-L157-STANDE	Stand desktop stand for PPC-L157T
PPC-L157-EXPE	PCI/PCIe expansion kit for PPC-L157
PS-DC19-L157E	19V DC power adapter module for PPC-L128/PPC-L157
1760001580	Battery PACK 11.1V 4.4AH 3S2P (only for PPC-L157T-R81-XE)
1700001524	Power cord 3P UL 10A 125V 1.8M
989KL15700E	Wireless Module for PPC-L157T Series
989KL15702E	Slim type DVD-RW Module for PPC-L157T Series
PPC-L157T-R81-XE	Intel Atom processor N270 1.6 GHz fanless panel PC with 15" TFT LCD and AMT Anti-Corrosive touchscreen (LED backlight)
2070009824	XPE WES2009 for PPC-L157T V4.0 24MUI (for R80)
2070011575	XPE WES2009 V4.0, 24 multi-languages with SUSI Access (for R81)



I/O Appearance



A. Main power switch
B. USB 2.0 x 3
C. Ethernet jack
D. USB 2.0
E. PS/2 mouse and keyboard
F. PCI/PCI-E expansion slot cover
G. GPIO port
H. DC inlet
I. Line-in jack
J. Line-out jack
K. Mic-in jack
L. Ethernet jack
M. VGA port
N. Serial ports

PPC-L158T

15" Fanless Panel PC with Intel® Atom™ Dual-Core Processor



Features

- 15" TFT XGA LCD with optional resistive touchscreen
- Embedded Intel® Atom™ processor, dual-core D525 1.8G
- System memory up to 2 x DDR3 800 MHz SODIMMs
- Supports one internal SATA 2.5" HDD
- Supports One Mini PCIe socket, Dual Gigabit Ethernet
- Either PCI/PCIe x 1 expansion kit
- Fanless and ultra-low power consumption
- One RS-232/422/485; (supporting Auto-flow control, BIOS-selectable)
- One RS-232/ GPIO (8 channels, TTL level); (by swapping pin header)

Introduction

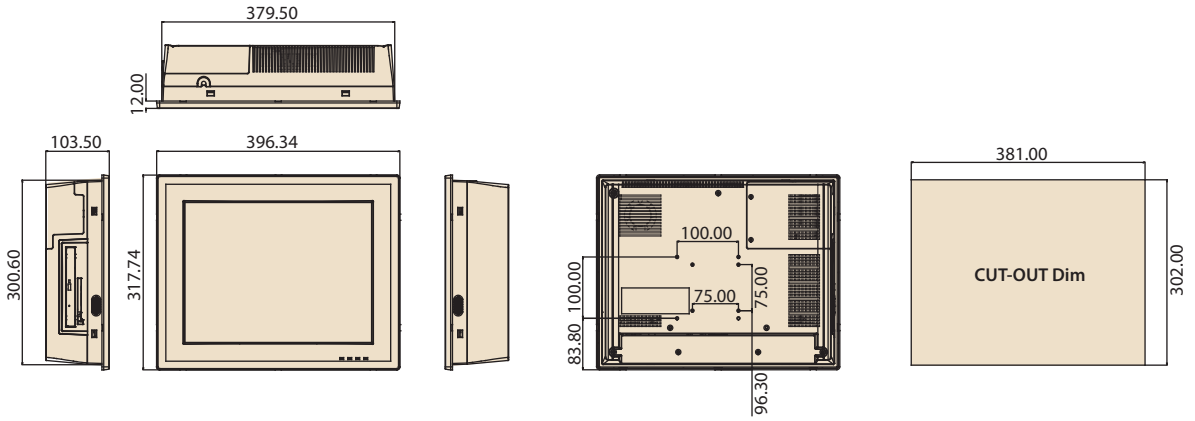
The PPC-L158T is a 15" Fanless panel PC that delivers high performance while consuming low power. The PPC-L158T operates with low noise and provides display resolutions up to 1024 x 768 (XGA) pixels. The PPC-L158T is equipped with dual Gigabit Ethernet connectors, 8-channel GPIO function and either one PCI or one PCIe expansion slot. Advantech's customization services and optional accessories including wireless modules and SATA optical devices, allow system integrators to design tailor-made solutions for a host of industrial applications.

Specifications

Processor System	CPU		Intel Atom processor, dual-core D525 1.8G
	Chipset		D525 + ICH8M
	Secondary Cache		1MB L2 cache
	Memory		2 x DDR3 800 MHz SODIMMs (up to 2GB each socket), compatible with 1066/1333 MHz (does not support ECC and REG)
	DVD-RW Drive		Optional (989K017702E)
	SSD		Supports one CFastTM Type I, II socket
	HDD		One internal SATA interface- 2.5" Type
	Network (LAN)		2 x 10/100/1000 Mbps (RJ-45)
	Fully Integrated I/O and Speakers		4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, 1 x RS-232/ GPIO (8 channels, TTL level)* 4 x USB 2.0 ports Mic in/ Line out, 1W speaker - 2 x Gigabit Ethernet ports 1 x D-SUB VGA port 1 x PS/2 mouse and 1 x keyboard interface 1 x Parallel port (by an additional cable in the accessory box) * RS-232/422/485 - selected in BIOS and supporting RS-232/GPIO by swapping pinheader, Auto-flow control
	Bus Expansion		1 x expansion slot for PCI/PCIe card 1 x MINI PCIe slot
	Front Panel Protection		IP65 compliant
	Weight		6 kg (13.2 lb)
	Dimensions (W x H x D)		396.5 x 317.6 x 103.5 mm (15.6" x 12.5 x 4.08")
OS Support			Win XPE / Win XP Pro / WES7 32 bit / Windows 7 32 & 64 bit / CE6.0
Power Supply	DC	Input Voltage	15 ~ 24 V_{DC}
	AC	Output Rating	85 W (max.)
		Input Voltage	100 ~ 240 V_{AC}, 50 ~ 60 Hz, 1 ~ 2 A
LCD Display	Display Type		15" Color TFT LCD
	Max. Resolution		1024 x 768
	Colors		262 K
	Pixel Pitch (mm)		0.297 x 0.297
	Viewing Angle		160°/140°
	Luminance (cd/m²)		350
	Brightness Control		Yes
	Backlight Lifetime		50,000 hours
Touchscreen (optional)	Type		Analog Resistive 5-wire (AMT) Anti-Corrective type
	Resolution		2048 x 2048
	Light Transmission		80 %
	Controller		RS-232 interface
	Durability (Touches)		35 million
Environmental Specifications	Operating Temperature		0-50°C (32-122°F)
	Relative Humidity		10 ~ 95 % @ 40°C, non-condensing
	Shock		Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
	Vibration		Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC		CE, FCC Class B, BSMI
	Safety		CE CB, UL, BSMI, CCC , VCCI

Dimensions

Unit: mm

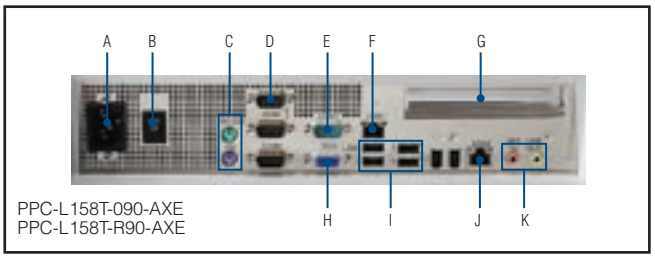


Ordering Information

Part NO	Description
PPC-L158T-090-AXE	Intel Atom processor, Dual Core processor D525 1.8G fanless panel PC with 15" TFT LCD (with 85W PSU inside)
PPC-L158T-R90-AXE	PPC-L158T-090-XE with resistive touchscreen (with 85W PSU inside)
PPC-L158T-090-DXE	Intel Atom Dual Core processor D525 1.8G fanless panel PC with 15" TFT LCD (DC Input Model)
PPC-L158T-R90-DXE	PPC-L158T-090-XE with resistive touchscreen (DC Input Model)
PPC-ARM-A03	VESA Stand ARM for PPC series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-155T STAND	Stand kit for PPC-L158T/157/177/ series
PS-DC19-L157E	19V DC power adapter module for PPC-L128/PPC-L157
1700001524	Power cord 3P UL 10A 125V 1.8M (for adapter)
989K017700E	Optical disc drive kit for PPC-L158T/157/177 (W/O ODD)
989K017702E	DVD-RW (SATA) module for PPC-L158T/157/177
2070010541	Image XPE WES2009 PPC-L158 V4.0 24 MUI
2070011078	Image CE 6.0 Pro PPC-L158 V1.0 ENG
PPC-L158T-WLANE	Wireless Module for PPC-L158T Series
2070011241	Image WES7E SP1 32 bit PPC-L158T V5.1 English version
2070011242	Image WES7P SP1 32 bit PPC-L158T V5.1, 36 multi-language

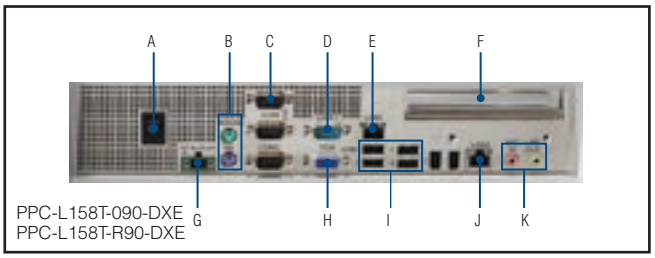
I/O Appearance

AC Input Model



A: AC Inlet
B: Power Switch
C: PS2 Mouse x 1 / Keyboard x1
D: RS-232 x 2, RS-232/422/485 x 1
E: RS-232 x 1 (or GPIO x 1 by cable swapping)
F: 10/100/1000 Mbps Ethernet x 1
G: PCI Slot x 1 (or PCIe Slot x 1)
H: VGA Port
I: USB 2.0 x 4
J: 10/100/1000 Mbps Ethernet x 1
K: Line out/Mic in

DC Input Model



A: Power Switch
B: PS2 Mouse x 1 / Keyboard x 1
C: RS-232 x 1 (or GPIO x 1 by cable swapping)
D: RS-232 x 2, RS-232/422/485 x 1
E: 10/100/1000 Mbps Ethernet x 1
F: PCI Slot x 1 (or PCIe Slot x 1)
G: DC inlet
H: VGA Port
I: USB 2.0 x 4
J: 10/100/1000 Mbps Ethernet x 1
K: Line out/Mic in

Multi-functional Panel PC Selection Guide

Selection Guide





NEW



Model Name		Multi-functional Panel Computer		
		PPC-125T	PPC-157T	PPC-6150
CPU Board		PCM-8200	PCM-8200	MIO-5290 PCM-8207
Processor		Socket 478 Supports Intel Core 2 Duo processor up to 2.16 GHz	Supports Socket 478 based Core 2 Duo up to 2.16 GHz	3rd Gen Core i CPU Celeron 847E 1.1 GHz Celeron 1020E 2.2 GHz Core i3-3120ME 2.4 GHz Core i5-3610ME 2.7 GHz
Memory	Size	512 MB ~ 4 GB DDR2 SDRAM	Supports up to 4 GB of 667 MHz DDR2 system memory	DDR3 (1600 MHz) / DDRL (1333 MHz), supports up to 8 GB
	Module Type	200-pin SODIMM x 2	SODIMM (socket x 2)	1 x 204-pin SODIMM
L2 Cache Memory		On-die 512 KB ~ 4 M	On-die 512 KB ~ 4 M	2MB/3MB
Storage/Type		Supports 1 x internal CompactFlash Type II socket, 2.5" SATA HDD drive	Supports 1 x internal CompactFlash Type II socket, 2.5" SATA HDD drive	1 x 2.5" SATA bay Either one - Second 2.5" SATA bay (Intel RAID supported, optional) - Slim type 8X or above DVD +/- RW (optional)
Display	Size/Type	12.1"	15" Color TFT LCD	15" TFT LCD (LED Backlight)
	Max. Resolution	1024 x 768	1024 x 768	1024 x 768
	Max. Colors	262 K	262K	262K
	Pixel Pitch (mm)	0.240 x 0.240	0.297 x 0.297	0.297 x 0.297
	Brightness (cd/m²)	450	350	350
	Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)	80°(left), 80°(right), 70°(up), 60°(down)	80°(left), 80°(right), 70°(up), 70°(down)
	Brightness Control	Yes	Yes	Yes
	Simultaneous Mode	Yes	Yes	Yes
	Backlight MTBF	50,000 hrs	50,000 hrs	50,000 hrs
VGA	Chipset	945GME	945GME	Intel 3rd Gen Core i CPU+QM77
CD-ROM/Combo Drive		Optional extenal module for 1 x slim type optical drive (optional SATA optical drive)	Optional 1 x Slim type optical drive bay (optional SATA optional drive)	Optional 1 x Slim type optical drive bay (optional SATA optional drive)
DVD-ROM, DVD+/- RW Drive Option		Yes	Yes	Yes
I/O Ports		4 x COM ports (3 x RS-232, 1 x RS-232/422/485) 6 x USB V2.0 ports, 1 x PS/2 mouse & K/B, Mic-in/Line-in/ Line-out, 1 W speakers, 2 x Gigabit Ethernet ports, 1 D-SUB VGA port	4 x COM ports (3 x RS-232, 1 x RS-232/422/485), 4 x USB 2.0 ports, 1 x PS/2 mouse and keyboard interface, MIC in/Line in/Line out port, 1W speaker, 2 x Gigabit Ethernet ports, 1 x D-SUB VGA port	4 x COM ports, 1 x isolated RS-232/422/485, 3 x RS-232 1 x GPIO/RS-232 (8 channels, TTL level); by pin header 3 x USB3.0 + 2 x USB2.0 ports 2 x Gigabit Ethernet 1 x D-SUB VGA port 1 x HDMI 1 x Line-out, 1 x Mic-in, 2 x 1W speaker
Bus Expansion		1 x PCI-e Expansion Slot or 1 x PCI slot (Both are available as options) 1 x Mini PCI Socket, 1 x Mini PCI-e socket	1 x PCI-e Expansion Slot (PCI is available as option) 1 x Mini PCI Socket 1 x Mini PCI-e socket	Either: - one PCI + one PCIe x1 (standard) - one x PCIe x 4 (in the accessory box) - two PCIe x 1 (optional) - two PCI (optional)
Network (LAN)		2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1: Intel 82579LM, GbE2: Intel 82583V)
Power	Output Rating	150 W	150 W	150W
	Input Voltage	AC Model: 150 W Input voltage: 100 ~ 240 V_{AC}, 50 ~ 60 Hz, 2 ~ 4 A	100 ~ 240 V_{AC}, 50 ~ 60 Hz, 2 ~ 4 A	100 ~ 240 V_{AC}, 50/60Hz, 4 ~ 2 A
Touchscreen	Technology	Resistive	Resistive	Resistive
	Light Transmission	80% (Resistive)	80% (Resistive)	80% (Resistive)
	OS Support	Windows XPE/XP Pro, Vista	Window XP/XPE/Vista	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit
	Durability (Touches)	35 million (Resistive)	35 million (Resistive)	35 million (Resistive)
Watchdog Timer		255 level	255 level	255 level
Working Temperature		0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)	0 ~ 50°C (32 ~ 122°F)
Front Panel Protection		IP65 compliant	IP65 compliant	IP65 compliant
Certifications		CE, FCC, BSMI, CCC, UL, CB	BSMI, CE, FCC Class B, CCC	CE, FCC, BSMI, CCC, UL
Dimensions (W x H x D)		376 x 285.55 x 100.95 mm (14.80" x 11.24" x 3.97")	420 x 223.3 x 130.5 mm (16.54" x 12.72" x 5.12")	395.5 x 316.8 x 105.5 mm (15.6" x 12.5" x 4.15")
Weight		5.8 kg (12.77 lb)	6 kg (13.22 lb)	6.5 kg (14.32 lb)
Page		14-18	14-20	14-22





NEW



Multi-functional Panel Computer		
PPC-177T	**PPC-179T**	**PPC-6170**
PCM-8200	PCM-8203	MIO-5290 PCM-8207
Supports Socket 478 based Core 2 Duo up to 2.16 GHz	LGA775 Socket-based Intel Core 2 Duo Processor up to 3.0 GHz	3rd Gen Core i CPU Celeron 847E 1.1 GHz Celeron 1020E 2.2 GHz Core i3-3120ME 2.4 GHz Core i5-3610ME 2.7 GHz
Supports up to 4 GB of 667 MHz DDR2 system memory	Supports up to 4 GB of 1333 MHz DDR3 system memory	DDR3 (1600 MHz) / DDRL (1333 MHz), supports up to 8 GB
SODIMM (socket x 2)	240-pin DIMM x 2	1 x 204-pin SODIMM
On-die 512 KB ~ 4 M	On-die 512 KB ~ 4 M	2MB/3MB
Supports 1 x internal CompactFlash Type II socket, 2.5" SATA HDD drive	Supports 1 x internal CFast Type II socket, 1 2.5" SATA HDD drive	1 x 2.5" SATA bay Either one - Second 2.5" SATA bay (Intel RAID supported, optional) - Slim type 8X or above DVD +/- RW (optional)
17" Color TFT LCD	17" TFT LCD	17" TFT LCD (LED Backlight)
1280 x 1024	1280 x 1024	1280 x 1024
16.7M	16.7 M	262K
0.264 x 0.264	0.264 x 0.264	0.264 x 0.264
380	380	350
80°(left), 80°(right), 80°(up), 80°(down)	80°(left), 80°(right), 80°(up), 80°(down)	85°(left), 85°(right), 80°(up), 80°(down)
Yes	Yes	Yes
Yes	Yes	Yes
50,000 hrs	50,000 hrs	50,000 hrs
945GME	Intel Q45	Intel 3rd Gen Core i CPU+QM77
Optional 1 x Slim type optical drive bay (optional SATA optional drive)	Optional SATA slim type optical drive	Optional 1 x Slim type optical drive bay (optional SATA optional drive)
Yes	Yes	YES
4 x COM ports (3 x RS-232, 1 x RS-232/422/485) 4 x USB 2.0 ports, 1 x PS/2 mouse and keyboard interface, Mic-in/Line-in/ Line-out port, 1 W speakers, 2 x Gigabit Ethernet ports, 1 x D-SUB VGA port	3 x serial ports: 2 x RS-232, 1 x RS-232/422/485, 6 x USB2.0 ports, Mic-in, Line-in, Line-out, 1 x D-SUB VGA port, 2 x Gigabit Ethernet ports	4 x COM ports, 1 x isolated RS-232/422/485, 3 x RS-232 1 x GPIO/RS-232 (8 channels, TTL level); by pin header 3 x USB3.0 + 2 x USB2.0 ports 2 x Gigabit Ethernet 1 x D-SUB VGA port 1 x HDMI 1 x Line-out, 1 x Mic-in, 2 x 1W speaker
1 x PCI-e Expansion Slot (PCI is available as option) 1 x Mini PCI Socket 1 x Mini PCI-e socket	1 x PCI + 1 x PCI-E through riser, 1 x Mini PCIe	Either: - one PCI + one PCIe x1 (standard) - one x PCIe x 4 (in the accessory box) - two PCIe x 1 (optional) - two PCI (optional)
2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported	2 x 10/100/1000 Mbps Ethernet	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1: Intel 82579LM, GbE2: Intel 82583V)
150 W	220 W	150W
100 ~ 240 V_{AC}, 50 ~ 60 Hz, 2 ~ 4 A	100 ~ 240 V_{AC} @ 50 ~ 60 Hz	100 ~ 240 V_{AC}, 50/60Hz, 4 ~ 2 A
Resistive	Resistive	Resistive
80% (Resistive)	80% (Resistive)	80% (Resistive)
Windows XPE/XP Pro, Vista, WES7	Windows XPE/XP Pro, Vista, WES7	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit
35 million (Resistive)	35 million (Resistive)	35 million (Resistive)
255 level	62 level, 1 ~ 62 seconds	255 level
0 ~ 50°C (32 ~ 122°F)	0 ~ 45°C (32 ~ 113°F)	0 ~ 50°C (32 ~ 122°F)
IP65 compliant	IP65 compliant	IP65 compliant
BSMI, CE, FCC Class B, CCC	BSMI, VCCI, UL, CE, FCC, Class B, CCC	CE, FCC, BSMI, CCC, UL
442 x 362 x 111.5 mm (17.4" x 14.25" x 4.39")	446 x 382 x 149.3 mm (17.56" x 15.04" x 5.88")	442.0 x 362.0 x 113.5 mm (17.4" x 14.25" x 4.47")
7.6 kg (16.74 lb)	11.0 kg (27.94 lb)	7.5Kg (16.52lb)
14-24	14-26	14-28

PPC-125T

12" Panel PC with Intel® Core™2 Duo Processor



Features

- 12.1" TFT XGA (1024 x 768) LCD Panel
- Intel® Core™2 Duo processor up to 2.16 GHz
- System memory up to 4 GB (DDR2 200-pin SODIMM socket x 2)
- 1 x PCI slot or 1 x PCIe slot (both optional)
- One Mini PCIe slot
- Built-in CF card interface (IDE interface for OS booting)
- Two Gigabit Ethernet ports, supports LAN teaming
- One RS-232/422/485; (supporting Auto-flow control, selecting by BIOS)

Introduction

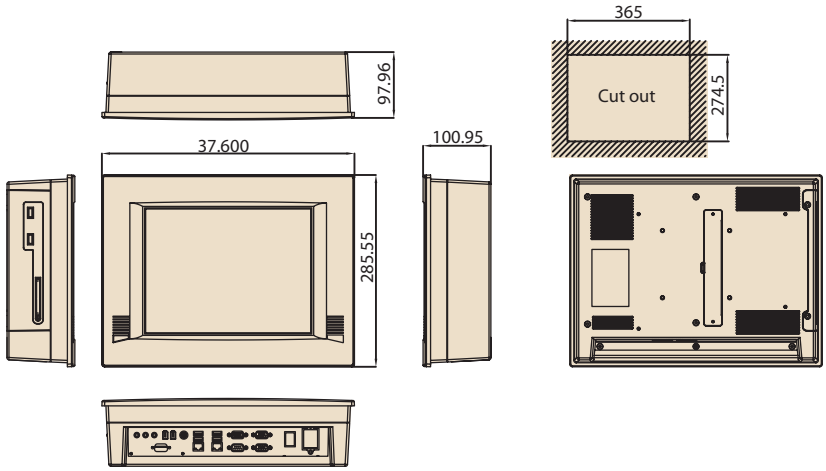
The PPC-125T is an Intel Core 2 Duo based Panel PC with 12.1" color TFT LCD. It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Four serial COM supports auto-flow control PPC-125T advanced networking capabilities, and provides a great solution for versatile applications.

Specifications

Processor System		CPU	Supports mSocket 478 based Core 2 Duo up to 2.16 GHz
		CPU FSB	533/667 MHz
		Chipset	945GME + ICH7M
		Disk Drive Housing	Room for 1 x 2.5" SATA HDD
		Dimensions (W x H x D)	376 x 285.55 x 100.95 mm (14.80" x 11.24" x 3.97")
		Front Panel Protection	IP65 compliant
		Weight	5.6 kg (12.33 lb)
		HDD	SATA HDD interface (2.5" HDD bay)
		DVD+/-RW Drive	Optional external module with SATA DVD-RW Drive
		Memory	Socket x 2, supports up to 4 GB DDR2 SDRAM 200pin SODIMM
		Network (LAN)	2 x Gigabit Ethernet ports, supports both wake on LAN and boot from LAN functions.
		I/O Ports	- 4 x COM ports: 3 x RS-232, 1 x RS-232/422/485 - 6 x USB 2.0 ports - 1 x PS/2 mouse and keyboard interface - MIC in / Line in / Line out port, 1 W speakers - 2 x Gigabit Ethernet ports - 1 x D-SUB VGA port
		Bus Expansion	PCI riser card & PCIe riser card are available as options, 1 x Mini PCI socket, 1 x Mini PCIe socket
OS Support		OS Support	Win XPE, Win XP Pro, WES7 with 32 bit, WES7 with 64 bit (only for T7400 CPU)
Environmental Specifications		Operating Temperature	0 ~ 50°C (32 ~ 122°F)
		Relative Humidity	10 ~ 95% @ 40°C non-condensing
		Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
		Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follow IEC 60068-2-64
		EMC	BSMI, CE, FCC Class B, CCC
		Safety	CB, CE, UL
Power Supply	AC Model	Output Rating	150 W (max.)
		Input Voltage	100 ~ 240 V_{AC}, 50 ~ 60 Hz, 2 ~ 4 A
		Output Voltage	+3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A
LCD Display		Display Type	Color TFT LCD
		Size (Diagonal)	12.1"
		Max. Resolution	1024 x 768
		Max. Colors or Grayscales	262 K
		Pixel Pitch (mm)	0.240 x 0.240
		Luminance (cd/m2)	450
		Contrast Ratio	700 : 1
		Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)
		Operating Temperature	-30 ~ +70°C
		LCD MTBF	50,000 hrs
Touchscreen (optional)		Type	5-wire Analog Resistive (USB interface)

Dimensions

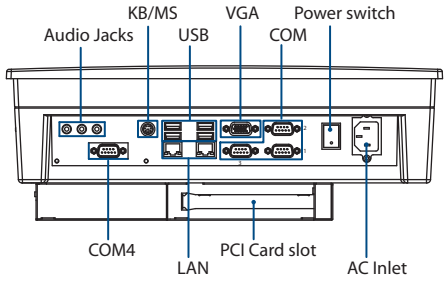
Unit: mm



Ordering Information

Part No.	Description
PPC-125T-BAREE	12.1" Core 2 Duo Panel PC without T/S
PPC-125T-BARE-TE	12.1" Core 2 Duo Panel PC with Resi. T/S
PPC-125-STANDE	Stand kit for PPC-125 series
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
989K012500E	PCI-e riser card with rear add-on box with 1 x Slim SATA ODD bay
989K012502E	DVD-RW Drive Module for PPC-125 with 1 x PCI-e slot
989K012503E	PCI riser card with rear add-on box with 1 x Slim SATA ODD bay
1702002605	POWER CABLE 90D 220V EUROPEAN 250V/6A 1.8M
1702002600	Power Cable UL/CSA (USA) 180D 125V10A 1.83M
2070006629	XPE FP2007 PPC-125T V3.01 (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
2070006569	Image XPE FP2007 PPC-125T V3.01 ENG
2070011330	IMG XPE WES09 PPC-125T V4.0 24 multi-languages with SUSI Access

I/O Appearance



Feature Details

Protection

To meet the requirements of a public environment, the front panel PPC-125T complies with the IP65 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The onboard hardware monitoring feature provides an automatic protection function, which prevents the CPU from becoming overheated.

Expansion

To extend functionality, PPC-125T is designed with either one expansion slot for PCI card or PCIe card and six USB 2.0 (Univeral Serial Bus) ports. With these expansion capabilities, PPC-125T not only functions as an HMI, but also as a computing center on which to build your applications.

PPC-157T

15" Panel PC with Intel® Core™2 Duo Processor



Features

- Intel® Core™2 Duo processor up to 2.16 GHz
- System memory up to 4 GB 667 MHz DDR2 SODIMM socket x 2
- One PCIe Expansion Slot (PCI is available as an option)
- One Mini PCI socket, One Mini PCIe socket
- Built-in CF card interface (IDE interface for OS booting)
- Dual Gigabit Ethernet ports supporting LAN teaming
- One RS-232/ GPIO (8 channels, TTL level); (by swapping pin header)
- One RS-232/422/485; (supporting Auto-flow control, selecting by BIOS)

Introduction

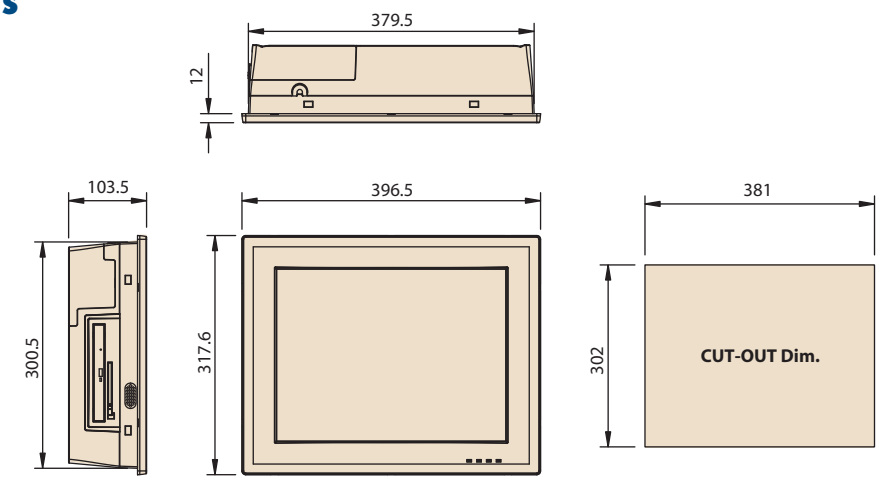
The PPC-157T is an Intel Core 2 Duo based Panel PC with 15" color TFT LCD. It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Four serial ports and two Gigabit Ethernet ports give the PPC-157T advanced networking capabilities, and provide a great solution for versatile applications.

Specifications

Processor System		CPU	Supports mSocket 478 based Core 2 Duo up to 2.16 GHz
		CPU FSB	533/667 MHz
		Chipset	945GME + ICH7M
		Disk Drive Housing	Room for 1 x 2.5" SATA HDD
		Dimensions (W x H x D)	396.5 x 317.6 x 103.5 mm (15.6" x 12.5 x 4.08")
		Weight	6 kg (13.22lb)
		Front Panel Protection	IP65 compliant
		HDD	SATA HDD interface (2.5" HDD bay)
		DVD+/-RW Drive	Optional SATA 8X or above DVD+/-RW Drive, Optional optical drive bay
		Memory	Supports up to 4 GB of 667 MHz DDR2 SODIMM system memory (socket x 2)
		Network (LAN)	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported
		I/O Ports	- 4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, 1 x RS-232/ GPIO (8 channels, TTL level)* - 4 x USB 2.0 ports - Mic in/ Line out / Line in, 1W speaker - 2 x Gigabit Ethernet ports - 1 x D-SUB VGA port - 1 x PS/2 mouse and keyboard interface
			* RS-232/422/485 - selecting by BIOS and supporting Auto-flow control, RS-232/GPIO - by swapping pin header
		Bus Expansion	1 x PCI-e Expansion Slot (PCI is available as an option), 1 x Mini PCI socket, 1 x Mini PCI-e socket
OS Support		OS support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)
Environmental Specifications		Operating Temperature	0 ~ 50°C (32 ~ 122°F)
		Relative Humidity	10 ~ 95% @ 40°C non-condensing
		Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
		Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
		EMC	BSMI, CE, FCC Class B, CCC
		Safety	CB, CE, UL
Power Supply	AC Model	Output Rating	150 W (max.)
		Input Voltage	100 ~ 240 V_{AC}, 50 ~ 60 Hz, 2 ~ 4 A
		Output Voltage	+3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A
LCD Display		Display Type	Color TFT LCD
		Size (Diagonal)	15"
		Max. Resolution	1024 x 768
		Max. Colors or Grayscales	262K
		Pixel Pitch (mm)	0.297 x 0.297
		Luminance (cd/m^2)	350
		Contrast Ratio	400:1
		Viewing Angle	80°(left), 80°(right), 70°(up), 60°(down)
		LCD MTBF	50,000 hrs
Touchscreen (optional)		Type	5-wire Analog Resistive (USB interface)

Dimensions

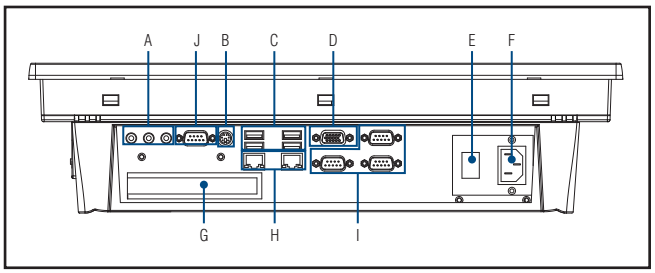
Unit: mm



Ordering Information

Part No.	Description
PPC-157T-BAREE	15" C2D Based PPC without T/S
PPC-157T-BARE-TE	15" C2D Based PPC with Resistive T/S
PPC-155T STAND	Stand kit for PPC-155/157/175/177 series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-174T-WL-MTE	Wall mount kit for PPC series
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA (USA) 180D 125V/10A 1.83M
989K017700E	Optical disc drive kit for PPC-157/177 (W/O ODD)
989K017702E	DVD-RW (SATA) module for PPC-157/177
989K070601E	PCI riser card for PPC-157/177
PPC-L158T-WLANE	802.11 b/g/n RT5390 1T1R Full Size Mini PCIe for PPC-L158/157/177 Series
2070011562	XPE WES2009 V4.3, 24 multi-language with SUSI Access

I/O Appearance



A: Line in/Line out/Mic in
B: PS2 Mouse & Keyboard
C: USB 2.0 x 4
D: VGA Port
E: Power Switch
F: AC Inlet
G: PCI Slot x 1
H: 10/100/1000 Base-T Ethernet x 2
I: RS-232 x 3 (including RS-232/422/485 x 1, COM2)
J: RS-232/GPIO (by swapping pin header)

Feature Details

Protection

To meet the requirements of a public environment, the front panel PPC-157T complies with the IP65 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The onboard hardware monitoring feature provides an automatic protection function, which prevents the CPU from becoming overheated.

Expansion

To extend functionality, PPC-157T is designed with one PCI-e expansion Slot (PCI is available as option) and Four USB 2.0 (Univeral Serial Bus) ports. With these expansion capabilities, PPC-157T not only functions as an HMI, but also as a computing center on which to build your applications.

PPC-6150

15" Panel PC with Intel® Core™ i3 / i5 / Celeron® Processor



Features

- Intel® Core™ i3, i5, Celeron 847E and 1020E + Intel QM77 PCH
- 1X DDR3/DDR3L SODIMM supports to 8 GB
- Multiple expansion slots including one PCIe x4, one PCI + one PCIe x1, two PCI (optional) and two PCIe x1 (optional)
- Optional second HDD, supports Intel RAID
- One isolated RS-232/422/485 port; (selectable in by BIOS)
- One GPIO/RS-232 (8 channels, TTL level); (by swapping pin header)
- Dual GbE, supports Intel AMT8.0
- Supports iManager, SUSIAccess and Embedded Software APIs

Introduction

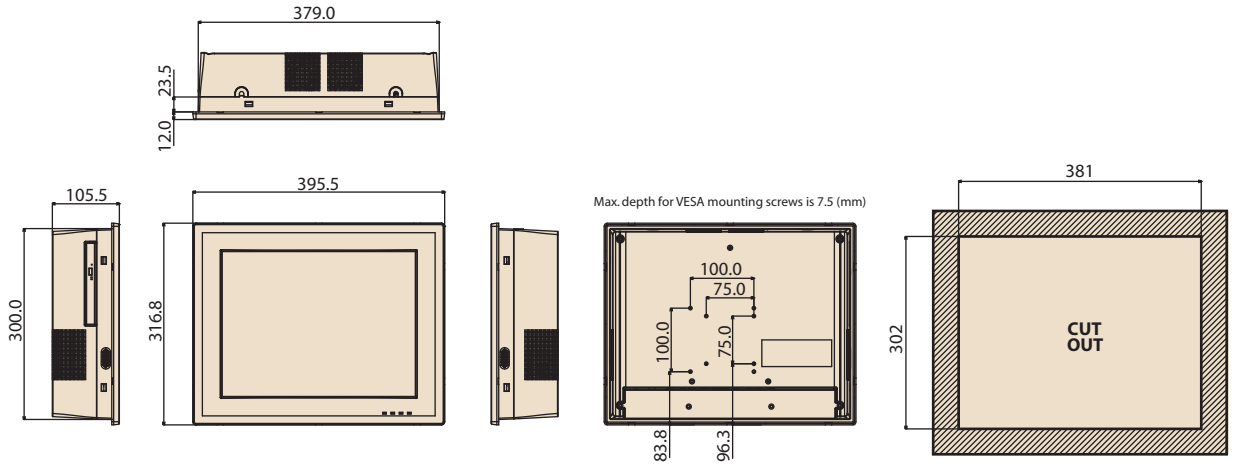
The PPC-6150 is a Panel PC with an Intel Core i3/i5 or Celeron processor, and a 15" color TFT LCD panel. It features extremely high computing power, modular design, excellent connectivity, and can support virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Two expansion slots, dual hard drives supporting Intel RAID, and one isolated RS-232/422/485 port make the PPC-6150 highly reliable, and provide a great solution for a wide range of applications.

Specifications

Processor System	Intel	Core i5-3610ME	Core i3-3120ME	Celeron 847E	Celeron 1020E
	Frequency	2.7 GHz	2.4 GHz	1.1 GHz	2.2 GHz
	L3 Cache	4M	3M	2M	2M
	Chipset	Intel QM77			
	Memory	1 x 204-pin SODIMM, DDR3 (1600 MHz) / DDRL (1333 MHz), supports up to 8 GB			
	Storage 1	1 x 2.5" SATA bay			
	Storage 2	Either one - Second 2.5" SATA bay (Intel RAID supported, optional) - Slim type 8X or above DVD +/- RW (optional)			
	Network (LAN)	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1- Intel 82579LM, GbE2 – Intel 82583V)			
	I/O ports	- 4 x COM ports, 1 x isolated RS-232/422/485, 3 x RS-232 - 1 x GPIO/RS-232 (8 channels, TTL level); by pin header - 3 x USB3.0 + 2 x USB2.0 ports		- 2 x Gigabit Ethernet - 1 x D-SUB VGA port - 1 x HDMI - 1 x Line-out, 1 x Mic-in, 2 x 1W speaker	
	Expansion Slots	Either: - one PCI + one PCIe x1 (standard) - one x PCIe x 4 (in the accessory box)		- two PCIe x 1 (optional) - two PCI (optional)	
	Additional Expansion	1 xfull-size mini PCIe (Supports mSATA) 1 x half-size mini PCIe			
	Fan	Two 12V 60 x 60 x 13 (mm) with smart fan control, (70,000 hours continuous test @ 40° C)			
Physical Characteristics	Dimensions	395.5 x 316.8 x 105.5 (mm) (15.6" x 12.5" x 4.15")			
	Weight	6.5 Kg (14.32lb)			
OS Support	OS Support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit			
Power Supply	Output Rating	150 W (max.)			
	Input Voltage	100 - 240V_{AC}, 50/60Hz, 4-2A			
	Power Consumption	With Core i5-3610ME is 61W With Core i3-3120ME is 50W With Celeron 847E is 48W (Burn-in test 7.0 in Windows 7 32-bit)			
LCD Display	Display Type	15" TFT LCD (LED Backlight)			
	Max. Resolution	1024 x 768			
	Colors	262K			
	Dot Size (mm)	0.297 x 0.297			
	Viewing Angle	80 (left), 80 (right), 70 (up), 70 (down)			
	Luminance(cd/m2)	350			
	Contrast Ratio	700			
	Operating Temperature	-30 ~ 85°C			
	Backlight Lifetime	50, 000 hrs (typical)			

Dimensions

Unit: mm



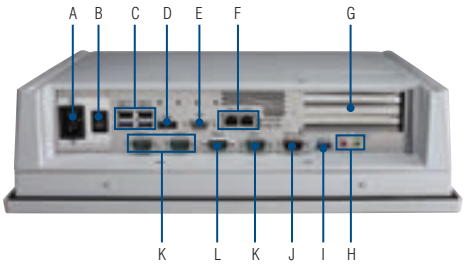
Specifications (Cont.)

Touchscreen	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
	Light Transmission	81+/-3%
	Controller	RS-232 interface (COM5), USB interface is available as an option
	Software Driver Support	Windows 7, XP
	Durability (Touches)	36 million
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

Ordering Information

Part No.	Description
PPC-6150-Ri5AE	Intel Core i5-3610ME (2.7G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-Ri3AE	Intel Core i3-3120ME (2.4G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-RC8AE	Intel Celeron 847E (1.1G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-WLANE	WiFi Module with Intel 6205 supports 802.11 abgn, 2T2R
PPC-6150-PCIE	Riser card supports two PCI slots for PPC-6150/PPC-6170
PPC-6150-PCIEE	Riser card supports two PCIe x1 slots for PPC-6150/ PPC-6170
PPC-6150-HDDE	Kit to install the second 2.5" SATA HDD for PPC-6150/ PPC-6170, w/o HDD
PPC-6150-DVDE	Module with 8X SATA DVD-RW for PPC-6150/PPC-6170
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-155T STAND	Stand kit for PPC-6150/PPC-6170
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA(USA) 180D 125V/10A 1.83M
2070011757	WES 7 32-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
2070011758	WES 7 64-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
PPC-6150-RC10AE	Intel Celeron 1020E (2.2G) Panel PC with 15" XGA LED backlight and 5-wire resistive T/S, w/o memory

I/O Placement



A: AC Inlet
B: Power Switch
C: USB 3.0 x 2, USB 2.0 x 2
D: HDMI
E: VGA
F: Gigabit Ethernet x 2
G: 2 Expansion slots
H: Line out/ Mic in
I: USB 3.0 x 1
J: GPIO / RS-232 (by swapping pin header)
K: RS-232 x 3
L: Isolated RS-232/422/485 (selecting by BIOS)

PPC-177T

17" Panel PC with Intel® Core™2 Duo Processor



Features

- Intel® Core™2 Duo processor up to 2.16 GHz
- System memory up to 4 GB 667 MHz DDR2 SODIMM socket x 2
- One PCIe Expansion Slot (PCI is available as an option)
- One Mini PCI socket, One Mini PCIe socket
- Built-in CF card interface (IDE interface for OS booting)
- Dual Gigabit Ethernet ports supports LAN teaming
- One RS-232/ GPIO (8 channels, TTL level); (by swapping pin header)
- One RS-232/422/485; (supporting Auto-flow control, selecting by BIOS)

Introduction

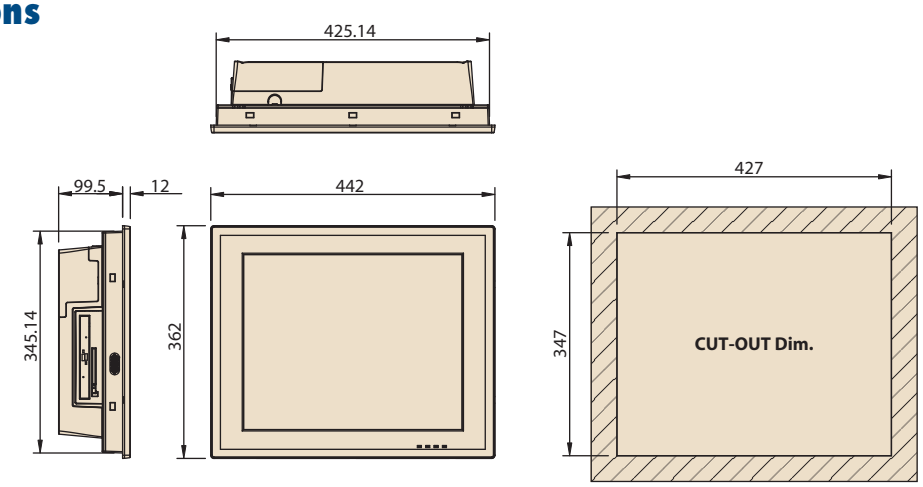
The PPC-177T is an Intel® Core 2 Duo based Panel PC with 17" color TFT LCD. It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Four serial ports and two Gigabit Ethernet ports give the PPC-177T advanced networking capabilities, and provide a great solution for versatile applications.

Specifications

Processor System		CPU	Supports mSocket 478 based Core 2 Duo up to 2.16 GHz
		CPU FSB	533/667 MHz
		Chipset	945GME + ICH7M
		Disk Drive Housing	Room for 1 x 2.5" SATA HDD
		Dimensions (W x H x D)	442 x 362 x 111.5mm (17.4" x 14.25" x 4.39")
		Weight	7.6 kg (16.74 lb)
		Front Panel Protection	IP65 compliant
		HDD	SATA HDD interface (2.5" HDD bay)
		DVD+/-RW Drive	Optional SATA 8X or above DVD+/-RW Drive, Optional optical drive bay
		Memory	Supports up to 4 GB of 667 MHz DDR2 SODIMM system memory (socket x 2)
		Network (LAN)	2 x Gigabit Ethernet ports, Wake on LAN, boot from LAN and LAN teaming supported
		I/O Ports	- 4 x COM ports: 2 x RS-232, 1 x RS-232/422/485, 1 x RS-232/ GPIO (8 channels, TTL level)* - 4 x USB 2.0 ports - Mic in/ Line out / Line in, 1W speaker - 2 x Gigabit Ethernet ports - 1 x D-SUB VGA port - 1 x PS/2 mouse and keyboard interface * RS-232/422/485 - selecting by BIOS and supporting Auto-flow control RS-232/GPIO - by swapping pin header
		Bus Expansion	1 x PCIe Expansion Slot (PCI is available as option), 1 x Mini PCI socket, 1 x Mini PCI-e socket
OS Support		OS Support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit (64 bit only for T7400)
Environmental Specifications		Operating Temperature	0 ~ 50°C (32 ~ 122°F)
		Relative Humidity	10 ~ 95% @ 40°C non-condensing
		Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
		Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
		EMC	BSMI, CE, FCC Class B, CCC
		Safety	CB, CE, UL
Power Supply	AC Model	Output Rating	150 W (max.)
		Input Voltage	100 ~ 240 V_{AC}, 50 ~ 60 Hz, 2 ~ 4 A
		Output Voltage	+3.3 V @ 4.5 A, +5 V @ 8.5 A, +12 V @ 7.0 A, +5 Vsb @ 1.5 A, -12 V @ 0.3 A
LCD Display		Display Type	Color TFT LCD
		Size (Diagonal)	17"
		Max. Resolution	1280 x 1024
		Max. Colors or Grayscales	16.7M
		Pixel Pitch (mm)	0.264 x 0.264
		Luminance (cd/m^2)	380
		Contrast Ratio	800:1
		Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)
		LCD MTBF	50,000 hrs
Touchscreen (optional)		Type	5-wire Analog Resistive (USB interface)

Dimensions

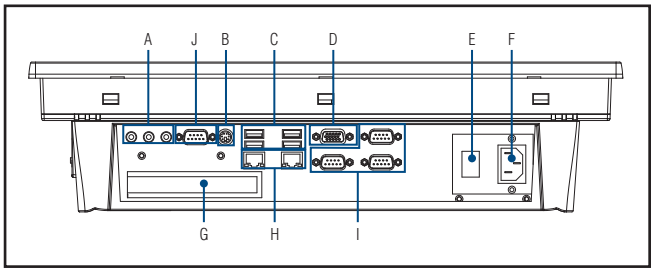
Unit: mm



Ordering Information

Part No.	Description
PPC-177T-BAREE	17" Core 2 Duo Based Panel PC without T/S
PPC-177T-BARE-TE	17" Core 2 Duo Based Panel PC with Resistive T/S
PPC-155T STAND	Stand kit for PPC-155/157/175/177 series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-175 RACK-MT	Rack mount kit for PPC-175/177 series
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA (USA) 180D 125V/10A 1.83M
989K017700E	Optical disc drive kit for PPC-177T (W/O ODD)
989K017702E	DVD-RW (SATA) module for PPC-177T
989K070601E	PCI riser card for PPC-177T
PPC-L158T-WLANE	802.11 b/g/n RT5390 1T1R Full Size Mini PCIe for PPC-L158/157/177 Series
2070011804	XPE WES2009 V4.3, 24 multi-language with SUSI Access

I/O Appearance



A: Line in/Line out/Mic in
B: PS2 Mouse & Keyboard
C: USB 2.0 x 4
D: VGA Port
E: Power Switch
F: AC Inlet
G: PCI Slot x 1
H: 10/100/1000 Base-T Ethernet x 2
I: RS-232 x 3 (including RS-232/422/485 x 1, COM2)
J: RS-232/GPIO (by swapping pin header)

Feature Details

Protection

To meet the requirements of a public environment, the front panel PPC-177T complies with the IP65 protection standard. Furthermore, the watchdog timer and power management features make the system secure and stable. The onboard hardware monitoring feature provides an automatic protection function, which prevents the CPU from becoming overheated.

Expansion

To extend functionality, PPC-177T is designed with one PCI-e expansion Slot (PCI is available as option) and four USB 2.0 (Univeral Serial Bus) ports. With these expansion capabilities, PPC-177T not only functions as an HMI, but also as a computing center on which to build your applications.

PPC-179T

17" Panel PC with Intel® Core™2 Duo Processor



Features

- 17" TFT SXGA LCD
- Intel® Core™2 Duo LGA775 Socket-based processor up to 3.0 GHz
- Supports 240-pin DDR3 1333/1066 DIMM x2 Up to 4 GB
- Rugged die-cast aluminum housing with removable plastic front bezel
- Supports One Mini PCIe socket, Dual Gigabit Ethernet
- One PCI and one PCIe expansion slot
- One RS-232/422/485; (supporting Auto-flow control, jumper-selected)

Introduction

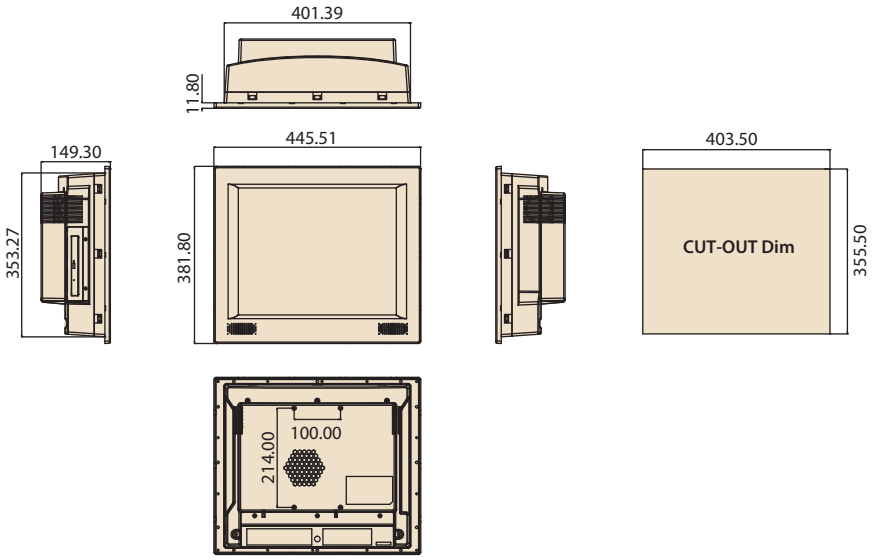
PPC-179T is a top performing and highly expandable panel PC. Equipped with a 17" Color TFT LCD, it features high performance, multimedia devices, connectors, and 2 expansion sockets (PCI and PCIe) for high expansion capacity. Because of its multifunctional design, the PPC-179T meets demands from multimedia applications and interactive kiosks that require big displays and powerful computing performance.

Specifications

Processor System	CPU	Supports LGA775 Socket-based Intel Core 2 Duo Processor up to 3.0 GHz
	Dimensions (W x H x D)	446 x 382 x 149 mm (17.56" x 15.04" x 5.87")
	Weight	10 kg (22 lb)
	Front Panel Protection	IP65 compliant
	HDD	One internal SATA interface - 2.5" Type
	DVD+/-RW Drive	Equipped with one slim 8x SATA DVD +/- RW (BLACK)
	Memory	Supports 240-pin DDR3 1333/1066 DIMM x2 Up to 4 GB (only supports 64X8 and 128X8, not for 256X8)
	Network (LAN)	2 x 10/100/1000 Mbps (RJ-45)
	I/O ports	- 4 x serial ports: 3 x RS-232, 1 x RS-232/422/485 - 6 x USB2.0 ports - Mic-in, Line-in, Line-out, 1W speaker - 1 x D-SUB VGA port
	Bus Expansion	1 x PCI + 1 x PCIe (standard) , 2 x PCI (in the accessory box), 1 x Mini PCI-e socket
Environmental Specifications	Operating Temperature	0 ~ 45°C (32 ~ 113°F)
	Relative Humidity	10 ~ 95% @ 40°C, non-condensing
	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	BSMI, VCCI, CE, FCC Class B, CCC
	Safety	CB, CE, UL
Touchscreen (Optional)	Types	Analog Resistive
	Resolution	2048 x 2048
	Light Transmission	75%
	Controller	RS-232 interface, (COM6)
	Power Consumption	+5 V @ 200 mA
LCD Display	Display Type	Color TFT LCD
	Size (Diagonal)	17"
	Max. Resolution	1280 x 1024
	Max. Colors or Grayscales	16.7M
	Pixel Pitch (mm)	0.264 x 0.264
	Luminance (cd/m²)	380
	Contrast Ratio	1000:1
	Viewing Angle	80°(left), 80°(right), 80°(up), 80°(down)
	LCD MTBF	50,000 hrs
Power Supply	Output Rating	220W (max.)
	Input Voltage	100 ~ 240 VAC @ 50 ~ 60Hz
	Output Voltage	+3.3 V @ 14.0A, +5 V @ 16.0A, +12 V @ 16 A + 10 A, -12 V @ 0.8 A, +5 Vsb @ 2.5 A

Dimensions

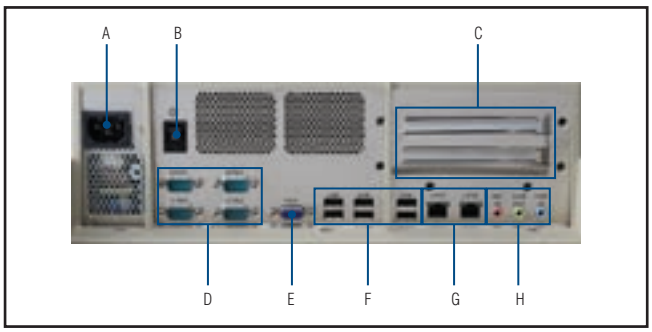
Unit: mm



Ordering Information

Part No.	Description
PPC-179T-BAREE	Panel PC with 17" TFT LCD display (resolution: 1280 x 1024)
PPC-179T-BARE-TE	PPC-179T with resistive touchscreen
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-174 RACK-MT	19" Rack Mounting kit for PPC-174 (9U)
1702002600	Power Cable UL/CSA (USA) 180D 125V10A 1.83M
1702002605	Power Cable 90D 220V EUROPEAN 250V/6A 1.8M
2070010804	XPE WES2009 V4.0, 24 multi-languages

I/O Appearance



A. AC inlet
B. Power switch
C. PCI expansion x 1, PCIe expansion x 1
D. RS-232 x 3, RS-232/422/485 x 1
E. VGA port
F. USB2.0 x 6
G. 10/100/1000 Mbps Ethernet x 2
H. Line-in/Line-out/Mic-in

Feature Details

Protection

The PPC-179T is robust enough to withstand harsh environments on factory floors and in an external environment. The die-cast housing also acts as a heat sink to prevent the system from overheating.

Networking

Four serial ports and dual 10/100/1000 Mbps Ethernet port give the PPC-179T advanced networking capabilities and provide the best solution for versatile applications.

Expansion

To extend its functionality, PPC-179T is designed with two expansion slots for one PCI and one PCIe card, one Mini PCIe slot, six USB 2.0 (Universal Serial Bus) ports, four COM ports. With these expansion capabilities, PPC-179T not only functions as an HMI, but also as a computing center around which to build your application.

PPC-6170

17" Panel PC with Intel® Core™ i3 / i5 / Celeron® Processor



Features

- Intel® Core™ i3, i5, Celeron 847E and 1020E + Intel QM77 PCH
- 1X DDR3/DDR3L SODIMM support to 8 GB
- Multiple expansion slots including one PCIe x4, one PCI + one PCIe x1, two PCI (optional) and two PCIe x1 (optional)
- Optional second HDD, supports Intel RAID
- One isolated RS-232/422/485 port; (selectable in by BIOS)
- One GPIO/RS-232 (8 channels, TTL level); (by swapping pin header)
- Dual GbE, supports Intel AMT8.0
- Supports iManager, SUSIAccess and Embedded Software APIs

Introduction

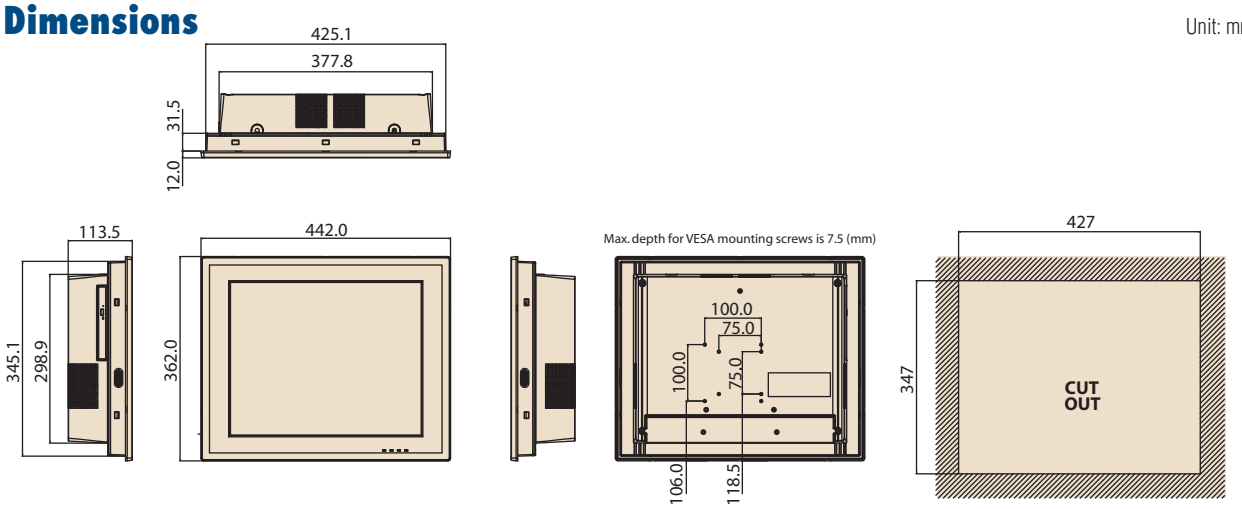
The PPC-6170 is a Panel PC with an Intel Core i3/i5 or Celeron processor, and a 17" color TFT LCD panel. It features extremely high computing power, modular design, excellent connectivity, and can support virtually any application. In addition, its user-friendly interface makes it a great host for information appliances. Two expansion slots, dual hard drives supporting Intel RAID, and one isolated RS-232/422/485 port make the PPC-6170 highly reliable, and provide a great solution for a wide range of applications.

Specifications

Processor System	Intel	Core i5-3610ME	Core i3-3120ME	Celeron 847E	Celeron 1020E
	Frequency	2.7 GHz	2.4 GHz	1.1 GHz	2.2 GHz
	L3 Cache	4M	3M	2M	2M
	Chipset	Intel QM77			
	Memory	1 x 204-pin SODIMM, DDR3 (1600 MHz) / DDRL (1333 MHz), supports up to 8 GB			
	Storage 1	1 x 2.5" SATA bay			
	Storage 2	Either one - Second 2.5" SATA bay (Intel RAID supported, optional) - Slim type 8X or above DVD +/- RW (optional)			
	Network (LAN)	2 x Gigabit Gigabit Ethernet connectors, Intel AMT supported (GbE1- Intel 82579LM, GbE2 – Intel 82583V)			
	I/O ports	- 4 x COM ports, 1 x isolated RS-232/422/485, 3 x RS-232 - 1 x GPIO/RS-232 (8 channels, TTL level); by pin header - 3 x USB3.0 + 2 x USB2.0 ports		- 2 x Gigabit Ethernet - 1 x D-SUB VGA port - 1 x HDMI - 1 x Line-out, 1 x Mic-in, 2 x 1W speaker	
	Expansion Slots	Either: - one PCI + one PCIe x1 (standard) - one x PCIe x 4 (in the accessory box)		- two PCIe x 1 (optional) - two PCI (optional)	
	Additional Expansion	1 x Full-size mini PCIe (Supports mSATA) 1 x half-size mini PCIe			
	Fan	Two 12V 60 x 60 x 13 (mm) with smart fan control, (70,000 hours continuous test @ 40° C)			
Physical Characteristics	Dimensions	442.0 x 362.0 x 113.5 (mm) (17.4" x 14.25" x 4.47")			
	Weight	7.5Kg (16.52lb)			
OS Support	OS Support	Win XPE / Win XP Pro / WES7 32 & 64 bit / Windows 7 32 & 64 bit			
Power Supply	Output Rating	150 W (max.)			
	Input Voltage	100 - 240V_{AC}, 50/60Hz, 4-2A			
	Power Consumption	With Core i5-3610ME is 65W With Core i3-3120ME is 55W With Celeron 847E is 53W (Burn-in test 7.0 in Windows 7 32-bit)			
LCD Display	Display Type	17" TFT LCD (LED Backlight)			
	Max. Resolution	1280 x 1024			
	Colors	262K			
	Dot Size (mm)	0.264 x 0.264			
	Viewing Angle	85 (left), 85 (right), 80 (up), 80 (down)			
	Luminance(cd/m2)	350			
	Contrast Ratio	1,000			
	Operating Temperature	-30 ~ 85°C			
	Backlight Lifetime	50, 000 hrs (typical)			

Dimensions

Unit: mm



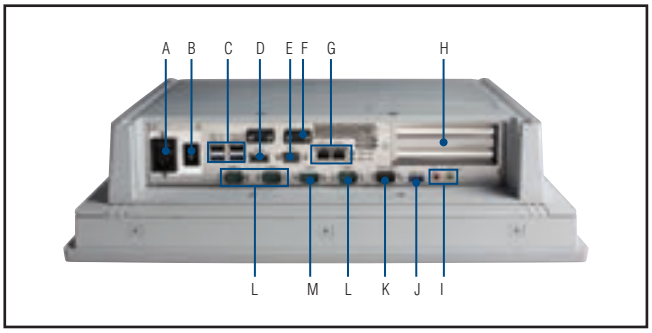
Specifications (Cont.)

Touchscreen	Touch Type	Analog Resistive 5-wire
	Resolution	2048 x 2048
	Light Transmission	81+/-3%
	Controller	RS-232 interface (COM5), USB interface is available as an option
	Software Driver Support	Windows 7, XP
	Durability (Touches)	36 million
Environment	Operating Temperature	0 ~ 50°C (32 ~ 122°F)
	Storage Temperature	-20 ~ 60°C (-4 ~ 140°F)
	Relative Humidity	10 ~ 95% @ 40°C (non-condensing)
	Shock	Operating 10 G peak acceleration (11 ms duration), follows IEC 60068-2-27
	Vibration	Operating Random Vibration Test 5~500Hz, 1Grms, follows IEC 60068-2-64
	EMC	BSMI, CE, FCC Class A
	Safety	CB, CCC, BSMI, UL
	Front Panel Protection	IP65 compliant

Ordering Information

Part No.	Description
PPC-6170-Ri5AE	Intel Core i5-3610ME (2.7G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6170-Ri3AE	Intel Core i3-3120ME (2.4G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6170-RC8AE	Intel Celeron 847E (1.1G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory
PPC-6150-WLANE	WiFi Module with Intel 6205 supports 802.11 abgn, 2T2R
PPC-6150-PCIE	Riser card supports two PCI slots for PPC-6150/PPC-6170
PPC-6150-PCIEE	Riser card supports two PCIe x1 slots for PPC-6150/ PPC-6170
PPC-6150-HDDE	Kit to install the second 2.5" SATA HDD for PPC-6150/ PPC-6170, w/o HDD
PPC-6150-DVDE	Module with 8X SATA DVD-RW for PPC-6150/PPC-6170
PPC-174T-WL-MTE	Wall mount kit for PPC series
PPC-ARM-A03	PPC ARM VESA Standard
PPC-155T STAND	Stand kit for PPC-6150/PPC-6170
1702002605	Power cord 90D 220V EUROPEAN 250V/6A, 1.8M
1702002600	Power cord UL/CSA(USA) 180D 125V/10A 1.83M
2070011780	WES 7 32-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
2070011779	WES 7 64-bit (ENG/JPN/Simplified Chinese/Traditional Chinese), 4 languages with SUSI Access
PPC-6170-RC10AE	Intel Celeron 1020E (2.2G) Panel PC with 17" XGA LED backlight and 5-wire resistive T/S, w/o memory

I/O Placement



A: AC Inlet
B: Power Switch
C: USB 3.0 x 2, USB 2.0 x 2
D: HDMI
E: VGA
F: Cable clip x 2
G: Gigabit Ethernet x 2
H: 2 Expansion slots
I: Line out / Mic in
J: USB 3.0 x 1
K: GPIO / RS-232 (by swapping pin header)
L: RS-232 x 3
M: Isolated RS-232/422/485 (selecting by BIOS)

Digital Logistics

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Industrial Mobile Computers

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Selection Guide

All-in-one In-vehicle Computers





Model Name		TREK-722	TREK-723	TREK-753
Processor		TI ARM Cortex-A8 AM3703 800 MHz		Industrial-grade Intel Atom XL Z510PT 1.1 GHz (Z520PT 1.3 GHz as option)
Design Compatible Models		-		-
OS		WinCE6.0 & Android (project base)		WES 2009, WinCE6.0 and Ubuntu Linux 10.04
Memory	Size	On board 256MB Mobile LPDDR		One 200-pin SODIMM socket, Supports up to 2 GB DDR2 400/533 memory module
	Module Type	On board LPDDR		1 x 200-pin SODIMM
Storage		On board NAND type 2GB for boot loader, operating system & customer apps, 1 x push-push type SD slot		1 x external accessible SD slot, 1 x external accessible CF slot
Display	Size/Type	5" (16:9) TFT LCD	7" (16:9) TFT LCD	7" (16:9) TFT LCD
	Max. Resolution	800 x 480	800 x 480	800 x 480
	Max. Colors	262K	262K	262K
	Brightness (cd/m²)	350 with TS (typical)	400 with TS (typical)	400 with TS (typical)
	Viewing Angle (degrees)	70° / 70° / 70° / 50°		70° / 70° / 60° / 60°
	Backlight MTBF	20,000 hrs		50,000 hrs
Touchscreen	Technology	4-wire resistive type		4-wire resistive type; optional support for sunlight readable feature by Low-Reflection touch solution
Brightness Control		Built-in light sensor for auto backlight adjustment		2 x hotkeys in front panel; built-in light sensor for auto backlight adjustment
I/O Ports		2 x USB host, 2 x RS-232, 1 x CAN with J1939 protocol, 2 x DI/DO		3 x USB host, 2 x RS-232 with DC Output, 1 x RS-485, 1 x CAN w/ J1939, 1 x J1708, 4 x isolated DI/DO
Audio		Built-in 2 watt speaker		Built-in 2 watt speaker
WWAN		GPRS : Cinterion TC63i qual-bands CDMA : Sierrawireless MC5728V HSPA+ : Cinterion PH8		GPRS : Cinterion MC55i qual-bands CDMA : Sierrawireless MC5728V HSPA+: Sierrawireless MC8090/8092
Network (LAN)		-		1 x 10/100/1000 Mbps
WLAN		-	802.11/b/g/n	802.11b/g/n
Bluetooth		Yes		Yes
Power		12V/24V car power design. DC-input 6V ~ 36V with ISO 7637-2, SAE J1113 & E-mark		12V/24V car power design. DC-input 6V ~ 36V with ISO 7637-2, SAE J1113 & E-mark; option to support 48V car power system
Operating Temperature		-20 ~ 60° C (TREK-722)/ -30 ~ 70° C (TREK-723)		-30° C ~ 60° C
Vibration/Shock		MIL-STD-810G, EN-60721-3-5 (5M3)		MIL-STD-810G, EN-60721-3-5 (5M3)
Certifications		CE, FCC, UL/cUL, CB, CCC, E-mark, PTCRB		CE, FCC, UL/cUL, CB, CCC, E-mark, PTCRB, EN50155
Dimensions (W x H x D)		165 x 115 x 43 mm (TREK-722)/ 213 x 145 x 43 mm (TREK-723)		256 x 161 x 56 mm
Weight		0.65 kg (TREK-722)/ 0.85 kg (TREK-723)		2.2 kg
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Smart Display

Preliminary







Model Name		TREK-303RH	TREK-303DH	TREK-306DH
Processor		-	-	-
Design Compatible Models		Paired with TREK-5xx/TREK-6xx	Paired with TREK-5xx/TREK-6xx	Paired with TREK-5xx/6xx
Display	Size/Type	7" (16:9) TFT LCD	7" (16:9) TFT LCD	10.4" (4:3) TFT LCD
	Max. Resolution	800 x 480	800 x 480	1024 x 768
	Max. Colors	262K	262K	262K
	Brightness (cd/m²)	400 with TS (typical)	400 with TS (typical)	LCD: 400 nits; With TS: 325 nits (typical)
	Viewing Angle (degrees)	70° / 70° / 60° / 60°	70° / 70° / 60° / 60°	89°/ 89° / 89° / 89°
	Backlight MTBF	50,000 hrs	50,000 hrs	50,000 hrs
Touchscreen	Technology	4-wire resistive type	4-wire resistive type	5-wire Resistive type
Brightness Control		Built-in light sensor for auto backlight adjustment	Built-in light sensor for auto backlight adjustment	Built-in light sensor for auto backlight adjustment
I/O Ports		36-pin locking type connector (connect to TREK box), power/wake up button	36-pin locking type connector (connect to TREK box), power/wake up button	36-pin locking type connector (connect to TREK box), power/ wake up button
Audio		Built-in 2 watt speaker	Built-in Two 2 watt speakers	Built-in Two 2-watts speakers
Power		12 V ± 5% (Powered by TREK-5xx/6xx)	12 V ± 5% (Powered by TREK-5xx/6xx)	12 V ± 5% (Powered by TREK-5xx/6xx)
Operating Temperature		-30° C ~ 70° C	-30° C ~ 70° C	-30° C ~ 70° C
Vibration/Shock		MIL-STD-810G	MIL-STD-810G	MIL-STD-810G, EN60721-3(5M3), SAE-J1455
Certifications		CE, FCC, UL/cUL, CCC	CE, FCC, UL/cUL, CCC	CE, FCC, UL/cUL, CCC
Dimensions (W x H x D)		244 x 160 x 41 mm	212.75 x 141.85 x 35 mm	303 x 226 x 35 mm
Weight		0.8 kg	0.76 kg	1.7 kg
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In-vehicle Box Computers

Preliminary

ITS/Telematics Excellent100

BC AWARD

TAIWAN EXCELLENCE 2012



Model Name		TREK-520	TREK-550	TREK-668
Processor		TI ARM Cortex-A8 AM3703 800 MHz	Industrial grade Intel Atom XL Z510PT 1.1 GHz (Z520PT 1.3 GHz as option)	Intel Atom N2600 1.6 GHz (Dual core)
OS		WinCE6.0 & Embedded Linux (project base)	Win CE 6.0, WES 2009, XP and Linux (Ubuntu 10.04/2.6.34)	WES7/Win7
Memory	Size	On board 512MB mDDR (default) / 1GB (project base)	One 200-pin SODIMM socket, Supports up to 2 GB DDR2 400/533 memory module (WinCE only supports upto 512MB)	DDR3 up to 2GB
Video	CRT	N/A	1 x VGA output by DB-15 (supports different content with LVDS port)	1 x VGA output by DB-15 (supports different content with LVDS port)
	LVDS	1x	1 x (supports different content with CRT port)	1 x (supports different content with CRT port)
	Video in	N/A	2 x composite analog video input ports for real-time rear-view monitor feature (doesn't support video recording)	For surveillance: supports up to 12 video inputs, with 12V/2A power supply for camera
I/O Interface	Audio	1 x MIC-in via phone jack 1 x Line-out via phone jack	Mic-in, Line-out, SPK-out	Mic-in, Line-out, SPK-out, 8 audio input
	Ethernet	N/A	1 x 10/100/1000 Mbps Ethernet (with LEDs)	1 x Giga LAN 10/100/1000 Mbps Ethernet controller, supports POE IP camera; compliant IEEE 802.3af and provides up to 15.4 watts power output
	USB	1 x USB host I/F via USB A-type connector (5V/1A)	4 x USB host ports	4 x USB host ports
	Serial Ports	1 x full RS-232 with optional 5V/1A DC output	2 x full function RS-232 with DC Output, 1 x 4-wire RS-232, 1 x RS-485, 1x J1708	2 x full function RS-232 with DC Output, 2 x RS-485
	DI/O	2 x Digital Input & 2 x Digital Output	4 x Isolated dry contact digital inputs and 4 x isolated relay driver output	8 x Isolated dry contact digital inputs and 4 x isolated relay driver output
	CAN	1 x CAN 2.0 B I/F (support J1939 protocol) 1 x J1708 I/F (support J1587 protocol) 1 x OBD2 I/F (support ISO15765 protocol)	1 x CAN 2.0 A/B (J1939 protocol support)	1 x CAN 2.0 A/B (J1939 protocol support)
GPS		Built-in GlobalSat EB-5662RE with external SMA type antenna	50-Channel uBlox LEA-6S with AGPS as default; u-blox LEA-6R with AGPS & dead-reckoning feature (built-in Gyro & speed line) as option	50-Channel uBlox LEA-6S with AGPS as default;ublox LEA-6R with AGPS & dead-reckoning feature (built-in Gyro & speed line) as option
WWAN		Mini-PCIe slot with external SMA type antenna - CDMA/EVDO - UMTS/HSPA+	GPRS : Cinterion MC55i qual-bands CDMA : Sierrawireless MC5728V HSPA+: Sierrawireless MC8090/8092	GPRS : Cinterion MC55i qual-bands CDMA : Sierrawireless MC5728V HSPA+: Sierrawireless MC8090/8092 (2*SIM, 2*mini-PCIe slot)
WLAN		802.11b/g/n	802.11b/g/n	802.11b/g/n
Bluetooth		Yes	Yes	Yes
Storage	CF	1 x internal non-accessible SD slot as boot up device 1 x external accessible SD slot as additional storage	1 x external-accessible port (for memory mode only)	1 x external-accessible port (for memory mode only)
	SATA	N/A	Option to support built-in 2.5" SSD (either solution with CF slot)	2 x SSD (optional SATA 2.5" MHD)
Power Requirements	Input Voltage	Supports 12/24 V car power system by ISO7637-2 & SAE J1113 (6V ~ 32V wide DC input)	12V/24V car power design. DC-input 6V ~ 36V with ISO 7637-2, SAE J1113 & E-mark	12V/24V car power design. DC-input 9V ~ 32V with ISO 7637-2, SAE J1113 & E-mark
Operating Temperature		-30° C ~ + 70° C	-30° C ~ + 70° C	-30° C ~ 60° C
Vibration/ Shock		SAE J1455, MIL-STD-810G, EN-60721-3-5 (5M3)	SAE J1455, MIL-STD-810G, EN-60721-3-5 (5M3)	SAE J1455, MIL-STD-810G, EN-60721-3-5 (5M3)
Certifications		CE, FCC, CCC, UL/cUL,CB, CE R&TTE, FCC Part 15, PTCRB, E-mark	CE, FCC, CCC, UL/cUL, CB, CE R&TTE, FCC Part 15, PTCRB, E-mark	CE, FCC, UL/cUL, CB, CE R&TTE, FCC Part 15, PTCRB, E-mark, EN50155
Dimensions (W x H x D)		205 x 47 x 135 mm (default metal chassis) / 240 x 54 x 200 mm (optional IP65 plastic housing)	266 x 149 x 68 mm	346 x 97 x 196.2 mm
Weight		900 g (metal chassis) / 1.2 kg (IP65 housing)	1.2 kg	5.7 kg (including 2 HDD)
Page		online	online	15-8

Industrial Tablet



Model Name		PWS-770	PWS-440
Processor	CPU	Intel Atom N2600/1.6 GHz	Marvell PXA310 806MHz
	Companion Chipset	Intel NM10	-
Memory		SODIMM DDRIII to 2 GB	256 MB DDR Mobile RAM on board
Storage		Supports mSATA SSD 32 GB ~ 128 GB	1 GB Flash ROM on board
Display	Size/ Type	10.4" XGA (1024 x 768) (Transflective) LCD	3.7" transflective TFT LCD,
	Brightness (cd/m²)	300 nits LED back light	320 nits LED back light
Touch Panel		4-wire resistive touch panel	4-wire resistive touch panel
Application Buttons		1 x Power button, 3 x Function keys (F1~F3), 1 x Tablet PC keyboard, 1 x Mode key, 1 x Enter key, 2 x Activate key (S1 & S2): Activate barcode reader, camera & dimming adjustment required to control the brightness	1 x power on/suspend button Navigation key and four function keys 1 x HW reset key located right side door 1 x button for backlight on/off (using power on/ suspend button)
I/O Ports		2 x USB 2.0, 1 x Serial port RS-232, 1 x VGA port, 1 x Audio-in jack, x 1 Audio-out jack, 1 x Internal mono microphone, 1 x DC-in, Docking port (32-pin; USB/PCIE/DC) SIM slot (with WWAN option)	2 x USB type A connectors, USB1.1 host, 1 x USB mini type B connector, USB1.1 slave 1 x RS-232 (full), 1 x RS-232/422/485 (optional) 1 x RJ-45 for 10/100M ethernet, 1 x stereo headphone jack 1 x microphone jack 1 x DC-In connector
Wireless Communication		802.11b/g/n WLAN (default); 802.11 a/b/g/n WLAN (optional); Bluetooth 4.0 class2; GPS (Optional); WWAN (Optional)	802.11b/g WLAN module build in Bluetooth class 2, v2.1 built-in with integral antenna SiRF Star IV high performance GPS chipset Cinterion PH8 HSPA+ WWAN module with high performance external antenna (for data transmission only)
Data Collection Modules		CMOS 2.0M pixel Camera module (default); 5.0M pixel Camera (optional) 1D/2D Barcode; MSR; HF RFID	-
Dimensions & Weight		264 x 213 x 18 mm, 1.2 kg without rubber bumper & optional devices	155 x 96 x 42 mm, 650 g
Power	Battery	Main battery: 3S1P 11.1V 1900 mAhr Hot-Swap External battery: 3S2P 11.1V 3760mAh/5000mAh	Rechargeable Li-ion smart battery, 7.4 V, 1880 mAh, 2S1P, 59 x 38 x 25 mm
	DC-input	19V ± 5%	12V ± 5%
Environment	Operating Temperature	-10 to 50° C (Charge: 0° C ~ +40° C for the battery protection)	-20° C ~ +60° C (Charge: 0° C ~ +40° C for the battery protection)
	Storage Temperature	-20 to +60° C	-40° C ~ + 70° C
	Operating Humidity	5% ~ 95%	5% ~ 95%
	IP Rating	IP-54	IP-67
	Drop	4 foot drop onto plywood, MIL-STD-810G 516.5 Precedure VI	5 foot drop to concrete
	Vibration	EN50155 certified	
OS		Windows 7 Professional / Embedded	Windows CE 6.0 and Windows Embedded Handheld 6.5
Certifications		CE/FCC/CCC/BSMI/C-Tick/ PTCRB, UL/CE/CB/CCC	CE, FCC, CCC MIL-STD-461F
Accessories		AC adaptor (19V, 65W) Stylus (default), Vehicle cradle VESA Mounting Bracket Carrying Bag, Hand strap Desktop stand, 2nd battery	Hand Strap 4-IN-1 battery charger (Option) Cradle (Option)
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TREK-722/723

RISC All-in-One Mobile Data Terminal



Features

- 5" & 7" LCD (800 x 480) with resistive touchscreen
- 24/7 monitoring & reporting
- CPU Cortex-A8 with WinCE6.0 and Android (project base)
- Built-in CAN bus with J1939 protocol
- Built-in GPS with AGPS feature, BT, CDMA/GPRS/HSPA+

Introduction

TREK-722/723 is a RISC platform with 5"/7" display all-in-one Mobile Data Terminal (MDT). The radio frequency options and programmable function keys make TREK-722/723 suitable for local fleet management, especially small truck, local delivery, government fleet and taxi. It is designed with vehicle power compliant to ISO7637-2 & SAE J1113 ensuring stability in a car with a "dirty" power system. With Suspend/Wakeup feature, TREK-722/723 supports a 24/7 monitoring mechanism with periodic, digital input & WWAN wakeup.

Specifications

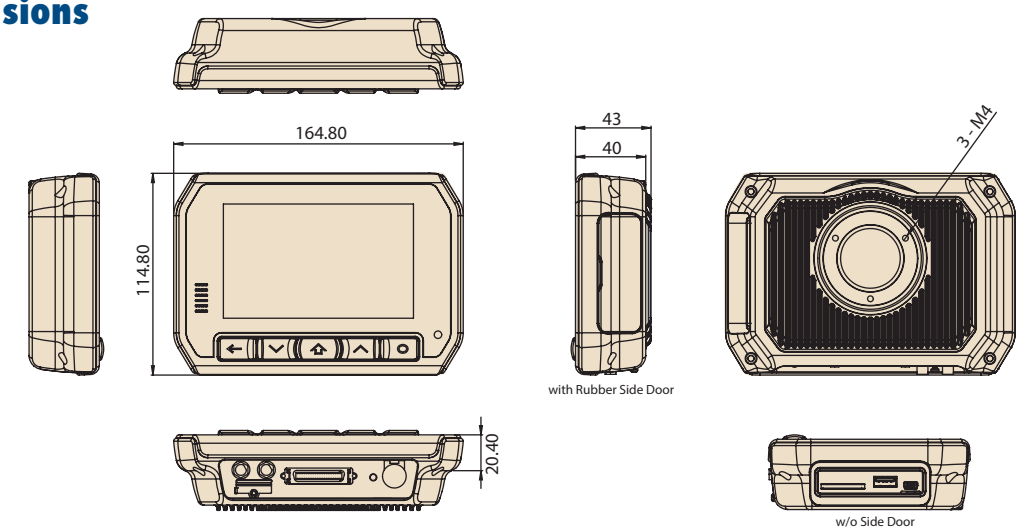
Display	Model	TREK-722	TREK-723
	Type	5" industrial grade wide screen TFT LCD	7" industrial grade wide screen TFT LCD
	Luminance	350 cd/m^2 (without touchscreen), auto brightness controlled by light sensor	400 cd/m^2 (without touchscreen), auto brightness controlled by light sensor
	Resolution	800 x 480	800 x 480
	View Angle (R/L/B/T)	70/70/70/50	70/70/70/50
	Contrast Ratio	500 (typical)	500 (typical)
	LED Lifetime	20000 hr (minimum)	20000 hr (minimum)
Touchscreen	Type	4-wire resistive with flat panel design	
	Light Transmission	81±3%	
Kernel	CPU	TI ARM Cortex-A8 AM3703 800MHz (default) / AM3715 1GHz (project base)	
	RAM	On board low power mobile DDR 256MB (default) / 512MB (project base)	
	Storage	On board NAND type 2GB for boot loader, OS & customer's APs 1 x push-push type SD slot	
	Watchdog	Yes	
	RTC	Yes with one time swappable 200 mAh lithium coin battery	
	Operating System	WinCE 6.0 R3 core version / Android support by project	
Functions	GPS (Optional)	Built-in 50 channel u-blox LEA-6S with internal antenna	
	Bluetooth (Optional)	Built-in Class 2 Bluetooth V2.1+EDR with internal antenna	
	WWAN (Optional)	▪ Built-in Quad-band GPRS module Cinterion TC63i with internal antenna ▪ Built-in UMTS/HSPA+ module Cinterion PH8 with internal antenna ▪ Built-in CDMA/EV-DO module Sierra Wireless MC5728V with internal antenna	
	WLAN (Optional)	802.11b/g/n with external antenna; TREK-722 supports either WLAN or WWAN. TREK-723 supports both	
	Audio	1 x built-in 2 W mono speaker 1 x MIC input, 1 x mono line-in, 1 x stereo line-out via high density cable (*1)	
	Video	1 x CVBS input via high density cable (*1) 1 x Y/C input via high density cable (*1)	
	USB Client	1 x USB client I/F via USB mini-B connector with rubber door protection	
	USB Host	1 x USB host I/F via USB A-type connector (500 mA) with rubber door protection 1 x USB host I/F via high density cable (*1) with USB A-type connector (500 mA)	
	Serial Port	2 x 4-wire RS-232 via high density cable (*1)	
	Digital Input/Output	2 x isolated digital input (DI) which can wake up system via high density cable (*1) 2 x isolated digital output (DO) via high density cable (*1)	
	CAN bus	1 x CAN bus 2.0a/b with J1939 protocol via high density cable (*1)	
	Function Key	5 x programmable function keys with green LED	
Power Supply	Input Voltage	12 V/24 V option supports 6 ~ 36 V car power design with ISO7637-2 & SAE J1113 compliant	
	Ignition ON/OFF	Power on delay, default 2 seconds; Power off delay, default 5 seconds; Hardware power off delay, default 30 seconds. SW configurable	
	24/7 monitoring	<300 mW low power saving mode with periodical, DI, WWAN wakeup mechanism	
Mechanical	Material	Plastic chassis with aluminum heat sink	
	Ingress Protection	IP54 except I/O plate at the bottom	
	Weight	650 grams (TREK-722) / 850 grams (TREK-723)	
	Dimensions (W x H x D)	165 x 115 x 43 mm (TREK-722) / 213 x 145 x 45 mm (TREK-723)	

*1. High density cable is an optional item for ordering.

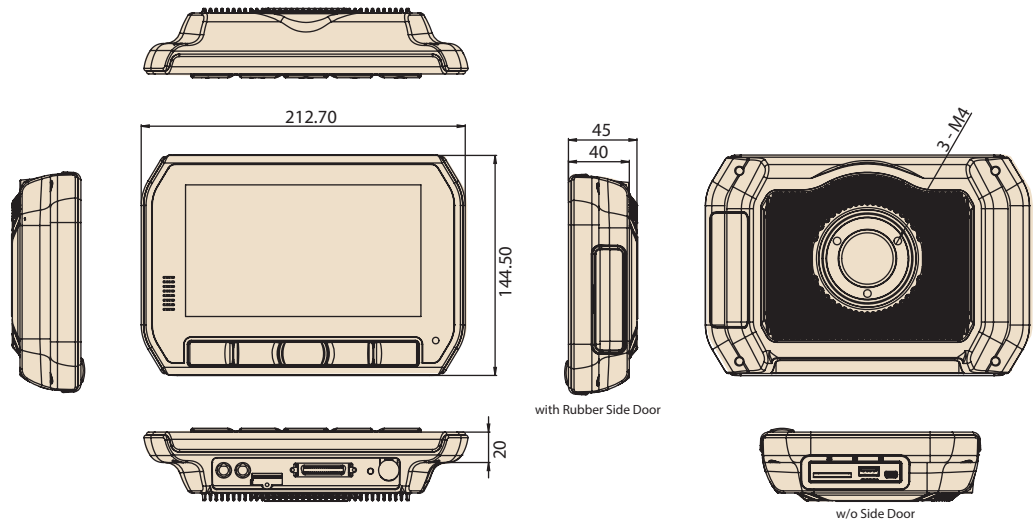
Dimensions

Unit: mm

TREK-722



TREK-723



Specifications Cont.

Environmental Specifications	Operating Temperature	-20 ~ 60° C (TREK-722) / -30 ~ 70° C (TREK-723)
	Storage Temperature	-30 ~ 80° C
	Relative Humidity	10 ~ 90% @ 40° C (non-condensing)
	Shock/Vibration	Compliant to MIL-STD-810G, SAE J1455, Class 5M3 according to DIN EN 60721-3-5
	Certifications	CE, FCC, UL, CUL, CB, PTCRB, CCC

Ordering Information

Part Number	Description
TREK-722R-A1E	TREK-722 barebone (GPRS/HSPA+ dedicated)
TREK-722R-CBCEB1E	TREK-722R-B1E w/ GPS, CDMA, BT, CE
TREK-722R-GBCEA1E	TREK-722R-A1E w/ GPS, GPRS, BT, CE
TREK-722R-HBCEA1E	TREK-722R-A1E w/ GPS, HSPA, BT, CE
TREK-723R-A1E	TREK-723 barebone (GPRS/HSPA+ dedicated)
TREK-723R-CBCEB1E	TREK-723R-B1E w/ GPS, CDMA, BT, CE
TREK-723R-GBCEA1E	TREK-723R-A1E w/ GPS, GPRS, BT, CE
TREK-723R-HBCEA1E	TREK-723R-A1E w/ GPS, HSPA, BT, CE

Optional Items

Part Number	Description
1700020042	(*1) High density cable for I/O expansion
1700019611	Cigarette lighter cable for testing purposes (30cm)
9666074302E	19V adapter for TREK-743 test purposes
RAM-MOUNT-02	VESA RAM mount w/2.5" DIA. base,1.5" ball
RAM-MOUNT-07E	75mm VESA base, RAM-202U, and socket ARM

TREK-303DH

7" In-vehicle smart Display



Features

- 7" display with touchscreen supports 800 x 480 resolution
- -30 to 70° C wide range temperature
- Five user-defined function keys, 2-watt speaker x 2, and USB host.
- Auto-dimming
- One cable connects with TREK box solutions
- USB Host and reset control by side for easy maintain

Introduction

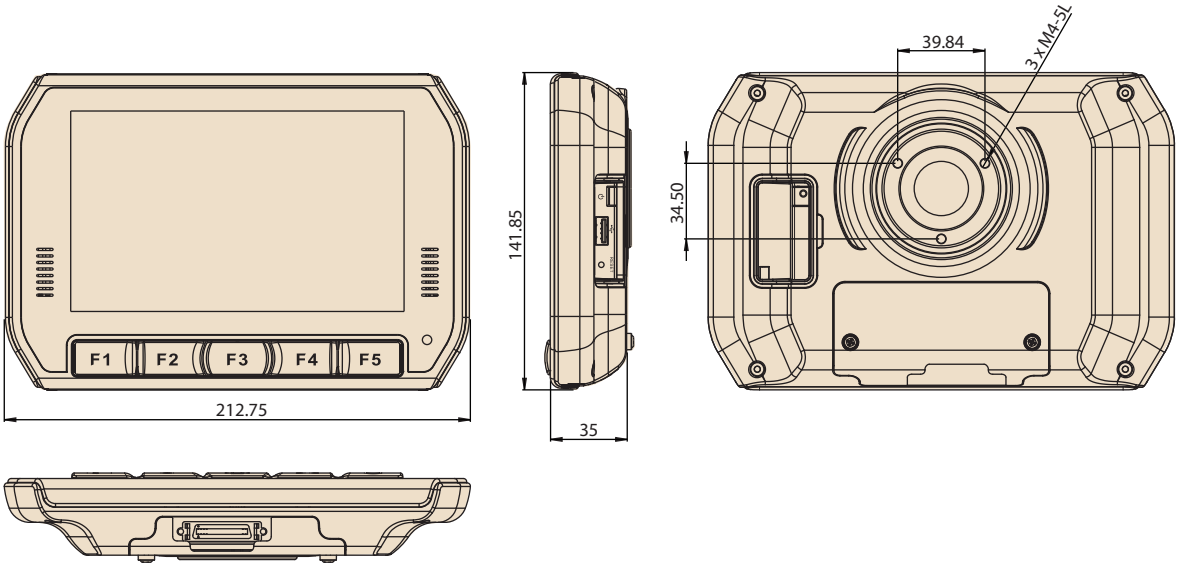
The TREK-303DH is a vehicle display system for Mobile Resource Management (MRM) applications in trucks and buses. The TREK-303DH touch panel is ideal for fleet management and dispatch applications. It also meets requirements for automotive grade working temperatures (-30 ~ 70° C). TREK-303DH provides excellent display capabilities, featuring light-weight housing, it's compatible with RAM mounting solutions that customers can easily install. TREK-303DH supports resolutions of 800 x 480; it is compatible with TREK box solutions connecting with only one cable. TREK-303DH is designed with drivers in mind: when the system requires powering up or waking up, it can be easily controlled from the button located on the side; and for night driving, the panel has an auto detecting light sensor to automatically adjust brightness.

Specifications

LCD	Design Compatible Models	Paired with TREK box solutions
	Resolution (pixel)	800 x 480
	LVDS Interface	18-bit
	Pixel Pitch	0.2168 (H) x 0.2168 (V)
	Brightness (cd/m^2)	390 (typical) with touchscreen
	View Angle (R/L/B/T)	70° / 70° / 60° / 60°
	Contrast Ratio	500
	Lamp Life (hrs)	50,000 (hrs)
	Lamp Type	LED
Touchscreen	Touchscreen	4-wire resistive
Front Plane	Speaker	2-watt x 2
	Hotkeys	5 hotkeys (user defined)
	Brightness Control	Auto-dimming by light sensor on front panel
Side Cover		Power button, USB host X 1, reset button
Bluetooth		Optional, supports Bluetooth Class II, version 2.0 + EDR, antenna built-in
Power	DC Input	12 V ± 5% (Power by TREK box)
	Power Consumption	~12 W (Max.), ~4 W (normal)
Mechanical	Mounting	Design compatible with RAM mount
	Material	PC
	Weight	0.76 kg
	Dimensions	212.75 x 141.85 x 35 mm
Environment	Operating Temperature	-30 to + 70° C
	Storage Temperature	-40 to + 80° C
	Vibration	MIL-STD-810G, SAE J1455 4.9.4.2
	IP Rating	IP 31 (entire system), IP 54 (without I/O)

Dimensions

Unit: mm



Fully Integrated I/O





A. B. Speaker
C. User-defined hotkeys
D. Light sensor
E. Reset, power, USB host (side)

Ordering Information

Part Number	Description
TREK-303D-HA0E	7" vehicle display system, 800 x 480 resolution, with 4-wire resistive touchscreen, 2-watt speaker x 2
RAM-MOUNT-07E	5.625" double socket arm for 1.5" ball base
1700018342	2-meter cable (paired with TREK BOX COMPUTER)

Packing List

Part Number	Description	Quantity
TREK-303D-HA0E	7" vehicle display system, 800 x 480 resolution, with 4-wire resistive touchscreen, 2-watt speakers x 2	1

TREK-668

In-vehicle Surveillance & Fleet Management Computing Box



Features

- Automotive grade working temperature range (-30° C to 60° C)
- Rich I/O including CAN, RS-232, RS-485, J1708, 8DI/4DO (isolated), Line out, Mic in, USB.
- 4/8/12 channel analog video input, one PSE for IP Camera supports (Supports up to 16 channels for half DI resolution)
- Built-in including GPRS/HSDPA/CDMA, WLAN & Bluetooth (supports dual SIM cards and dual WWAN Modules mechanism)
- GPS with AGPS and dead reckoning technology (Gyro & speed line)
- Certifications: CE/FCC/E-mark, MIL-STD-810G, ISO 7637-2, SAEJ1455, SAE J1113 regulations, EN50155
- Ignition on/off delay; software centrollable for car power management

Introduction

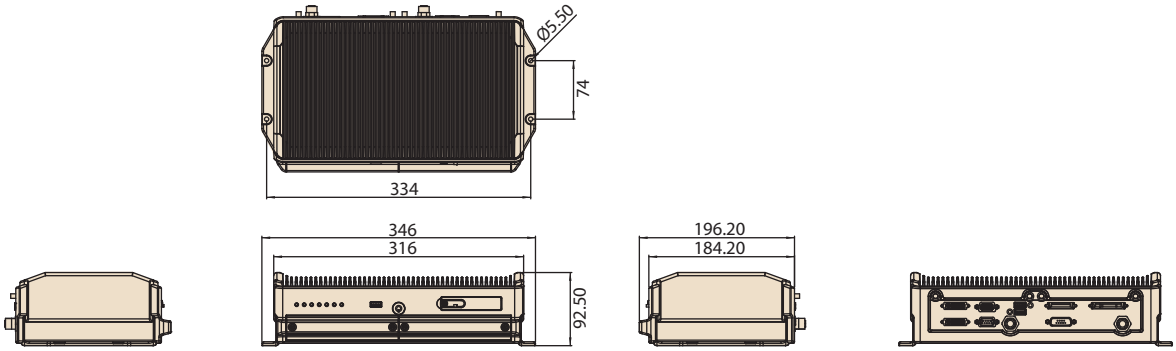
TREK-668 is an industrial-grade, dual-core computing box designed to provide high-quality video surveillance and fleet management for police car, ambulance, fire engine, buses and trains. TREK-668 delivers tracking and positioning and also supports dead-reckoning, which allows a truck to be traced even if the driver is in a tunnel. It supports the J1939 protocol for vehicle diagnostics and driver behavior management, and it supports high-quality, MPEG-4, MJPEG, H.264 recording, and transmission for up to 12 camera inputs. It has one PSE for an IP camera, and dual display/dual audio interfaces which support different resolutions. Each camera input provides motion detection capabilities; there are 8 audio inputs. The TREK-668 provides reliable on-board recording and can transmit images or alarms for remote monitoring over a wireless, GPRS, 3G, or HSDPA network connection.

Specifications

Core	CPU	Intel Atom N2600 1.6 GHz (Dual core)
	System Memory	DDR 3 800MHz , up to 2GB
	Chipset	Intel NM10 Express Chipset
	Graphics	Integrated 2D/3D Graphics Engine Supports Directx* 10.1 compliant Pixel Shader* v2.0 and OGL 3.0
	Video Encoder Engine	Stretch S7
	OS	Windows WES7/Win7, Linux (Project base)
Video/Audio	LVDS out	18-bit LVDS interface (Paired with TREK-303, 800 x480 resolution)
	VGA	1 x via DB15
	Video in for Surveillance	4/8/12 Video inputs, with 12V/2A power supply for camera Dedicate H/W video encoding engine
	Video Compression	MJPEG, H.264, MPEG4, by D1 resolution 30 frames per channel per second
	Video/Audio Input Connector and Format	DVI-I connector, (NTSC, PAL), with 12V/2A power supply
	Audio in	Up to 8 mono audio inputs
	Audio Compression	Audio format G.711
	Mic in	1x via extended I/O port
	Line out	1x via extended I/O port
Storage	Storage	2 x optional SSD/ SATA 2.5" MHDDs, external accessible with key protection 1 x Type I/II CompactFlash card
I/O	RS-232	2 x RS-232 full function; one via extended I/O port; one with 12V / 0.5A via DB9 2 x 2-wire RS-232 (via smart display port)
	RS-485	2 x RS-485 (one with auto flow control via extended I/O port, one via DVI-I port for PTZ camera
	CAN/ J1708	1x CAN Bus (J1939 protocol is ready) via DB15 female connector, integrated with CN bus in single one connector
	USB	4 x USB (2 on rear I/O panel, 1 on front panel, one for TREK-303)
	DI/DO	8 in, 4 out 4 x isolated DI and 4 x relay DO via extended I/O ports 4 x isolated DI via DB15 connectors
	LAN (PSE)	1 x Giga LAN 10/100/1000 Mbps Ethernet controller, supports POE IP camera, IEEE 802.3af compliant, and provides up to 15.4 watts power output
	LED	1. Power (red) 2. CF (green) 3. WiFi (Green) 4. WWAN (Green) 5. GPS (blue) 6. HDD/SSD (amber)
RF	WWAN	HSDPA/CDMA: Sierra Wireless MC809X/MC5728V via miniPCIe card (Note: Option supports dual SIM, dual WWAN in this case, doesn't support WLAN)
	WLAN	802.11a/b/g/n (by MiniPCIe) with external SMA connector
	Bluetooth	Bluetooth Class II, version 2.0 + EDR, antenna built in
GPS	GPS	Default LEA-6S, option ublox LEA-6R (Gyro on board) for dead reckoning (Note: Must connect with direction and speed line)
	Channels	50 channels (Supports GPS and Galileo system)
	Cold/ Warm Start	29 s
	Hot Start	< 1 s

Dimensions

Unit: mm

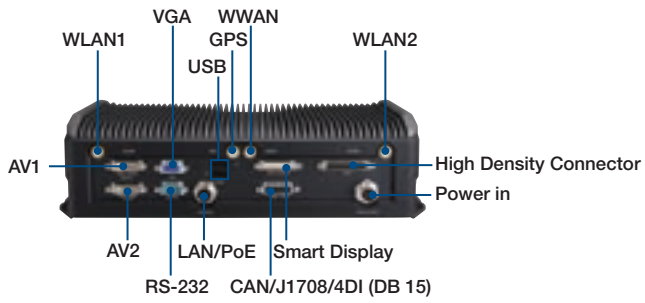


Specifications Cont.

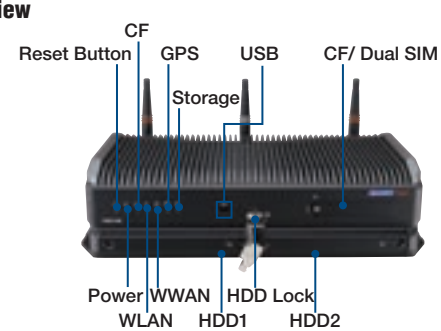
GPS	Aided Start	< 5 s
	Reacquisition	-160 dBm
Security	G-sensor	For auto SOS
Power	Reset Button	Yes
	Power Out	+12 V / 2 A via DVI-I per port; +12V / 1.5A and 5V/1.1A via HDC; DB9 9th Pin (optional with 5 V / 0.5 A jumper selected); +12 V / 1.5 A via smart display port (Default for TREK-303)
	Power input	9~32 V_{DC} (12/24V car power system) car power compliant with SAE J1113, ISO7637-2 level IV
Environment	Dimensions (W/D/H)	346 x 97 x 196.2 mm
	Weight	5.7 kg (including 2 HDD)
	Operating Temp.	-30°C to 60°C
	Storage Temp.	-40°C to 85°C
	Humidity	95% ±5%
	Vibration	Compliant with SAE J1455, MIL-STD-810G, Method 516.5, 5M3
Certifications	RF Certifications	Part 22/24E certified whole system PTCRB
	Safety	CE/FCC, E-Mark

I/O Connectors

Rear View



Front View



Remark: RS-485 x1 (Either AV1 or AV2)



Ordering Information

Part Number	Description
TREK-668-00A0E	TREK-668 barebone
TREK-668-GHB7A0E	System,W/2G DDR3, GPS, 3.5G,16G CF,BT,Win7
TREK-668-GWB7A0E	System,W/2G DDR3, GPS,GPRS,16G CF,WLAN,BT,Win7
9668TREK58E	WLAN Kit w/antenna for TREK-668
9668TREK59E	GPRS Kit w/antenna for TREK-668
9668TREK60E	HSXPA Kit w/antenna for TREK-668
9668TREK61E	GPS (LEA-6S) Kit w/antenna for TREK-668
9668TREK62E	GPS (LEA-6R) Kit w/antenna for TREK-668
9668TREK70E	HSXPA kit w/antenna for TREK-668 (USA)

PWS-770

10.4" Rugged Tablet PC with Intel N2600



PTCRB CE FCC

Features

- 10.4" XGA LED panel, WAV transflective-LCD, high brightness 300 cd/m²
- Hot swap, high capacity Li-ion battery provides 8 hours of operation(*1)
- Rich array of I/O ports supports a variety of applications
- IP54-certified, 4ft drop proof
- Complete communication: Wi-Fi/Bluetooth/GPS/WWAN (3.75G)
- Optional data capture modules: 1D/ 2D barcode scanner / MSR / RFID
- Lightweight, 1.2 kg

IP54 4ft

Introduction

The PWS-770 is a rugged mobile tablet PC featuring a 10.4" XGA resolution TFT LCD panel and an Intel Atom N2600 1.6 GHz processor. It comes with 802.11 b/g/n WiFi, Bluetooth 4.0, a 2M pixel camera. It also has built-in optional GPS and WWAN 3.75G antenna. PWS-770 optional devices include an RFID module with antenna, a 1D/2D barcode scanner and an MSR card reader. PWS-770 is a fully functional communication device suitable for any outdoor application. It carries an IP54 rating for protection against dirt, dust and water. PWS-770 can also survive a 4-foot drop. Advantech's PWS-770 is a strong tablet PC for industrial and commercial use in any environment.

Specifications

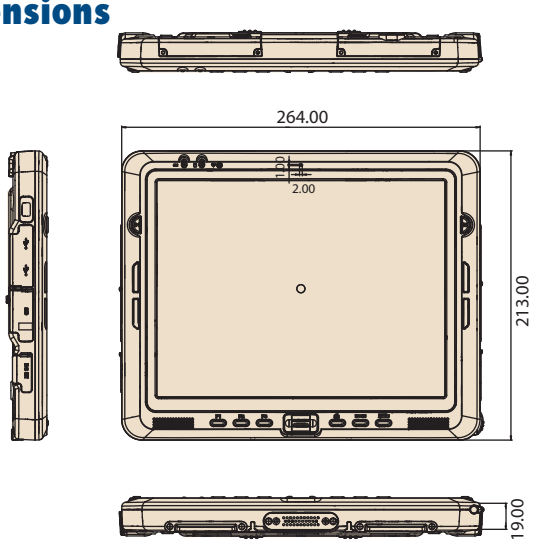
Motherboard	CPU	Intel Atom N2600/1.6 GHz	
	Chipsets	Intel NM10	
	Memory	SODIMM DDRIII to 2 GB	
	Storage	Supports mSATA SSD 32 GB ~ 128 GB	
Display & Touchscreen	Display	10.4" XGA (1024 x 768) (Transflective) LCD 300 cd/m² LED back light	
	Touch Panel	4-wire resistive touch panel	
System	Wireless Communication	802.11b/g/n WLAN (default); 802.11 a/b/g/n (optional) Bluetooth 4.0 class2 GPS (u-blox 6; 50-channel; supports GALILEO); WWAN (Cinterion PH8)	
	Camera	CMOS 2.0M pixel Camera module	
	Security	1. Password security 2. TPM 1.2 (Optional)	
	Application Buttons	Power button x 1 Function keys x 3 (F1~F3) Tablet PC keyboard x 1 Mode key x 1	Enter key x 1 Activate key x 2 (S1 & S2): Activate barcode reader, camera & dimming adjustment required to control the brightness
	LED Status Indicator	Power LED (Green/Yellow) x1 Storage LED (Green) x1	WLAN LED (Green) x1
	I/O Interfaces	USB 2.0 x 2 Serial port RS-232 x 1 VGA port x 1 Audio in jack x 1 Audio out jack x 1	Internal mono microphone x 1 DC-in x 1 Docking port (32-pin; USB/PCIE/DC) SIM slot (with WWAN option)
	Audio Output	1 Watt speaker x 2	
	Expansion Port	SD memory card x 1 (SD 2.0/SDHC)	
	Battery	Internal battery: 3S1P 11.1V 1880mAh Hot-Swap External Battery: 11.1V 3760/5000mAh (Optional)	
	DC Input	19V 1± 5%	
	OS Support	Windows 7 Professional /Embedded	
Optional Devices	Data Collection	CMOS 2.0M pixel Camera module (default); 5.0M pixel Camera (optional) 1D/2D Barcode MSR; HF RFID	
Environmental Specifications	Temperature & Humidity	Operating Temperature: -20° C (*2) ~ +50° C (Charge: 0° C ~ +40° C for the battery protection) Storage Temperature -30 to +60° C Operating Humidity 5% ~ 95% @ 40° C	
	IP Rating	IP54	
	Drop	4-foot drop onto Plywood, MIL-STD-810G 516.5 Precedure VI	
	Vibration	MIL-STD-810G, EN50155 certified	

(1) - Internal battery + external 2nd battery 5000mAh in Battery Mark with maximum peripherals connected (Wi-Fi & BT enabled) the battery life up to 7.5hrs
- Internal battery + external 2nd battery 5000mAh idle with minimum peripherals connected in OS (Wi-Fi & BT disabled) the battery life up to 8.5 hrs

(2) Battery life and charge cycles vary by use and settings.

Dimensions

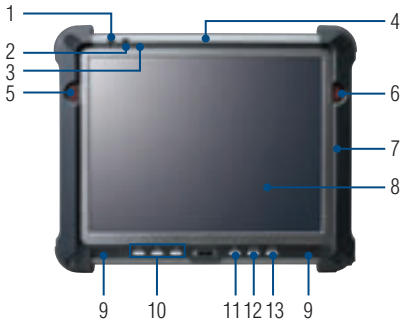
Unit: mm



Specifications Cont.

Certifications	EMC	CE/FCC/CCC/BSMI/C-Tick/PTCRB
	Safety	UL/CE/CB/CCC
Dimensions & Weight	Dimensions	264 (L) x 213 (W) x 18 (H) mm
	Weight	Under 1.2 kg without rubber bumper & optional devices

I/O



1. Power LED
2. Storage LED
3. WLAN LED
4. Microphone
5. Brightness button (Decrease brightness)
6. Brightness button (Increase brightness)
7. Rubber bumper
8. Touch-sensitive display
9. Speakers
10. Function keys
11. Keyboard button
12. Mode button
13. Enter button



1. Power button
2. USB ports (2)
3. SD card slot
4. DC-in jack
5. Serial port
6. VGA port
7. Headphone jack
8. Microphone jack

Ordering Information

Standard Configuration

Part Number	Description
PWS-770-N3A0EC001E	10.4 Normal N2600 RAM2G SSD32 WL BT Win7 EM
PWS-770-N3AWEC001E	10.4 Normal N2600 RAM2G SSD32 WL BT GPS 3G Win7 EM
PWS-770-S3A0PC001E	10.4 Sunlight N2600 RAM2G SSD32 WL BT Win7 PRO EN
PWS-770-S3AWPC001E	10.4 Sunlight N2600 RAM2G SSD32 WL BT GPS 3G Win7 PRO EN

Note: The package are included PWS-770 table and Power adapter (not include power cord)

Barebones (CTOS only)

Part Number	Description
PWS-770-N0A00C001E	PWS-770 Barebone, Normal 10.4"/WL/BT
PWS-770-N0AW0C001E	PWS-770 Barebone,Normal/WL/BT/GPS/3G
PWS-770-S0A00C001E	PWS-770 Barebone, Sunlight/WL/BT
PWS-770-S0AW0C001E	PWS-770 Barebone,Sunlight/WL/BT/GPS/3G

Accessories

Part Number	Description
S10A-93-S10A6-011	VESA MOUNT (M6)
S10A-93-S10A6-021	VESA MOUNT (M4)
S10A-93-S10A1-001	Carrying bag
S10A-93-S10AA-002	Handstrap
S10A-93-S10A6-001	Stand
1757002943	ADAPTER 100-240V 65W 19V 3.42A
PWS-770-CADAP00E	PWS-770 Car adapter ADP90DCA-M12 to Cigar Lighter (1200mm)
PWS-770-BAT100E	PWS-770 2nd Battery (3760mAh)
PWS-770-BAT200E	PWS-770 2nd Battery (5000mAh)
PWS-770-CRADLE00E	PWS-770 Desk Cradle
PWS-770-VCRADLE00E	PWS-770 Vehicle Docking; with LAN Cable M12(M) cable 8P/RJ45(F) (50mm)

Innovations of DSP-based Video Solutions

Enabling Embedded Intelligent Analytics



ADVANTECH

Enabling an Intelligent Planet

DSP-based Intelligent Video Analytics

As video sensors for the intelligent planet, Advantech's DSP-based Intelligent Video Platforms are designed for reliable, real-time response, while at the same time providing flexible system integration and saving system resources.

Smart Algorithms in High Gear

Video software algorithms are smart. Those same algorithms implemented in hardware are both smart and *fast*. Advantech's DSP-based PC video encoder and decoder solutions, IP video encoder solutions, and frame grabber solutions address numerous video-related vertical markets including video broadcast, video surveillance, and automatic optical inspection (AOI).

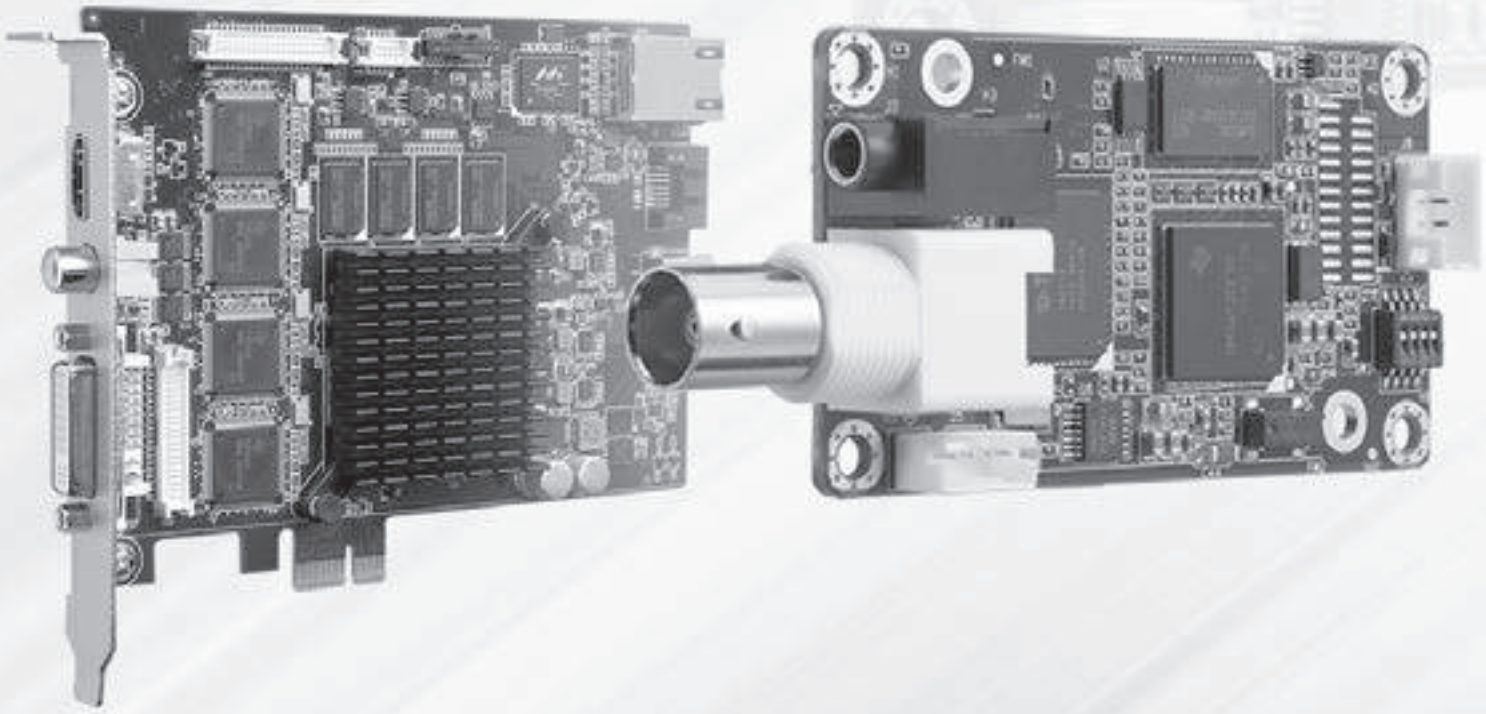
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DSP-based Video Platforms

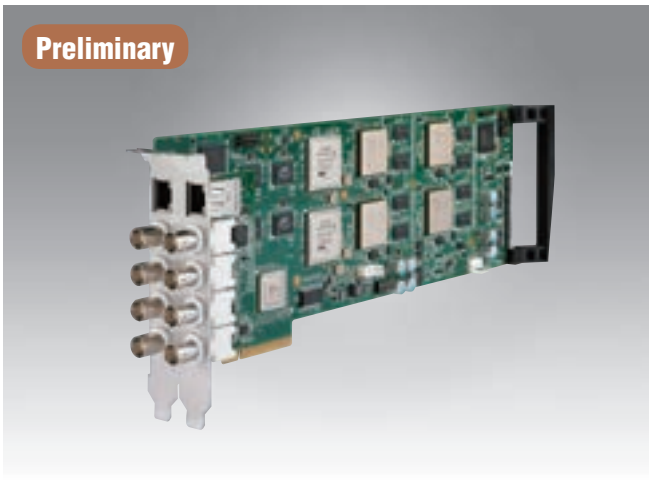
DSP-based Video Solutions		
DSPC-8662-PCXE	8-ch 3G-SDI PCIe Video Acquisition Card with SDK	***16-2***
DSPC-8661-PCXE	16-ch PCIe Versatile Video Processing Board with SDK	***16-4***
DSPC-8601-USBE	1-ch H.264 USB Video Capture Module with SDK	***16-6***
DSPC-8682	Full-length PCIe Card with 8 TMS320C6678 DSPs	***16-8***
DSPC-8681	Half-length PCI Express Card with 4 TMS320C6678 DSPs	***16-10***

To view all of Advantech's Pre-configured Systems, please visit www.advantech.com/products.



DSPC-8662-PCXE

8-Ch 3G-SDI PCIe Video Acquisition Card with SDK



Features

- Powered by quad TI TMS320DM8168 SoC
- 8-channel SD-SDI / HD-SDI / 3G-SDI video + audio inputs
- Supports H.264 / MJPEG / RAW HW compression
- Up to 60 fps at Full HD (1080p) resolution per channel
- Dual 10/100/1000Mbps LAN ports
- Multi-port Ethernet and PCIe Express switch support
- Embedded with digital signal processor for 3rd party program implementation
- SDK with sample codes

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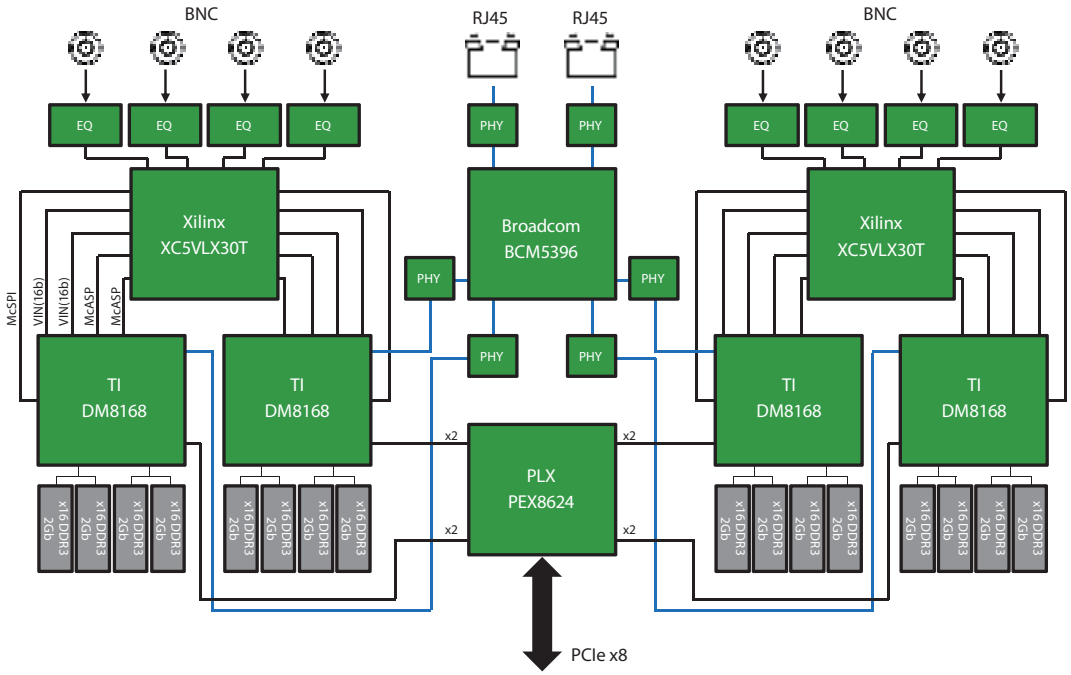
Introduction

DSPC-8662-PCXE is an advanced PCIe video acquisition card with the support of 8-channel Serial Digital Interface (SDI) video and audio inputs. DSPC-8662-PCXE is capable of performing multi-channel H.264 / MJPEG / RAW compression with up to Full HD 1080p resolution at 60fps in each channel (total 480fps simultaneously). Designed for video broadcasting applications, DSPC-8662-PCXE lets users easily capture, encode and distribute multi-channel live video content through Ethernet or PCI Express interface with the built-in switch support. For video surveillance applications, DSPC-8662-PCXE can execute some powerful 3rd party programs like vision analytics functions using the on-chip high-performance DSP (Digital Signal Processor) that saves host computing resources. With an easy-to-use software development kit (SDK), DSPC-8662-PCXE is an ideal solution for system integrators to implement versatile video applications, to fulfill various customer requirements.

Specifications

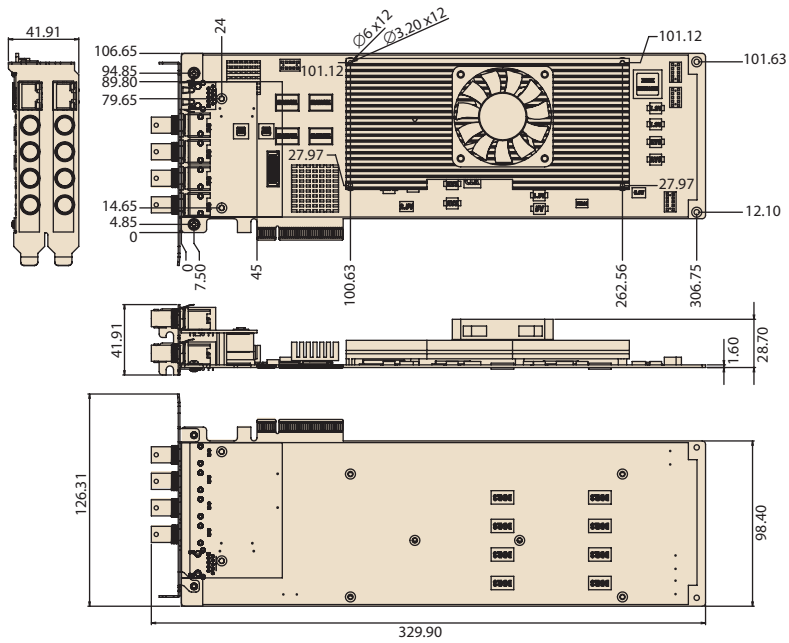
Video Input	Channels	8
	Input Format	SD-SDI / HD-SDI / 3G-SDI
	SDI Standards	SMPTE 259M / 292M / 344M / 424M (depends on the performance of the inputs device)
	Resolution	Up to 1920 x 1080p (Full HD 1080p)
	Compression	H.264 / MJPEG / RAW
	Max. Frame Rate	480 fps at Full HD 1080p (up to 60fps per channel)
	Bit Rate Control	CBR / VBR / ABR
	Connectors	BNC
Audio Input	Channels	8
	Format	RAW
	Sampling Rate	Up to 16-bit, 44KHz, stereo
	Connectors	BNC (shared with video inputs)
Peripherals & Accessories	LAN Port	10/100/1000 Mbps LAN port x2; RJ-45 connector
	Data Bus	PCIe Gen-2 x8
Physical Characteristics	Power Consumption	< 60W
	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
	Dimensions	270 x 111.15 mm (10.63" x 4.38")
Software	Supported OS	Windows XP / XPe / Vista / 7 Linux
	SDK	User's Manual Programming Guide Sample Codes
	Demo Program	8ch 3G-SDI video capture and H.264 encoding at PCIe device mode

Block Diagram



Dimensions

Unit: mm



Ordering Information

Part Number	Description
DSPC-8662-PCXE	8-ch 3G-SDI PCIe Video Acquisition Card with SDK
DSPC8661ACY001-E	JTAG debug board

DSPC-8661-PCXE

16-ch PCIe Versatile Video Processing Board with SDK



Features

- Powered by TI TMS320DM8168 SoC
- 16-ch composite video and audio inputs
- H.264 / MJPEG / RAW H/W encoding up to 480fps at D1
- H.264 / MJPEG / RAW H/W decoding up to 480fps at D1
- One HDMI supports AV display up to 1080p at 60fps
- Embedded with 1.0GHz C674X VLIW DSP
- Versatile peripherals: Giga LAN port, SATA, USB 2.0, I²C and UART
- Dual working modes: PCIe device mode and standalone mode
- Half-size form factor and fanless H/W design
- Windows / Linux PC driver and SDK with sample codes

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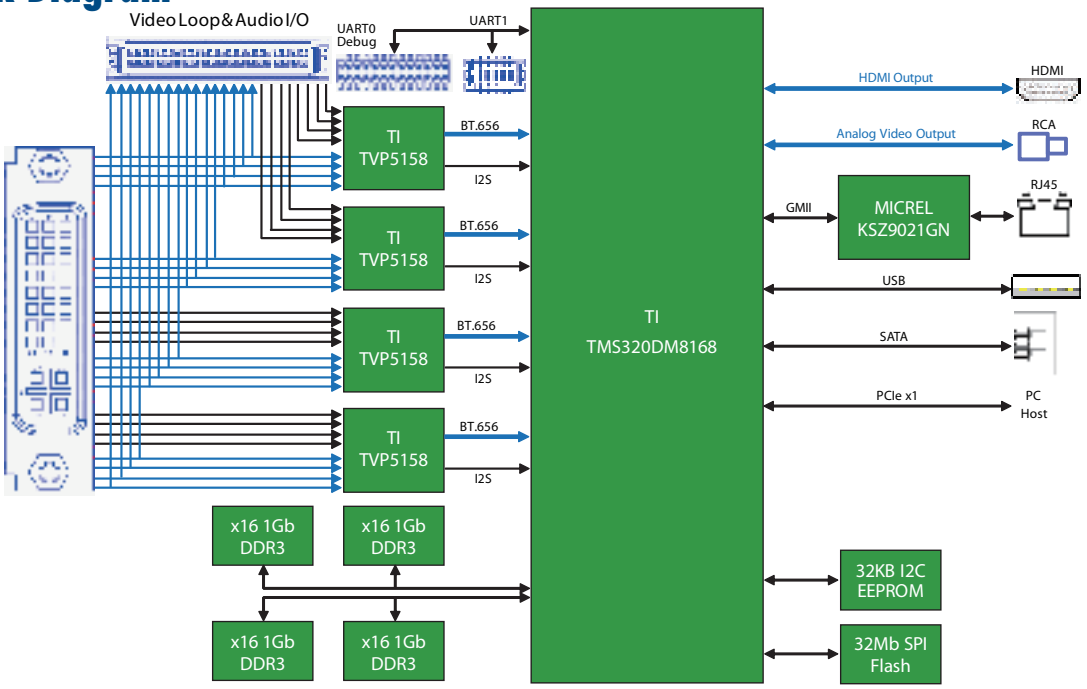
Introduction

The TI TMS320DM8168 SoC, DSPC-8661-PCXE is a full-functional video processing platform with 16-ch composite video and audio inputs based on a standard half-length PCIe board form factor. The board supports H.264 / MJPEG / RAW encode / decode up to D1 resolution at a real-time frame rate (30/25fps) for all channels simultaneously. HDMI provides up to 1080p 60fps video / audio outputs that fulfills high-definition display requirements. Equipped with a high-performance C674X Digital Signal Processor (DSP), DSPC-8661-PCXE can manage a system's host processing by executing image enhancement and video analytics programs. The I²C and UART interfaces are designed for extending the control and indicator functions like RS-485 and DIO (on the optional DIO & Control Board). And, versatile peripherals like Giga LAN, SATA and USB ports, enrich data communication, storage and user interface functions while the device works in standalone mode. With an easy-to-use software development kit (SDK), the DSPC-8661-PCXE is an ideal solution for system integrators integrators working to implement diverse video-processing related applications that fit a broad spectrum of customer requirements.

Specifications

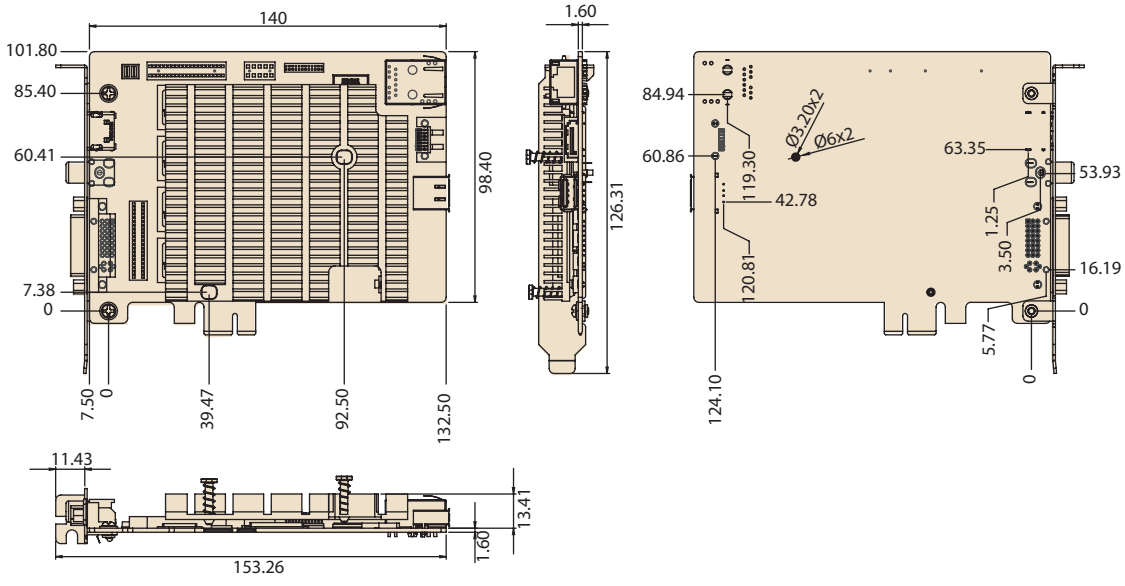
Video Input	Channels	16
	Input Format	Composite for NTSC/PAL
	Resolution	Up to D1 (720 x 576)
	Compression	H.264/MJPEG/RAW
	Max. Frame Rate	480/400 fps (NTSC/PAL) at D1
	Bit Rate Control	CBR & VBR
	Connectors	DVI x1 (for connecting 16 x BNC + 8 x RCA to DVI octopus cable), Pin header x1 (Alternative for 16-ch video inputs)
Audio Input	Channels	8 + 8 (optional)
	Format	RAW
	Sampling Rate	Up to 16-bit, 44KHz
	Connectors	DVI x1 (8-ch audio shared with video-input connector) Pin header x1 (for connecting the optional Audio & Loop-out Board; supports the other 8ch audio-in)
Video Output	RCA	1
	Loop-out	16-ch pin header on board (connecting the optional Audio & Loop-out Board)
	HDMI out	1, resolution up to 1080P, frame rate up to 60fps
Peripherals	Giga Lan Port	RJ-45 x1
	USB 2.0 Port	A-type Female x1
	SATA Port	x1 (3.0 Gbps)
	I²C and UART	Pin-header x1 for connecting the optional DIO and Control Board
	Data Bus	PCI Express 2.0, Gen2, x1
Accessories	Cable	16xBNC + 8xRCA to DVI Octopus Cable
	Expansion Board (optional)	JTAG Debug Board (with 1x Board-to-board flat cable) Audio & Loop-out Board: Audio-out + 8ch Audio-in + 16ch Video Loop-out (with 1x Octopus Cable + 1x Board-to-board flat cable) DIO & Control Board: 16x DI + 8x DO (Relay) + 1x RS-485 (with 1x Board-to-board flat cable)
Physical Characteristics	Power Consumption	< 26W
	Operating Temperature	-20 ~ 70° C / -4 ~ 158° F (with air flow)
	Dimensions	140 x 111.15 mm (5.51" x 4.38")
Software	OS Supported by Driver	Linux; Windows XP / XPe / Vista / 7
	SDK	User's Manual, Programming Guide, Sample Codes
	Demo Program	16-ch Video Capturing and H.264 Encoding at PCIe Device Mode
Applications	PCIe Device Mode	PCIe digital video capturing & encoding card PCIe video decoder card with HDMI out PCIe DSP-based intelligent video analytics card
	Standalone Mode	Embedded IP video encoder / video recoder Embedded IP video decoder with HDMI out Embedded IP intelligent video analytics box

Block Diagram



Dimensions

Unit: mm

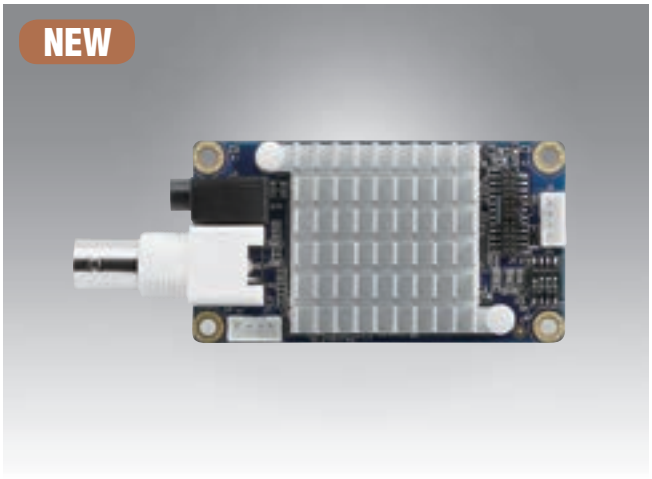


Ordering Information

Part Number	Description
DSPC-8661-PCXE	16-ch PCIe H.264 Video Capture Card with SDK
DSPC8661ACY001-E	JTAG Debug Board with cable
DSPC8661ACY002-E	Audio-in & Loop-out Board for DSPC-8661-PCXE with cables
DSPC8661ACY003-E	DIO & Control Board for DSPC-8661-PCXE with cable

DSPC-8601-USBE

1-ch H.264 USB Video Capture Module with SDK



Features

- Powered by TI TMS320DM365 SoC
- 1-channel composite video input with H.264 hardware compression
- Supports PCM/G.711 hardware audio compression
- 30/25 fps (NTSC/PAL) at full D1 resolution for recording
- High-speed USB 2.0 interface
- SDK with VC++ sample codes

FCC CE RoHS COMPLIANT 2002/95/EC

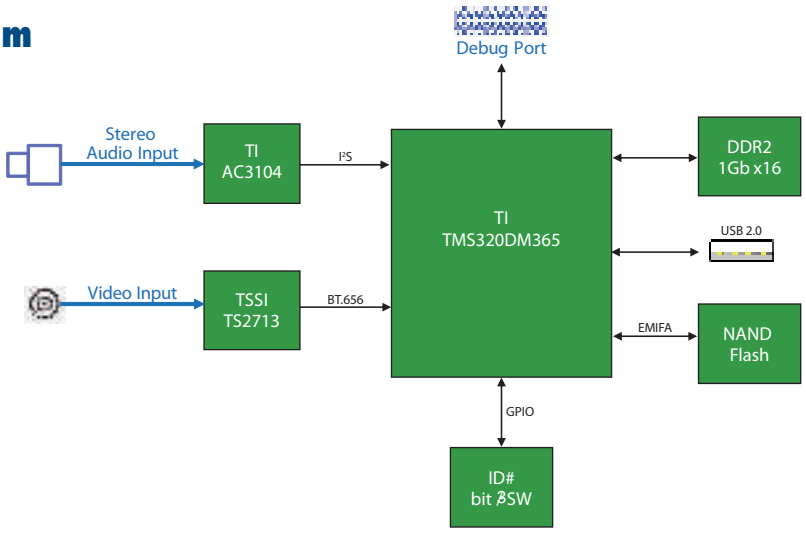
Introduction

DSPC-8601-USBE is a USB 2.0 high-speed video capture module with 1 analog video input and 1 stereo audio input. DSPC-8601-USBE supports H.264 compression formats up to full D1 resolution at real-time frame rate (30/25fps). With an easy-to-use software development kit (SDK), DSPC-8601-USBE is an ideal solution for system integrators to implement versatile video capturing and encoding applications that fulfill a wide variety of customer requirements.

Specifications

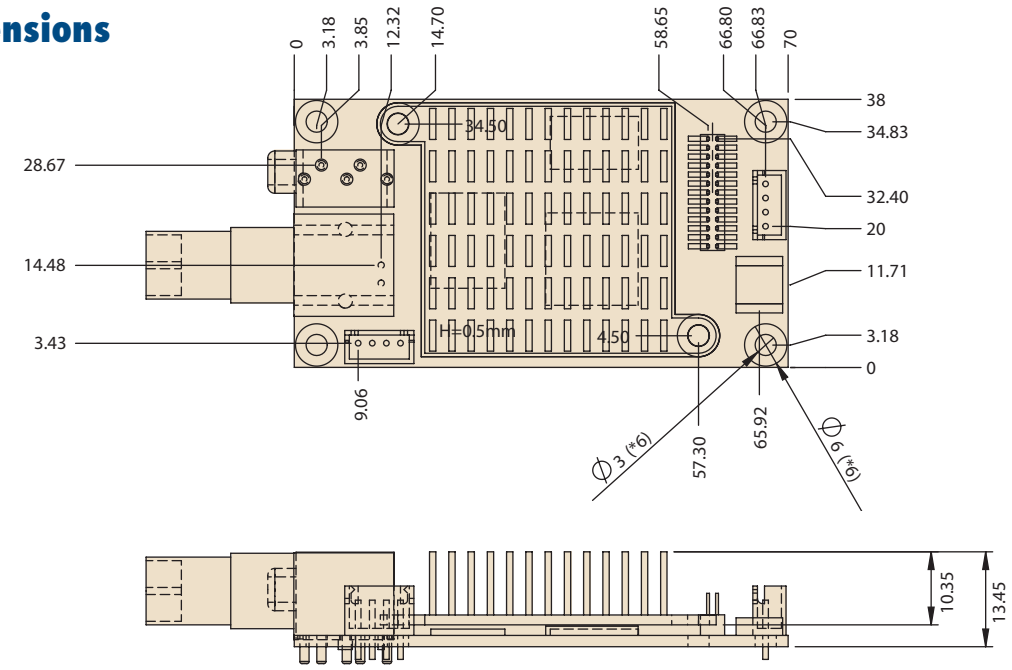
Video Input	Channels	1
	Video Inputs	Composite for NTSC/PAL
	Compression	H.264 / RAW
	Dual Streams	Yes
	Frame Rate	Up to 30 fps @NTSC / 25 fps @PAL (adjustable)
	Bit Rate Control	Supports constant bit rate (CBR) & variable bit rate (VBR)
	OSD	Text OSD
	Connector	BNC, male / 1.0Vp-p, 75ohms
Audio Input	Channels	1 x stereo line-in
	Sampling Rates	Up to 16-bit, 48 KHz, stereo
	Compression	PCM / G.711
	Connector	Phone jack, female
Physical Characteristics	Host Interface	USB 2.0 High Speed
	Power Input	USB bus power
	Operating Temperature	0 ~ 70° C (32 ~ 158° F) (with air flow) 0 ~ 60° C (32 ~ 140° F) (without air flow)
	Dimensions	70 x 38 mm (2.75" x 1.49") (Board size)
	Safety	CE / FCC
Software	OS Supported by Driver	Windows XP / XPe / Vista / 7
	SDK	User Manual, Programming Guide and VC++ Sample Codes
	Direct X Required	Version 9 or above

Block Diagram



Dimensions

Unit: mm

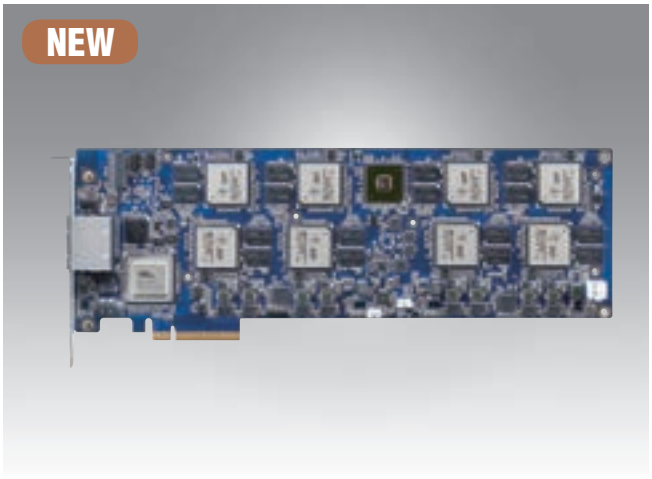


Ordering Information

Part Number	Description
DSPC-8601-USBE	1-ch H.264 USB Video Capture Module with SDK

DSPC-8682

Full-length PCI Express Card with 8 TMS320C6678 DSPs



Features

- Eight TI TMS320C6678 DSPs on single full-length PCI Express Card with PCIe Gen3 x8 interface to the edge connector
- Eight TMS320C66x™ DSP Core Subsystems (C66x CorePacs) @ 1.25GHz per DSP
- 1GB/2GB (Optional) DDR3-1333/1600 on board memory per DSP
- Applications:
  - Audio and video transcoding/transrating
  - Media gateways and accelerator
  - High Performance Computing
  - Broadcasting Application
  - Automatic Optical Inspection

FCC CE

Introduction

The DSPC-8682 integrates eight Texas Instruments TMS320C6678 multi-core digital signal processors (DSPs) each with 2GB of DDR3 1333/1600MHz 64-bit DDR3 memory, the PLX® ExpressLane™ PEX8748 PCIe Gen 3 switch, a Xilinx XC3S200AN Spartan-3 FPGA, and an IDT CPS1616 Serial RapidIO Gen 2 switch to achieve the highest possible performance levels in a full-length PCIe form factor. The PEX8748 and the IDT CPS1616 interconnect x2 lanes between each DSP device. A high speed connection to the host is assured through the PEX8748 switch's PCIe x8 Gen 3 interface for the fastest possible data transfers. A HyperLink chip-to-chip interconnect interface has been implemented enabling the on-chip navigator to transparently dispatch tasks for execution between DSP pairs.

In addition, an SGMII daisy chain between all devices is connected to a Broadcom BCM5482S providing two RJ-45 Giagabit Ethernet connections the I/O panel.

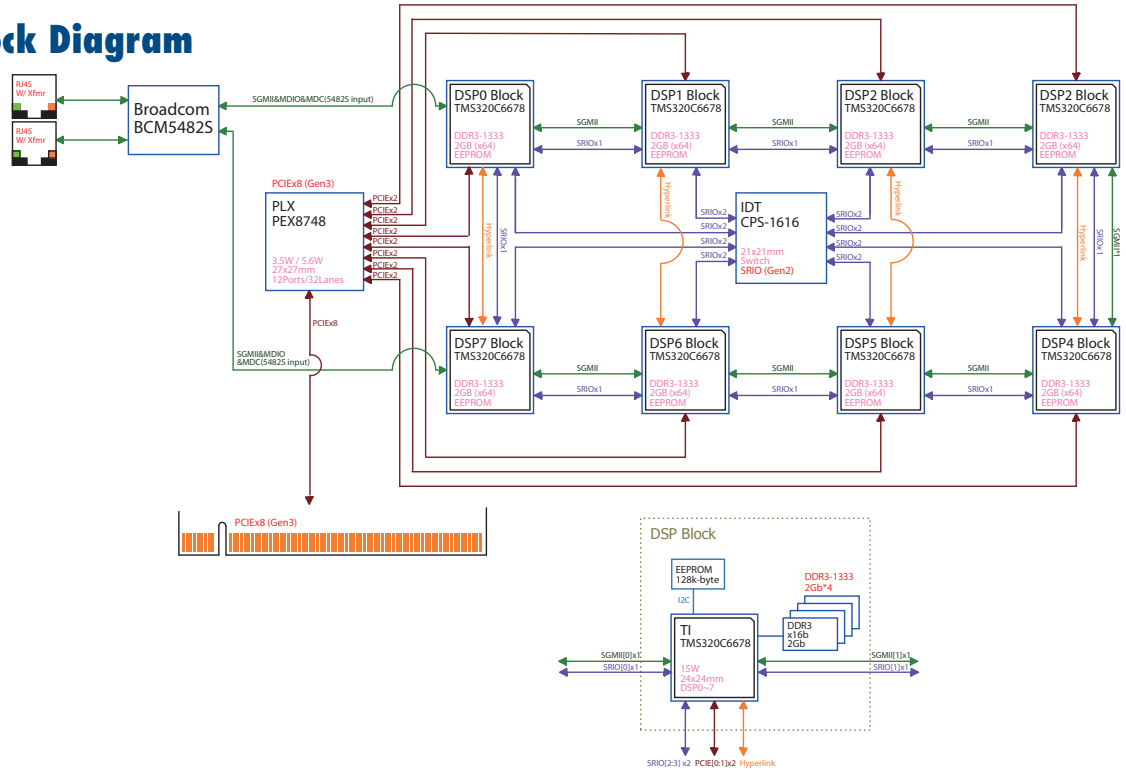
The DSP's provide fixed- and floating-point capabilities enabling the board to perform 2,048 GMACs (Giga Multiply-Accumulation operations per second) using the embedded C66x DSP cores inside the TMS320C6678 devices.

The 64 DSP cores on the DSPC-8682 make it ideal for power efficient solutions based on commercial and industrial servers needing the highest performing video processing technology on fast-to-deploy PCIe add-in cards. This raw computing power makes the DSPC-8682 a perfect fit for advanced and complex video processing such as JPEG2000 for 2K/4K processing, AVC-Intra 50/100 and AVC-Ultra, deep-color pixel manipulation, HEVC/H.265 and motion-compensated temporal filtering. It is also suited for applications in many industries such as media gateways and high performance computing.

Specifications

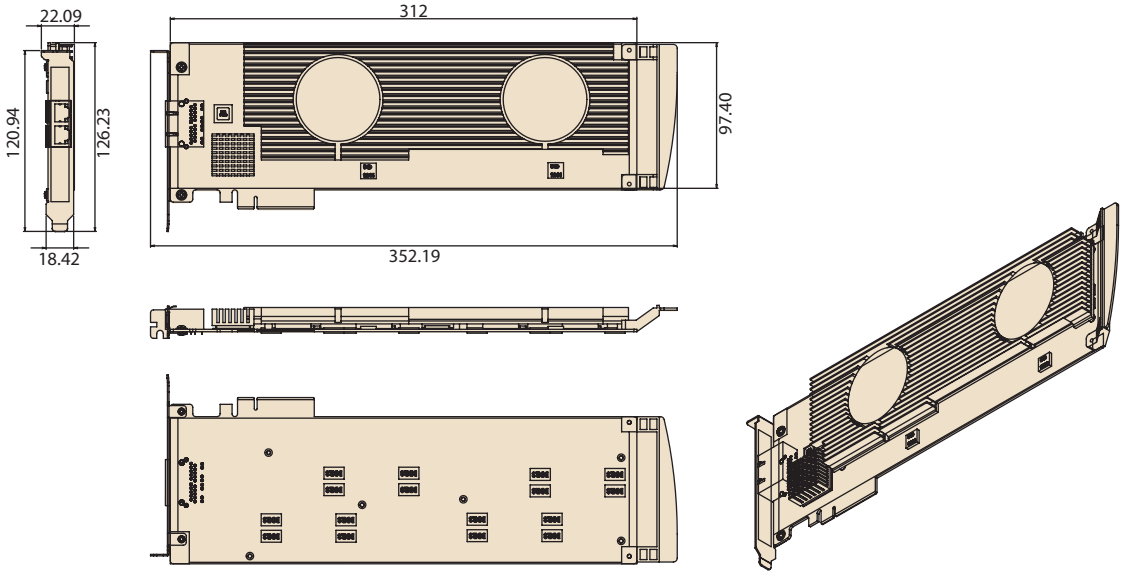
Media Processing Elements	Eight TI TMS320C6678
	Eight TMS320C66x cores (@ 1.0GHz) per DSP
	1024/2048 MB DDR3-1333 on board memory
	One Serial RapidIO 2.1 x2 interface up to 10Gbps plus two x1 interfaces up to 5Gbps bandwidth
	One PCI Expess Gen-2 x2 interface
	Dual 10/100/1000Mbps Ethernet w/ SGMII
Host Interface	PCI Express Gen-3 x8 with PCI Express x8 edge connector
Ethernet	2 x10/100/1000 Mbps Ethernet ports
Software Support	Host PC Linux DSP program loader
	MCSDK for TMS320C6678
	PDK for TMS320C6678
Power	Max. 106W
Cooling	Aluminum cooler with fan (4800 RPM, 19.41 CFM)
Physical Dimensions	111.15 x 312 mm (4.38" x 12.28")
	0.8 kg
Environment	Operating temperature: 0 to 50° C
	Humidity: 20% to 90 % RH
	Storage temperature: -20 to 70° C
	Humidity: 5% to 95 % RH

Block Diagram



Dimensions

Unit: mm

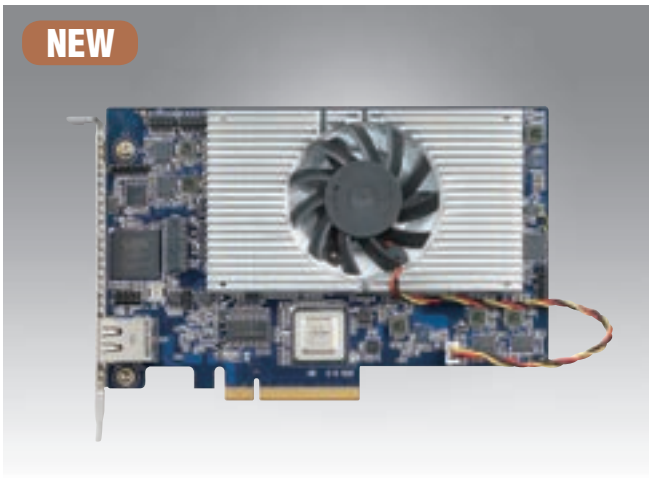


Ordering Information

Part Number	Description
DSPC-8682G1-00A1E	Full-length PCI Express Card with 8 TMS320C6678 & 1GB DDR3 on board memory per DSP
DSPC-8682G2-00A1E	Full-length PCI Express Card with 8 TMS320C6678 & 2GB DDR3 on board memory per DSP

DSPC-8681

Half-length PCI Express Card with 4 TMS320C6678 DSPs



Features

- Four TI TMS320C6678 DSPs on single half-length PCI Express Card with PCIe Gen 2 x8 interface to the edge connector
- Eight TMS320C66x™ DSP Core Subsystems (C66x CorePacs) @ 1.0 GHz per DSP
- 1 GB DDR-1333 on board memory per DSP
- Supports XDS560v2 evaluation module via JTAG for CCS connection
- Hardware monitor for temperature detection
- Applications:
  - IPTV/Web TV/mobile TV video transcoder
  - Audio and video transcoding/transrating
  - Media gateways and accelerator
  - Medical applications
  - High Performance Computing

FCC CE

Introduction

The DSPC-8681 integrates four Texas Instruments TMS320C6678 multi-core digital signal processors (DSPs), the PLX® ExpressLane™ PEX8624 PCIe switch, and the Xilinx XC3S200AN Spartan-3 FPGA to achieve the highest possible performance levels in a half-length PCIe form factor. The DSPs provide fixed- and floating-point capabilities and include packet accelerator support for various transport plane protocols and a security accelerator engine which supports a wide range of security and encryption standards including DES.

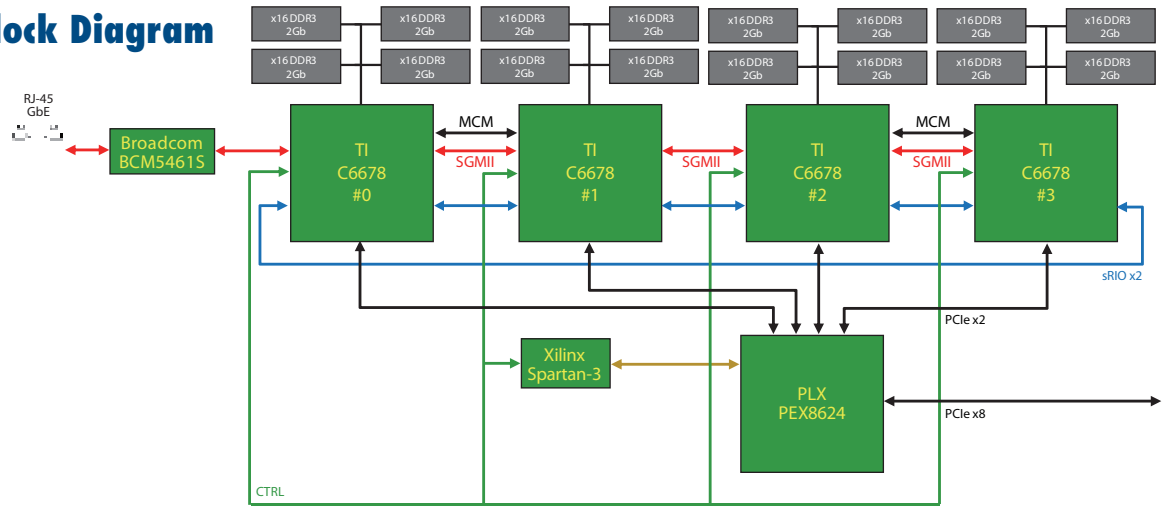
The DSPC-8681 includes Serial RapidIO and SGMII daisy-chains for connecting all DSP devices. Each DSP device is also connected by two separate PCI Express lanes (PCIe x2) via the PEX8624 enabling up to 10Gbps non-blocking throughput. The card can support 120 channels in an H.264 mobile video application (CIF, 30fps) and 60 channels in a content delivery network using H.264 (SD, 30fps). For HD Broadcast applications, the DSPC-8681 is capable of supporting 4 channels of AVCIntra-50, 10-bit, 4:2.0 at 60fps.

The 32 DSP cores on the DSPC-8681 make it ideal for power efficient solutions based on commercial and industrial servers needing the highest performing video processing technology on fast-to-deploy PCIe add-in cards. It is a perfect fit for applications in many industries such as digital media, communications, video-surveillance, medical imaging, bioinformatics, radar, sonar and instrumentation, high performance computing as well as test and measurement.

Specifications

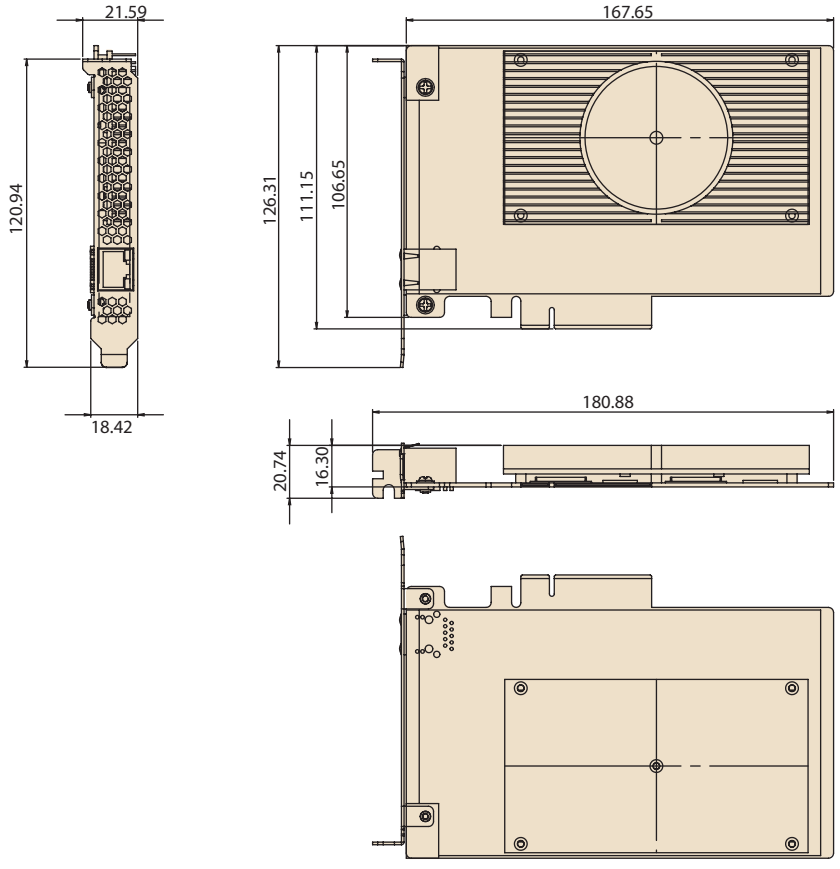
Media Processing Elements	Four TI TMS320C6678
	Eight TMS320C66x cores (@1.0GHz) per DSP
	1024 MB DDR3-1333 on board memory
	Two Serial RapidIO 2.1 x2 interfaces up to 10Gbps bandwidth
	One PCI Express Gen-2 x2 interface
	Dual 10/100/1000Mbps Ethernet w/ SGMII
Host Interface	PCI Express Gen-2 x8 with PCI Express x8 edge connector
Ethernet	1 x 10/100/1000 Mbps Ethernet port
Software Support	Host PC Linux DSP program loader
	MCSDK for TMS320C6678
	PDK for TMS320C6678
Power	Max. 54 W
Cooling	Aluminum cooler with fan (4800 RPM, 19.41 CFM)
Physical Dimensions	111.15 x 167.65 mm (4.48" x 6.6")
	0.5 kg
Environment	Operating temperature: 0 to 50° C
	Humidity: 20% to 90 % RH
	Storage temperature: -20 to 70° C
	Humidity: 5% to 95 % RH

Block Diagram



Dimensions

Unit: mm



Ordering Information

Part Number	Description
DSPC-8681E-00A1E	Half-length PCI Express Card with 4 TMS320C6678

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CompactPCI Platforms



MIC-3022	4U CompactPCI® Enclosure for 3U Cards	*17-2*
MIC-3042	4U CompactPCI® Enclosure with cPCI Power Supply (CT Bus non-CT Bus or PICMG 2.16)	*17-4*
MIC-3043	4U CompactPCI® Enclosure with cPCI Power Supply and Removable HDD Bay (CT Bus or Non-CT Bus)	*17-6*
MIC-3325	3U CompactPCI® Intel® AtomTM Dual Core D525/N455 Processor Blade	*17-8*
MIC-3326	3U CompactPCI Intel® Atom™ N455 Low Power Processor Blade	*17-10*
MIC-3328	3U CompactPCI Intel® Core™ Ivy Bridge Processor Blade	*17-12*
MIC-3392Rev2	6U CompactPCI® Intel® Core™2 Duo Processor-based Board with Dual PCIe GbE/DDR2/SATA/PMC	*17-14*
MIC-3393	6U CompactPCI® Intel® Xeon® Processor Quad/Dual Core Blade	*17-16*
MIC-3395	6U CompactPCI® 2nd and 3rd Generation Intel Core i3/i5/i7 Processor Blade with ECC Support	*17-19*
MIC-3396	6U CompactPCI 4th Generation Intel® Core™ i3/i5/i7 Processor Blade with ECC support	*17-21*

To view all of Advantech's CompactPCI Platforms, please visit www.advantech.com/products.



MIC-3022

4U CompactPCI® Enclosure for 3U Cards



Features

- Hosts up to eight 3U CompactPCI® boards
- 32bit/66MHz PCI bus backplane
- PICMG 2.11power supplies
- ATX power supply option for cost sensitive applications
- Dual system ready

Introduction

The MIC-3022 is a 4U enclosure designed to host up to 8 CompactPCI 3U cards connected via a 32bit 33MHz or 66MHz PCI bus. The chassis can be powered by PICMG2.11 CPCI power supplies or an ATX 400W power supply for cost sensitive applications. A CPCI power supply supports a wide range of applications in the industrial market requiring a robust, compact and reliable platform. Rear transition modules can be installed for each of the 8 slots to support I/O extension.

Four high performance fans provide adequate air flow to all slots, enabling system configurations which can be used in extended temperature environments. With the support of front swappable power supplies and add-in cards as well as a simplified fan replacement mechanism built in, systems based on the MIC-3022 can support a MTTR of 5 minutes or less.

Specifications

Backplane	3U slots		System x 1, Peripheral x 7, Rear transition x 8 (80 mm, IEEE1101.11 compliant)			
	Bus Interface		32-bit/33 MHz/66 MHz PCI bus			
	V (I/O)		+3.3 V/+5 V (selectable)			
Cooling	Fan		2 Blowers (Max 45.6CFM/FAN)			
Power Supply	Standard CPCI 250W PSU	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range			
			+3.3 V	+5 V	+12 V	-12 V
		Max. Load	18 A	25 A	5 A	0.5 A
		Min. Load	0 A	1 A	0 A	0 A
	ATX 400W PSU	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range			
			+3.3 V	+5 V	+12 V	-12 V
		Max. Load	11.6A	12.89A	11.74A	0.37A
		Min. Load	0.3A	0.3A	0.5A	0A
Environment			Operating		Non-Operating	
	Temperature		0 ~ 45° C (32 ~ 113° F)		-40 ~ 70° C (-40 ~ 158° F)	
	Humidity		10 ~ 95% @ 40° C, non-condensing		10 ~ 95% @ 60° C, non-condensing	
	Shock		10 G		30 G	
	Vibration	Random: 1.06G	Frequency range (Hz) 5 ~ 10 10 ~ 50 50 ~ 100		Test Severity PSD Value 12 B/Octave 0.02 g²/Hz -12 B/Octave	
		Sine: 2G	Test Frequency: 5-500Hz Test Acceleration: 2G Test displacement value: 4.4mm			
Physical Characteristics	Dimensions (W x H x D)		440 x 177 x 295 mm (17.3" x 7" x 11.6")			
	Weight		11 kg			
Reliability	MTBF		Backplane	Fan module	Power supply	
			800, 000 hours	50, 000 hours @ 25 °C	100, 000 hours @ 70% load	
Compliance			PICMG 2.0 R3.0 CompactPCI Specification PICMG 2.1 R2.0 CompactPCI Hot Swap Specification PICMG 2.11 R3.0 Front-Access Power Connectors Specification			
			RoHS, CE, FCC, UL, CCC			

Ordering Information

Part Number	PCI	PICMG 2.11	ATX power SPEC	Description
MIC-3022AE	Yes	-	Yes	3U CPCI enclosure with 400W ATX PSU
MIC-3022CE	Yes	Yes	-	3U CPCI enclosure with 250W CPCI PSU

Recommended Configurations

Enclosure	CPU Board	Rear I/O Board
MIC-3022	MIC-3325	MIC-3525
MIC-3022	MIC-3326	MIC-3525
MIC-3022	MIC-3328	-

Optional Accessories

Part Number	Description
1757000190G	CPCI 250W Power Supply Unit
1757004252-01	ATX 400W Power Supply Unit

MIC-3042

4U CompactPCI® Enclosure with cPCI Power Supply (CT Bus non-CT Bus or PICMG 2.16)



Features

- 8-slot 6U CompactPCI® backplane
- AC cPCI 500 W + 250 W redundant (2+1) power supplies
- PICMG 2.16 (CompactPCI Packet Switching Backplane) compliance
- PICMG 2.5 (CompactPCI Computer Telephony) compliance

Introduction

The MIC-3042 is a 4U enclosure designed for standard cPCI power supplies. It is equipped with a cPCI 500 W redundant 2+1 power supply with hot-swap support. The system has 8 slots for CompactPCI boards and 6 slots for IEEE 1101.11 rear I/O transition boards. The MIC-3042 comes with a built-in high quality backplane that supports 64-bit / 66 MHz PCI cards. The standard configuration includes a H.110 CT Bus that complies with PICMG 2.5, which is the open architecture used to build telecom solutions.

Specifications

		MIC-3042A	MIC-3042B	MIC-3042C
Backplane	6U Slot	System x 1, Peripheral x 6, Switch x 1, Rear transition x 8 (80 mm, IEEE1101.11 compliant)	System x 1, Peripheral x 6, Media x 1, Rear transition x 7 (80 mm, IEEE1101.11 compliant)	System x 1, Peripheral x 7, Rear transition x 8 (80 mm, IEEE1101.11 compliant)
	Bus	Up to 64-bit/66 MHz PCI bus		
	H.110 CT Bus	Yes	Yes	No
	V (I/O)	+3.3 V/+5 V (selectable)		
Cooling	Fan	2 (front: 193 CFM, rear: 61.3 CFM)		
Power Supply	Input	AC 100 ~ 254 V @ 50 ~ 60 Hz, full range (MIC-3042X-A)		
	Output	AC cPCI 250 W redundant power module		
		+3.3 V / +5 V / +12 V / -12 V		
	Max. Load	36 A / 50 A / 10 A / 1 A		
	Min. Load	0 A / 2.0 A / 0 A / 0 A		
Environment		Operating	Non-Operating	
	Temperature	0 ~ 45° C (32 ~ 113° F)	-20 ~ 60° C (-4 ~ 140° F)	
	Humidity	20 ~ 90% @ 40° C, non-condensing	10 ~ 95% @ 40° C, non-condensing	
	Shock	10 G	30 G	
	Vibration (5 ~ 500 Hz)	1.0 Grms	2.0 G	
Physical Characteristics	Dimensions (W x H x D)	440 x 177 x 320 mm (17.3" x 7" x 12.6")		
	Weight	18 kg (39.7 lb)		
Reliability	MTBF	Backplane	Fan module	Power supply
		800, 000 hours	50, 000 hours @ 25 °C	100, 000 hours @ 70% load
Serviceability	MTTR	5 minutes		
Compliance	PICMG 2.0 R3.0 CompactPCI Specification PICMG 2.1 R2.0 CompactPCI Hot Swap Specification PICMG 2.5 R1.0 CompactPCI Computer Telephony Specification PICMG 2.11 R3.0 Front-Access Power Connectors Specification PICMG 2.16 R1.0 CompactPCI Packet Switching Backplane Specification (MIC-3042B, MIC-3042C are not compliant with PICMG 2.16)			
	RoHS, CE, FCC, UL, CCC			

Backplane Information

Physical Number	Function
8	Switch slot
7	I/O slot
6	I/O slot
5	I/O slot
4	I/O slot
3	I/O slot
2	I/O slot
1	System slot

MIC-3042A, PICMG 2.16 / CT backplane (for MIC-3042A series)

Physical Number	Function
8	I/O slot
7	I/O slot
6	I/O slot
5	I/O slot
4	I/O slot
3	I/O slot
2	System slot
1	Media blade slot

MIC-3042B, CT backplane (for MIC-3042B series)

Physical Number	Function
8	I/O slot
7	I/O slot
6	I/O slot
5	I/O slot
4	I/O slot
3	I/O slot
2	I/O slot
1	System slot

MIC-3042C, non-CT backplane (for MIC-3042C series)

Recommended Configurations

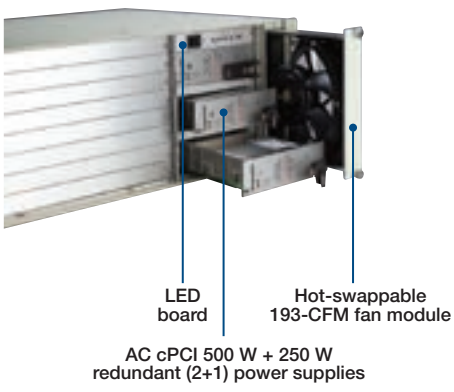
Enclosure	CPU Board	Rear I/O Board	Chassis Management Module
MIC-3042AE MIC-3042A-AE MIC-3042BE MIC-3042B-AE	MIC-3392A-MxE, MIC-3392B-MxE, MIC-3392A2-MxE, MIC-3392B2-MxE, MIC-3392LE	RIO-3310S-A2E, RIO-3310BE	Included MIC-3924L-AE or Optional MIC-3927CE
MIC-3042CE MIC-3042C-AE	MIC-3392A-MxE, MIC-3392B-MxE, MIC-3392A2-MxE, MIC-3392B2-MxE, MIC-3392LE MIC-3395A1-M4E, MIC-3395A2-M4E, MIC-3395B1-M4E MIC-3395C1-M4E	RIO-3310S-A2E, RIO-3310BE RIO-3315-A1E, RIO-3315-B1E, RIO-3315-C1E	

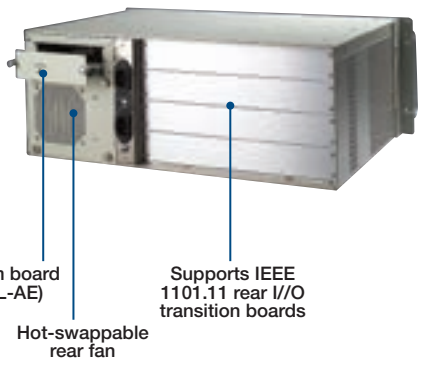
Ordering Information

Part Number	PICMG 2.16	PICMG 2.5	PCI	Switch Board Support	Media Blade Support	Chassis Management Module	cPCI Power Supply
MIC-3042AE	Yes	Yes	Yes	Yes	-	MIC-3924L-AE	-
MIC-3042A-AE	Yes	Yes	Yes	Yes	-	MIC-3924L-AE	AC cPCI 500 W + 250 W redundant (2+1)
MIC-3042BE	-	Yes	Yes	-	Yes	MIC-3924L-AE	-
MIC-3042B-AE	-	Yes	Yes	-	Yes	MIC-3924L-AE	AC cPCI 500 W + 250 W redundant (2+1)
MIC-3042CE	-	-	Yes	-	-	MIC-3924L-AE	-
MIC-3042C-AE	-	-	Yes	-	-	MIC-3924L-AE	AC cPCI 500 W + 250 W redundant (2+1)

Optional Accessories

Part Number	Description
1757000190G	One AC cPCI 250 W redundant power module
MIC-3927CE	MIC-3927 intelligent chassis management module (IPMI)





MIC-3043

4U CompactPCI® Enclosure with cPCI Power Supply and Removable HDD Bay (CT Bus or Non-CT Bus)



Features

- 6-slot 6U CompactPCI® backplane (CT or Non-CT Bus)
- Supports removable HDD bays (up to 2 3.5" SATA or up to 4 2.5" SATA/SAS drives)
- Built-in SATA slim-type DVD-RW/RAM
- AC cPCI 250 W + 250 W redundant (1+1) or 500W+250W (2+1) power supplies
- Supports hot-swappable fan modules
- PICMG 2.5 (CompactPCI Computer Telephony) compliance (MIC-3043D)
- Built-in alarm module (MIC-3924L-AE)

Introduction

The MIC-3043 is a 4U enclosure designed for mission-critical and high-reliability applications such as Networking, Telecommunication, Computer Telephony Integration, and Image Processing. It is equipped with a hot-swappable CompactPCI redundant power supply and hot-swappable fan modules to minimize MTTR (Mean-Time-to-Repair). The MIC-3043 supports six 6U CompactPCI blades and rear I/O transition boards. Users can route I/O signals to the rear transition boards for simplified system cabling. Front boards and RTMs can be swapped in and out the system without powering down. The MIC-3043 has removable SATA /SAS HDD bays and one slim DVD-RW as standard. The MIC-3043 has a high-quality backplane with impedance controlled design that supports 64-bit / 66 MHz cards. The H.110 CT Bus complies with PICMG 2.5, which is an open architecture ideal for telecom solutions.

Specifications

		MIC-3043D	MIC-3043E	MIC-3043F
Backplane	6U Slot	System x 1, Peripheral x 5, Rear transition x 6 (80 mm, IEEE1101.11 compliant)		
	H.110 CT Backplane	Yes	-	-
	Backplane	32-bit/33 MHz, 64-bit/66 MHz CompactPCI Rev. 3.0, PICMG2.9		
	V (I/O)	+3.3 V/+5 V (selectable)		
Cooling	Fan	2 (front: 193 CFM, rear: 61.3 CFM)		
Drive Bay	HDD	2 (3.5" SATA1)	2 (3.5" SATA1)	4 (2.5" SAS /SATA or SSD)
	Slim DVD-RW/RAM	1	1	1
Management Interface	Alarm Indicators	2 (fan failure and system overheating)		
Power Supply	Input	AC 100 ~ 240 V @ 50 ~ 60 Hz, full range (MIC-3043X-XX)		
	Output	AC cPCI 250 W redundant power module (1+1 configuration)		
		+3.3 V	+5 V	+12 V / -12 V
	Max. Load	36 A	50 A	10 A / 1 A
	Min. Load	0 A	2.0 A	0 A / 0 A
Reliability	MTBF	Backplane	Power supply	FAN
		800, 000 hours	100, 000 hours @ 70%	80000 hours @ 40°
Environment		Operating	Non-Operating	
	Temperature	0 ~ 45° C, (32 ~ 113° F)	-20 ~ 60° C, (-4 ~ 140° F)	
	Humidity	-	10 ~ 95% @ 40° C, non-condensing	
	Shock	10 G	30 G	
	Vibration (5 ~ 500 Hz)	1.0 Grms*	2.0 G	
Physical Characteristics	Dimensions (W x H x D)	440 x 177 x 320 mm (17.3" x 7" x 12.6")		
	Weight	18 kg (39.7 lb)		
Compliance	PICMG 2.0 R3.0 CompactPCI Specification PICMG 2.1 R2.0 CompactPCI Hot Swap Specification PICMG 2.11 R3.0 Front-Access Power Connectors Specification PICMG 2.5 R1.0 CompactPCI Computer Telephony Specification (MIC-3043D only)			
	RoHS, CE, FCC, UL, CCC			

Backplane Information

Physical Number	Function
6	I/O slot
5	System slot
4	I/O slot
3	I/O slot
2	I/O slot
1	I/O slot

MIC-3811, CT Bus backplane (for MIC-3043D)
MIC-3812, non-CT Bus backplane (for MIC-3043E, MIC-3043F)

Recommended Configurations

Enclosure	CPU Board	Rear I/O Board	Chassis Management Module	
MIC-3043DE MIC-3043D-BE	MIC-3392A-MxE, MIC-3392B-MxE, MIC-3392A2-MxE, MIC-3392B2-MxE, MIC-3392LE	RIO-3310S-A1E, RIO-3310S-A2E, RIO-3310AE, RIO-3310BE		
MIC-3043EE MIC-3043E-BE	MIC-3392A-MxE, MIC-3392B-MxE, MIC-3392A2-MxE, MIC-3392B2-MxE, MIC-3392LE	RIO-3310AE, RIO-3310S-A2E, RIO-3310S-A1E, RIO-3310BE		
MIC-3043FE (Preliminary) MIC-3043F-BE	MIC-3392A-MxE, MIC-3392B-MxE, MIC-3392A2-MxE, MIC-3392B2-MxE, MIC-3392LE MIC-3393A-M2E MIC-3393B-M2E MIC-3393C-M2E MIC-3393D-M2E MIC-3395A1-M4E MIC-3395A2-M4E MIC-3395B1-M4E MIC-3395C1-M4E	RIO-3310AE, RIO-3310S-A2E, RIO-3310S-A1E, RIO-3310BE RIO-3311-A1E RIO-3311-A2E RIO-3313-A1E RIO-3315-A1E RIO-3315-B1E RIO-3315-C1E	Included MIC-3924L-AE	Optional MIC-3927CE

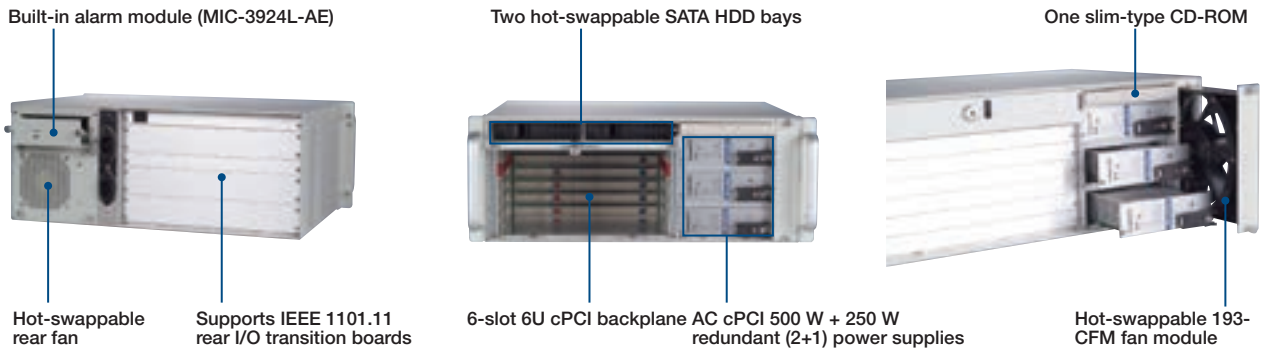
Ordering Information

Part Number	PICMG 2.5	HDD Bay	Media Support	Chassis Management Module	cPCI Power Supply
MIC-3043DE	Yes	3.5" SATA x 2	Slim DVD-RW/RAM	MIC-3924L-AE	-
MIC-3043D-BE	Yes	3.5" SATA x 2	Slim DVD-RW/RAM	MIC-3924L-AE	Hot-swap AC cPCI 250 W + 250 W
MIC-3043EE	-	3.5" SATA x 2	Slim DVD-RW/RAM	MIC-3924L-AE	-
MIC-3043E-BE	-	3.5" SATA x 2	Slim DVD-RW/RAM	MIC-3924L-AE	Hot-swap AC cPCI 250 W + 250 W
MIC-3043FE	-	2.5" SATA/SAS HDD/SSD x4	Slim DVD-RW/RAM	MIC-3924L-AE	-
MIC-3043F-BE	-	2.5" SATA/SAS HDD/SSD x4	Slim DVD-RW/RAM	MIC-3924L-AE	Hot-swap AC cPCI 250 W + 250 W

Note: Please contact your local distributor to order AC 500W + 250W (2+1) redundant power suppliers.

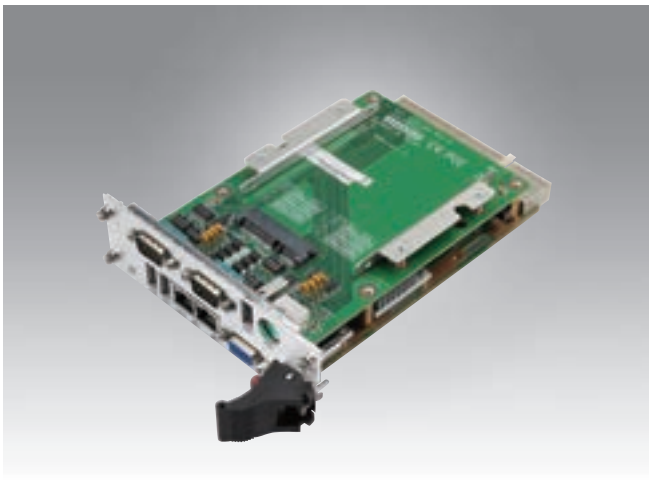
Optional Accessories

Part Number	Description
1757000190G	AC cPCI 250 W redundant power module
MIC-3927CE	MIC-3927 Intelligent chassis management module (IPMI)



MIC-3325

3U CompactPCI® Intel® Atom™ Dual Core D525/N455 Processor Blade



Features

- Dual Core Intel® Atom™ D525 processor/single core N455 processor
- Intel® I/O Controller Hub 8-Mobile (ICH8M)
- Two GB DDR3 onboard up to 800 MT/s
- Optimized CompactFlash socket on single board computer
- 2.5" SATA-II HDD on XTM second layer
- Two 10/100/1000 Mbps ports, two USB ports, one VGA port on front panel
- Two COM ports, one USB ports, one PS/2 port on 8HP second layer
- PICMG 2.0, R 3.0, PICMG 2.1, R 2.0 compliant

Introduction

Advantech's MIC-3325 is a 3U CompactPCI dual/single core processor blade based on the Intel® Atom™ processor D525/N455+ICH8M two-chip platform. It provides the high performance of 2 cores and 4 threads of processing power at lower cost, and with easier validation. The MIC-3325 fully utilizes the I/O features of the Intel® chipsets, including an integrated memory controller (IMC), integrated graphics processing unit (GPU) and integrated I/O (IIO) such as DMI. The low power requirements of the Intel® Atom™ processor makes operation in elevated temperature ranges possible. Breakthrough memory design puts 2GB SDRAM on board, while keeping the speed at DDR3 800MT/s. The on-board CPU and memory provide less weight and higher shock/vibration resistance than socket devices. With such benefits, the MIC-3325 can be used in mission-critical applications such as military defense, transportation, traffic control, test and measurement (T&M) as well as critical data acquisition & control applications. MIC-3325 uses the Intel® ICH8M as the PCH, which provides extensive I/O support. The Integrated Gigabit Ethernet Controller can operate at multiple speeds (10/100/1000 Mb/s) and in either full duplex or half duplex mode. A flexible 8HP extension module design provides the MIC-3325 with great flexibility and additional I/O connectivity to the customer. For more connectivity details, please contact an Advantech representative.

Specifications

Processor System	CPU	Intel Atom N455 Single Core 1.66 GHz Intel Atom D525 Dual Core 1.8 GHz
	Max. Speed	1.8 GHz
	Chipset	Intel ICH8M @ Pine View-D Platform
	BIOS	SPI 2-MByte BIOS
	DMI	100 MHz reference clock
CompactPCI Interface	J1 Connector	32-bit PCI local bus (33MHz)
	J2 Connector	RTM area
Memory	Technology	DDR3-800 SDRAM
	Max. Capacity	2 GB
	On board/socket	On board
Graphics	Chipset	Integrated in Intel Atom N455/D525
	Resolution	Intel Atom N455 Single Core up to 1400 x 1050 (SXGA) Intel Atom D525 Dual Core up to 2048 x 1536
Ethernet	Controller	2Xi82583V
	Interface	10/100/1000 Mbps
	I/O Connector	RJ-45 x 1 (front panel), RJ-45 x 1 (RTM)
	Controller	ICH8M (MAC)+82567 (PHY)
	Interface	10/100/1000 Mbps
	I/O Connector	RJ-45 x 1 (front panel)
Storage	IDE	1 x CompactFlash Socket Type II
	SATA	1 x Internal SATA connector only on 8HP version
Front I/O	VGA	DB15 Port
	Ethernet	2 x 10/100/1000 Mbps RJ-45 connector
	USB 2.0	2 x Type A ports
	LEDs	Power, Hot Swap
	8HP-option A	2 x DB9 RS-232, 1 x USB Type A port, 1 x PS/2 port

Specifications (Cont.)

RIO (J2 interface)	SATA	1 SATA-II (internal)	
	VGA	1 port	
	COM	2 ports (internal)	
	USB 2.0	2 ports	
	RJ-45	1 PCIex1 based on i82583V MAC/PHY	
Watchdog Timer	Supervision	0 ~ 255s, 1s step, generate reset signal	
Operating System	Compatibility	Microsoft Windows XP Professional, Windows 7, Windows XPE, Redhat6.1	
Power Requirement	Configuration	4HP, w/o RIO	
	Consumption	16.6 W for D525, 14.6 W for N455 (4HP with peripherals)	
Physical Characteristics	Dimensions (W x D)	4HP, 160.00 x 100.00 mm (6.30" x 3.95") (PCB size)	
	Weight	0.4 kg including XTM	
Environment		Operating	Non-operating
	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)
	Humidity	5 to 95% @ 40°C (non condensing)	95% @ 60° C (non-condensing)
	Shock	10 G, 11ms	30 G, 11ms
	Vibration	1.06 Grms (5 ~ 100 Hz, without on-board HDD)	2 Grms (5 ~ 500 Hz)
Regulatory Compliance	Conformance	FCC, Class A, CE, RoHS	
	Standard	PICMG 2.0 Rev. 3.0 compatible; PICMG 2.1 R2.0 CompactPCI Hot Swap Specification	

Ordering Information

Part Number	Description
MIC-3325D-D2E	MIC-3325 with D525 CPU 2G RAM XTM dual slot
MIC-3325D-S2E	MIC-3325 with D525 CPU 2G RAM single slot
MIC-3325N-D3E	MIC-3325 w/ N455 CPU 2G RAM 8HP-2 XTM dual slot
MIC-3325N-S2E	MIC-3325 with N455 CPU 2G RAM single slot
MIC-3525-S1E	ASS'Y MIC-3525 A101-1 Rear IO for MIC-3325
MIC-3325XTM-S1E	3U CPCI Extension Board for MIC-3325

Optional Accessories

Part Number	Description
MIC-3525-S1E	Rear I/O for MIC-3325 with VGA, LAN, USB, SATA, COM
MIC-3611/3-AE	4-port RS-232/422/485
MIC-3716/3-A	3U 250kS/s, 16-bit, 16-ch multifunction Card
MIC-3756/3-A	64-ch Isolated DI/O Card
MIC-3680/3-A	2-port CAN Card

MIC-3326

3U CompactPCI Intel® Atom™ N455 Low Power Processor Blade



Features

- Dual Core Intel® Atom™ single core N455 processor
- Intel® I/O Controller Hub 8-Mobile (ICH8M)
- 1 GB DDR3 onboard up to 800 MT/s (Max 2GB)
- Optimized CompactFlash socket on single board computer
- Second storage choice CFast on XTM second layer
- Two 10/100/1000Mbps ports, two USB ports, 1 VGA port on front panel
- 2 fiber ports, 2 RJ45 ports, or 4 RJ45 ports on 8HP second layer
- Conduction cooled
- PICMG2.0, R3.0, PICMG2.1, R2.0 compliant

RoHS COMPLIANT 2002/95/EC

Introduction

Advantech's MIC-3326 is a 3U CompactPCI single core processor blade based on the Intel® Atom™ N455+ICH8M two-chip platform. It provides the low power and cost-effective performance, and with easier validation. The MIC-3326 fully utilizes the I/O features of the Intel® chipsets, including an integrated memory controller (IMC), integrated graphics processing unit (GPU) and integrated I/O (IIO) such as DMI. The low power requirements of the Intel® Atom™ processor makes operation in elevated temperature ranges possible. Breakthrough memory design puts up to 2GB SDRAM on board, while keeping the speed at DDR3 800MT/s. The direct-soldered CPU and memory provide less weight and higher shock/vibration resistance than socket devices. With such benefits, the MIC-3326 can be used in mission-critical applications such as energy, transportation, traffic control, test and measurement (T&M) as well as critical data acquisition & control applications.

MIC-3326 uses the Intel ICH8M as the PCH, which provides extensive I/O support. The Integrated Gigabit Ethernet Controller can operate at multiple speeds (10/100/1000 Mb/s) and in either full duplex or half duplex mode. A flexible 8HP extension module design provides the MIC-3326 with great flexibility and additional I/O connectivity to the customer. For more connectivity details, please contact an Advantech representative.

Specifications

Processor System	CPU	Intel Atom N455 Single Core 1.66 GHz
	Max. Speed	1.66GHz
	Chipset	Intel ICH8M @ Pine View-D Platform
	BIOS	SPI 2-MByte BIOS
	DMI	100 MHz reference clock
CompactPCI Interface	J1 Connector	32-bit PCI local bus (33MHz)
	J2 Connector	RTM area
Memory	Technology	DDR3-800 SDRAM
	Max. Capacity	2 GB
	On board/socket	On board
Graphics	Chipset	Integrated in Intel Atom N455
	Resolution	Intel Atom N455 Single Core up to 1400 x 1050 (SXGA)
Ethernet (4HP)	Controller	2 x i82583V
	Interface	10/100/1000 Mbps
	I/O Connector	RJ-45 x 1 (front panel), RJ-45 x 1 (RTM)
	Controller	ICH8M(MAC) + 82567(PHY)
	Interface	10/100/1000 Mbps
	I/O Connector	RJ-45 x 1 (front panel)
Ethernet (8HP)	Controller	2 x IC plus + 2 x i82583V
	Interface	100 Mbps fiber or 10/100/1000BASE-T
	I/O Connector	SFP x 2 or RJ-45 x 2
	Controller	2 x i82583V
	Interface	10/100/1000 Mbps
	I/O Connector	RJ-45 x 4 (8HP front panel)
Storage	IDE	1 x CompactFlash Socket Type II
	SATA	1 x Internal CFast connector only on 8HP version
Front I/O	VGA	DB15 Port
	Ethernet	2 x 10/100/1000 Mbps RJ-45 connector
	USB 2.0	2 x Type A ports
	8HP-option A	2 x RJ-45, SFP x 2
	8HP-option B	4 x RJ-45

Specifications (Cont.)

RIO (J2 interface)	SATA 2	SATA-II (internal)	
	VGA	1 port	
	COM	2 ports (internal)	
	USB 2.0	2 ports	
	LAN LEDs	2	
Watchdog Timer	Supervision	0 ~ 255s, 1s step, generate reset signal	
Operating System	Compatibility	Microsoft Windows XP Professional, Windows 7, Windows XPE, Redhat6.1, Debian4.0	
Power Requirement	Configuration	8HP, w/o RIO	
	Consumption	16.7W (8HP with peripherals)	
Physical	PCB Dimensions	4HP, 160.00 x 100.00 mm (6.30" x 3.95") (W x H)	
	Weight	0.4kg including XTM	
Environment		Operating	Non-operating
	Temperature	-25 ~ 60° C (-13 ~ 140° F)	- 40 ~ 85° C (-40 ~ 185° F)
	Humidity	5 to 95% @ 40° C (non condensing)	95% @ 60° C (non-condensing)
	Shock	10 G, 11ms, each face three times	30 G, 11ms, each face three times
	Vibration	1.06Grms (5 ~ 100 Hz)	Sine 2 Grms, 30mins each axis(5 ~ 500 Hz)
Regulatory	Conformance	FCC, Class A, CE, RoHS	
Compliance	Standard	PICMG 2.0 Rev. 3.0 compatible; PICMG 2.1 R2.0 CompactPCI Hot Swap Specification	

Ordering Information

Model Number	Configuration
MIC-3326N-D1E	MIC-3326 with N455 CPU 1G RAM dual slot

Related Products

Model Number	Configuration
MIC-3525-S1E	Rear I/O for MIC-3325 with VGA, LAN, USB
MIC-3611/3-AE	4-port RS-232/422/485
MIC-3716/3-A	3U 250kS/s, 16-bit, 16-ch multifunction Card
MIC-3756/3-A	64-ch Isolated DI/O Card
MIC-3680/3-A	2-port CAN Card

MIC-3328

3U CompactPCI PlusIO Intel® 3rd Generation Core™ Processor Blade



Features

- Supports 3rd Generation Intel® Core™ processor
- Intel® QM77 Platform Controller Hub
- 4 GB DDR3-1600 soldered SDRAM with ECC (max 8GB)
- Triple independent display support
- Optional SATA NAND Flash on board
- 2.5" SATA-II SSD, CFast, XMC on 8HP version
- Two 10/100/1000 Mbps ports, two USB 3.0 ports, 1 VGA port on front panel (4HP)
- Two COM ports, 2 Display ports, 1 PS/2 port (8HP)
- Supports CompactPCI PlusIO
- PICMG2.0, R3.0 , PICMG2.1, R2.0, PICMG2.30 compliant

CompactPCI® PlusIO

RoHS COMPLIANT 2002/95/EC

Introduction

Advantech's MIC-3328 is a 3U CompactPCI PlusIO CPU blade based on the Intel® 3rd generation Core™ processor family. Based on latest 22nm process technology these processors support up to two cores / four threads at up to 2.5GHz and up to 6M last level cache. With Intel HD Graphics(Gen7, DX11, OCL1.1) integrated into the CPU, the MIC-3328 can serve applications demanding high performance, high resolution video output on up to three independent display interfaces. Latest DDR3 DRAM up to 8GB running at 1600MT/s complement the powerful processor with high performance, ECC protected onboard memory.

MIC-3328's design for reliability like using soldered processor, DRAM and flash storage for enhanced shock and vibration tolerance make it an ideal choice for workstation workloads in harsh environments and mission/business-critical applications such as military, transportation, test & measurement and traffic control. The enhanced fixed point and floating point performance offered by the intel Core™ processor, improvements in the vector processing instruction set (AVX) along with the possibility to utilize the integrated GPU via standard interfaces such as OpenCL make the MIC-3328 also a great fit for signal processing applications such as radar, beam forming or image processing.

For best in class IO performance, MIC-3328 uses the Intel QM77 PCH, which provides extensive I/O support such as USB3.0, PCI Express gen.2 and SATA-III ports. Three i210 Gigabit Ethernet Controllers provide front panel as well as rear panel network connectivity. The i210 provides higher performance over previous Gigabit Ethernet controllers, better support for virtualization, Energy Efficient Ethernet and ECC protected packet buffers for enhanced reliability. Support for timestampping and synchronization is accomplished via IEEE1588 (PTP). Support for industrial Ethernet protocols such as ProfiNet, EtherCAT and Powerlink is available via third party software partners.

For dense applications the MIC-3328 is available with a 4HP front panel, occupying a single slot, only. For applications requiring additional IO and/or peripheral support, the MIC-3328 can be extended to 8HP (2 slots) via specific extension modules (XTMs). For industrial display or workstation applications, a graphics-centric XTM routes two Display Ports from the PCH for triple display support, adds 2 COM ports for data acquisition and control plus a PS/2 and 2.5" SSD. A second XTM provides a XMC mezzanine slot for industry standard extension modules like Advantech's MIC-3666 dual 10GE adapter card. The XMC slot supports a PCI Express x8 interface directly into the Intel CoreTM processor with speeds up to 64Gbps according to PCI Express 3.0.

While support for legacy CompactPCI is provided on J1 via an onboard PI7CX110 bridge, the MIC-3328 supports an UHM J2 connector according to PCIMG2.30 (PlusIO). While this connector maintains backwards compatibility and interoperability with legacy systems, it makes state of the art serial interfaces such as Gigabit Ethernet, PCI express, USB and SATA available for use on a Rear transition Module (RTM) or on a hybrid backplane supporting legacy IO cards as well as CompactPCI Serial peripheral cards as defined in PICMG2.30. Thus, MIC-3328 provides a smooth, risk free and future proof migration path from legacy parallel PCI bussed CompactPCI system to latest serial interface standard predominant in the computer industry. With full backwards compatibility to CompactPCI, customers investments stay protected while the door is opened for platform enhancements and innovations via the new serial interfaces. The MIC-3328 supports interfaces such as 4 PCI Express x1 gen. 2 links for IO extension, one GbE for computer to computer multiprocessing, three SATA for Hard drives and RAID systems as well as 4 USB ports for wireless interfaces and legacy interface replacement.

For more information about CompactPCIPlusIO and Serial offerings from Advantech or information on how this new platform can help you to gain competitive advantages, please contact your Advantech representative.

Specifications

Processor System	CPU	Intel 3nd Generation Core i3/i5/i7 up to 2.5 GHz (6MB L2 cache)
	Platform Controller Hub	Intel QM77
	BIOS	Customized AMI Aptio UEFI BIOS
CompactPCI Interface	J1 Connector	32-bit PCI local bus (33MHz)
	J2 Connector	Customized AMI Aptio UEFI BIOS
Memory	Technology	DDR3-1600MHz SDRAM, dual channel with ECC support
	Max. Capacity	8 GB
	On board/socket	Soldered
Graphics	Chipset	Integrated in Intel CPU
	Resolution	VGA 2048 x 1536 pixels with 32-bit color at 75 Hz Display port 2560 x 1600 at 60 Hz

Specifications (Cont.)

Ethernet	Controller	3 x i210AT	
	Interface	10/100/1000 Mbps	
	I/O Connector	RJ-45 x 2 (front panel), RJ-45 x 1 (RTM / PlusIO)	
Storage	IDE	1 x CFast Socket on 8HP	
	SATA	1 x SATA NAND Flash on 4HP, 1 x Internal SATA connector on 8HP version	
Front I/O	VGA	DB15 Port	
	Ethernet	2 x 10/100/1000 Mbps RJ-45	
	USB 3.0	2 x Type A	
	8HP XTM	Option A: 2 x RJ-45, RS-232, 2 x Display port, 1 x PS/2 port Option B: XMC (PCIex8 gen.3) front IO	
RIO (4HPJ2 interface)	PCIE	4 x PCIex1 Gen 2	
	SATA	2 x SATA-II, 1 x SATA-III	
	RJ45	1 GbE based on i210AT	
	USB 2.0	4 ports	
RIO (8HP-A J2 interface)	Switchable from 8HP	2 x RJ-45, RS-232, 2 x Display port, 1 x PS/2 port	
Watchdog Timer	Supervision	0 ~ 255s, 1s step, generate reset signal	
Operating System	Compatibility	Microsoft Windows XP Professional, Windows 7, Windows XPE, VxWorks, Linux	
Power Requirement	Configuration	4HP 17w/25w, w/o RIO	
	Consumption	Estimate 24W/32W	
Physical	PCB Dimensions	4HP or 8HP, 160.00 x 100.00 mm (6.30" x 3.95") (W x H)	
	Weight	0.7kg including XTM	
Environment		Operating	Non-operating
	Temperature	0 ~ 60° C (32 ~ 140° F)	- 40 ~ 85° C (-40 ~ 185° F)
	Humidity	5 to 95% @ 40°C (non condensing)	95% @ 60° C (non-condensing)
	Shock	10 G, 11ms, each axis three times	30 G, 11ms, each axis three times
	Vibration	1.06Grms (5 ~ 100 Hz, without HDD on 8HP)	Sine 2 Grms, 30mins each axis (5 ~ 500 Hz)
Regulatory	Conformance	FCC, Class A, CE, RoHS	
Compliance	Standard	PICMG 2.0 Rev. 3.0, PICMG 2.1 R2.0, PICMG2.30 PlusIO compatible	

Ordering Information

Model Number	Configuration
MIC-3328A1-D1E	MIC-3328, 3517UE 8G RAM, w/ 8HP-1, 2 DP, 2 COM, PS/2
MIC-3328B1-D1E	MIC-3328, 3555LE 8G RAM, w/ 8HP-1, 2 DP, 2 COM, PS/2
MIC-3328C1-D1E	MIC-3328, 3612QE 8G RAM, w/ 8HP-1, 2 DP, 2 COM, PS/2
MIC-3328A1-D2E	MIC-3328, 3517UE 8G RAM, w/ 8HP-2, XMC
MIC-3328B1-D2E	MIC-3328, 3555LE 8G RAM, w/ 8HP-2, XMC
MIC-3328C1-D2E	MIC-3328, 3612QE 8G RAM, w/ 8HP-2, XMC
MIC-3328A1-S1E	MIC-3328, 3517UE 8G RAM Single slot, 2 LAN, VGA, 2 USB
MIC-3328B1-S1E	MIC-3328, 3555LE 8G RAM Single slot, 2 LAN, VGA, 2 USB
MIC-3328C1-S1E	MIC-3328, 3612QE 8G RAM Single slot, 2 LAN, VGA, 2 USB

Related Products

Model Number	Configuration
MIC-3526R-S1E	RTM, 4 USB, 1 RJ45 LAN, 1 mSATA flash CONN, 1 Mini-PCIe Wireless LAN CONN, 2 SATA CONN
MIC-3526R-S2E	RTM for MIC-3328 8HP, 2 DP, 2 COM, PS/2
MIC-3666-AE	XMC board with dual 10Gbe SFP+
MIC-3022CE	3U enclosure, 8slots, 32-bit/33 MHz/66 MHz
MIC-3611/3-AE	4-port RS-232/422/485
MIC-3716/3-A	3U 250kS/s, 16-bit, 16-ch multifunction Card
MIC-3680/3-A	2-port CAN Card

MIC-3392Rev2

6U CompactPCI® Intel® Core™2 Duo Processor-based Board with Dual PCIe GbE/DDR2/SATA/PMC



Features

- Supports Intel® Core™2 Duo processor
- Intel® 945GME chipset supports 533/667 MHz FSB
- Up to 3 GB (DDR2 533/667) memory with SODIMM expansion
- Comprehensive I/O capability, dual Gigabit Ethernet, SATA, CompactFlash
- One 64-bit/66 MHz PMC expansion slot, and optional second 64-bit/66 MHz PMC expansion slot
- PICMG 2.16, R1.0 packet switching backplane specification compliant
- PICMG 2.9, R1.0 IPMI specification compliant
- PICMG 2.1, R2.0 hot-swap specification compliant
- Selectable System/Peripheral mode

RoHS COMPLIANT 2002/95/EC

Introduction

The MIC-3392 is a high performance, power efficient CompactPCI single board computer based on the Intel® Core™2 Duo processor. It combines the benefits of two execution cores with Intel® intelligent power management features to deliver significantly greater performance per watt over previous Intel processors. The two execution cores share a power-optimized 667 MHz front side bus to access the same system memory. To save power, address and data buffers are turned off when there is no activity. The MIC-3392 uses PCI Express (PCIe) technology to maximize I/O throughput. It supports up to 3 GB of 667 MHz DDR2 RAM (6.4 GB/s throughput), an onboard 2.5" Serial ATA HDD and a CompactFlash slot. Two front-accessible PCI Express (PCIe) Gigabit Ethernet (GbE) ports provide a bidirectional bandwidth of 2 Gb/s. In addition, the MIC-3392 supports Rear Transition Boards and PCI Mezzanine Cards for further expansion options.

Specifications

Processor System	CPU (Not Included)	Intel Core 2 Duo T7400, Core Duo T2500, Celeron 530 or Celeron M 440 processor (Enclosure with forced air cooling is required)
	Max. Speed	2.16 GHz (up to 4 MB L2 cache)
	Chipset	Intel 945GME
	BIOS	AMI 8 M-bit flash
Bus	Front Side Bus	533/667 MHz
	PCI	Up to 64-bit/100 MHz
Memory	Technology	DDR2 533/667 SDRAM
	Max. Capacity	3 GB
	Socket	SODIMM x 1 1 GB/ 2 GB memory integrated on board
Graphics	Controller	Intel 945GME integrated
	VRAM	Dynamic
	Resolution	Up to 2048 x 1536, 64k color at 75 Hz
Ethernet	Interface	10/100/1000 Mbps Ethernet
	Controller	Intel 82573E x 2
	I/O Connector	RJ-45 x 2 (front)
Storage	Mode	SATA
	Channels	1
	Storage Site	One SATA connector and space reserved for embedded 2.5" HDD
Bridge	Bus	PCI 64-bit/66 MHz
	Interface	Universal (System/Peripheral mode capability)
I/O Interface	Serial (COM1)	RJ-45 x 1 (front)
Operating System	Compatibility	Windows Vista/XP/2000, Linux
Hardware Monitor	Controller	Winbond W83627DHG
	Monitor	CPU temperature, +3.3 V, +5 V, +12 V
Watchdog Timer	Output	System reset
	Interval	Programmable, 0 ~ 255 sec.
PMC	Site	1 or 2
	Interface	IEEE1386.1 64-bit/66 MHz on A version PMC1 and PMC2 are 64-bit/66 MHz on B version
	Signal	+5 V/+3.3 V compliant

Specifications (Cont.)

Miscellaneous	Solid State Disk	One CompactFlash socket			
	LEDs	HDD, Power, Hot Swap, system/peripheral			
	USB 2.0	2 channels			
	Real Time Clock	Built-in to the South Bridge			
Power Requirement (Intel Core 2 Duo 2 GHz with 2 GB memory)	Voltage	+3.3 V	+5 V	+12 V	-12 V
	Typical	2.66 A	3.04 A	0.39 A	0 A
	Maximum	3.17 A	7.16 A	0.40 A	0 A
Physical Characteristics	Dimensions (W x D)	233.35 x 160 mm (9.19" x 6.3"), 1-slot width			
	Weight	0.8 kg (1.76 lb)			
Environment		Operating		Non-Operating	
	Temperature *	0 ~ 60° C (32 ~ 140° F)		-20 ~ 60° C (-4 ~ -140° F)	
	Humidity	-		95% @ 60° C (non-condensing)	
	Vibration	5 ~ 500 Hz 1.5 Grms (without on-bard HDD)		5 ~ 500 Hz, 3.5 Grms	
	Altitude	4000 m above sea level			
Regulatory	Conformance	FCC Class A, CE			
	NEBS Level 3	Design for GR-63-Core & GR-1089-Core			
Compliance	Standard	PICMG 2.0, R3.0 CompactPCI Specification PICMG 2.1, R2.0 Hot-Swap Specification PICMG 2.9, R1.0 IPMI Specification PICMG 2.16, R1.0 Packet Switching Backplane Specification			

*Note: Optional large heatsink available but only adapted to single PMC model. Please contact your local distributor for ordering information.

Recommended Configurations

CPU Board	PMC Module	Rear I/O Board	Enclosure
MIC-3392A2-MxE, MIC-3392B2-MxE	MIC-3665-AE, MIC-3665-BE	RIO-3310AE, RIO-3310S-A1E, RIO-3310S-A2E	MIC-3042, MIC-3043

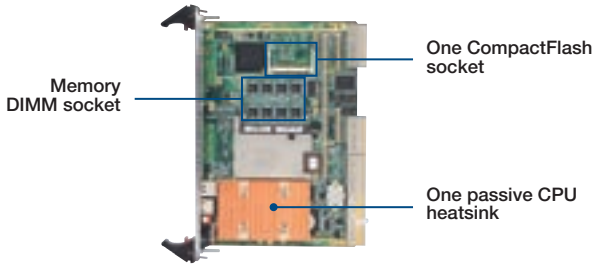
Rear Transition Board

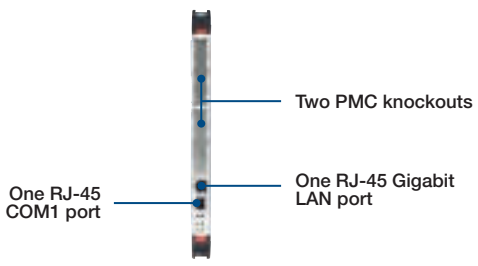
Part	Rear Panel							Onboard Header/Socket/Connector							
	KB & Mouse	COM2 *	GbE LAN	VGA	USB	10/100 Mbps LAN	SCSI **	IDE	SATA	FDD	SCSI**	PRT	USB	Slot Width	Conn.
RIO-3310S-A1E	1	1	2	1	1	1	-	1	1	1	1	1	1	1	J3/J5
RIO-3310S-A2E	1	1	2	1	1	1	1	1	1	1	1	1	1	1	J3/J5
RIO-3310AE	1	1	2	1	1	1	-	1	1	1	-	1	1	1	J3/J5

*Note: Optional 3rd LAN port occupies the rear COM2 port
**Note: Internal Ultra 320 SCSI port with optional external rear I/O port

Ordering Information

Model Number	Front Panel I/O					Main Onboard Features				
	LAN	COM	PMC	USB	VGA	CPU	Memory	CF Socket	Storage Channel	Slot Width
MIC-3392A2-M1E	2	1	1	2	1	-	1 GB	1	1	1
MIC-3392A2-M2E	2	1	1	2	1	-	2 GB	1	1	1
MIC-3392B2-M1E	1	1	2	-	-	-	1 GB	1	1	1
MIC-3392B2-M2E	1	1	2	-	-	-	2 GB	1	1	1

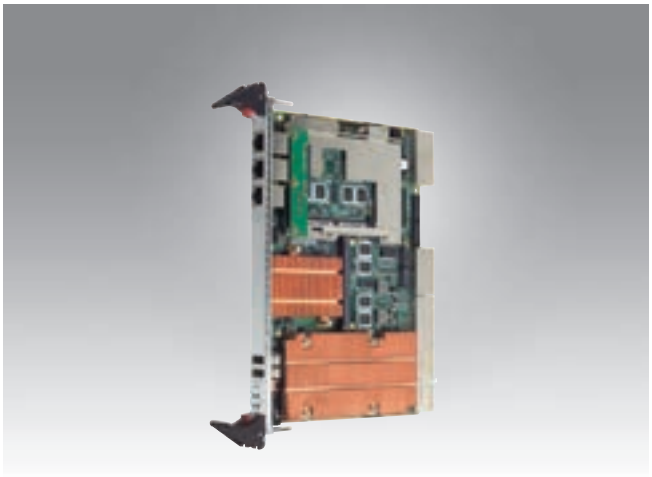




Note: These pictures are based on the "MIC-3392B2-M1E" model.

MIC-3393

6U CompactPCI® Intel® Xeon® Processor Quad/Dual Core Blade



Features

- Supports 45 nm Intel® Xeon® Low Voltage/Ultra Low Voltage processor
- Intel® 5100MCH chipset supports 1066/1333 MHz FSB
- Up to 6 GB (DDR2 533/667) ECC memory
- Optimized design in one or two slots SBC with 2.5" SATA HDD/CompactFlash socket
- Optional Extension Module on 8HP version supports two XMCs/PMCs, two 2.5" SATA HDDs or VGA display output
- TPM, three GbE ports, six SATA ports, four USB 2.0 ports, one VGA port, three RS-232 ports, one PS/2 connector, and PCIe x1, PCIe x4 interfaces to the Rear Transition Module (RTM)
- Built-in Intel® I/OAT technology for enhanced I/O performance
- PICMG 2.16 R1.0, PICMG 2.9 R1.0, PICMG 2.1 R2.0 compliant

CompactPCI® FCC CE RoHS COMPLIANT 2002/95/EC

Introduction

Experience true server class performance on CompactPCI. Using Intel® 45nm 64-bit Xeon technology with up to four Cores at 2.33 GHz combined with the powerful Intel® 5100MCH/ICH9R chipset, the MIC-3393 blade boosts computing and I/O performance deploying the latest virtualization, multi-threading and I/OAT acceleration techniques. Enhanced Xeon® packaging, front side bus parity, onboard, soldered DRAM with ECC support and RASUM features integrated in the 5100 MCH combined with PICMG2.9, IPMI-based management make the MIC-3393 a highly available and reliable high performance computing engine. The comprehensive I/O subsystem includes a 2.5" SATA HDD or CompactFlash slot, three advanced Gigabit Ethernet controllers, two UARTs, USB ports and a TPM. The addition of PCIe links to the RTM further enhances versatility compared to previous generation blades resulting in best-in-class connectivity.

The RIO-3311 RTM module supports one PS/2 connector with both keyboard and mouse ports, three USB ports, two RS-232 ports, 2 SATA ports, a PCIe based server graphics controller with VGA port, a USB port for USB NAND flash module, and alternate cabling for the three Gigabit Ethernet ports of the MIC-3393. In case the SATA disk drives and SATA RAID support of the ICH9R do not meet performance and reliability requirements, the RIO-3311 SAS version supports a 4-port SAS controller with RAID and failover support.

The MIC-3393 is outfitted with single slot (4HP) or dual slot (8HP) front panels to match CPU performance, CPU power dissipation, and system cooling capabilities. The 8HP version of the blade can be extended with a MIC-3312 mezzanine module which can carry two XMCs/PMCs or two 2.5" SATA HDDs to support enhanced I/O modularity and additional mass storage options; or extended with a MIC-3313 mezzanine module which support one VGA display output. If further combine with rear I/O board RIO-3313, the CPCI system can support dual display.

Specifications

Processor System	CPU	Quad-Core/Dual-Core Intel Xeon processor LV or Dual-Core Intel Xeon processor ULV up to 2.66 GHz
	Chipset	Intel 5100MCH/ICH9R
	Front Side Bus	1066/1333 MHz with parity protection
	BIOS	Redundant AMI 2MByte SPI flash
Memory	Technology	Dual channel DDR2 533/667 MHz with ECC
	Max. Capacity	2 GB onboard, max. 6 GB total
	Socket	SODIMM x2
CompactPCI Interface	J1~J2 Connectors	64-bit/66 MHz PCI local bus + RTM
	J3 Connector	PICMG2.16 + RTM
	J5 Connector	RTM
	Bridge	Pericom PI7C9X130DNDE + PLX PCI 6540CB
	Mode	System Master/Drone (Standalone)
Ethernet	Controller	2 Intel 82574L single-port Gigabit Ethernet controllers
	Interface	10/100/1000 Mbps Ethernet
	I/O Connector	PICMG2.16 x 1, RJ-45 x1 or RTM x 2
	Controller	Intel ICH9R MAC and Intel 82566DM Gigabit Ethernet PHY
	Interface	10/100/1000 Mbps Ethernet
	I/O Connector	RJ-45 x 1 or RTM x 1
Graphics (on RTM)	Controller	XGI Volari Z11 PCIe Server graphics with 32 MB VRAM
	Resolution	Up to 1600 x 1200, 64k hi-color at 70Hz
Storage	Type	SATA-II
	Channels	1 channel. onboard SATA HDD carrier (default) or CF disk carrier (option)* 2 channels. to RTM 2 channels to extension module (8HP only)
Front I/O	USB 2.0	2 type A
	COM	1 RS-232 on RJ-45
	LAN	2 10/100/1000 Mbps on RJ-45
	Front Panel LEDs	x 1 blue/yellow for Hot Swap/HDD, x 1 green for Master/Drone, x 1 yellow BMC Heartbeat, and x 1 green for Power
	Buttons	CPU and BMC reset buttons

Specifications (Cont.)

Rear I/O	USB	4 ports	
	COM	2 ports	
	LAN	3 10/1000/1000 Mbps	
	SATA	2 ports	
	PCIe	1 PCIe x1, 1 PCIe x4	
	Others	PS/2 for keyboard & mouse	
BIOS	CMOS	Battery backed up with backup copy in EEPROM	
	Boot Options	SATA, SAS, USB ports, USB flash disk, network (PXE)	
	Console	VGA or console redirection over COM Port, SoL supported by BMC	
	Other	Supports operation without disk, keyboard, video	
Watchdog Timer	Output	Local Reset and Interrupt	
	Interval	Programmable 1s ~ 255s	
Hardware Monitor	Controller	Winbond 83627DHG: voltages, CPU, chipset, board temperature	
BMC	Controller	Renesas H8S 2167, IPMIv2.0 compliant	
Operating System	Compatibility	Windows XP 32/64 bit, Windows Server 2008 32/64 bit, Windows Server 2003 32/64 bit, Linux	
Power Requirement	Configuration	4HP	8HP
	TDP (max./typ.)	60W / <50W	90W / <75W
Physical Characteristics	Dimensions & Weight	6U /1 slot width (4HP), 233.35 x 160 x 20 mm (9.2" x 6.3" x 0.8"), 1.03 kg (2.27 lb) 6U /2 slots width (8HP), 233.35 x 160 x 40 mm (9.2" x 6.3" x 1.6"), 1.42 kg (3.14 lb)	
Environment		Operating	Non-operating
	Temperature	0 ~ 55° C (32 ~ 122° F)	-40 ~ 85° C (-40 ~ 185° F)
	Humidity	95 %@ 40° C, non-condensing	95 %@ 60° C, non-condensing
	Vibration	5 ~ 500Hz, 2Grms (4HP), 1Grms (8HP) (without on-board 2.5" SATA HDD)	5 ~ 500Hz, 3.5Grms
	Bump	-	15G, 6ms (without on-board 2.5" SATA HDD)
	Altitude	4, 000m above sea level	
Regulatory	Conformance	FCC Class A, CE, RoHS	
	NEBS Level 3	Designed for GR-63-Core and GR-1089-Core	
Compliance	Standards	PICMG2.0 R3.0, PICMG2.1 R2.0, PICMG2.9 R1.0, PICMG2.16 R1.0	

Supported CPU Configurations

Intel CPU Model Number	CPU architecture	# Cores	Freq.	Cache	FSB	CPU TDP	Required airflow for single slot width	Required airflow for dual slot width
L5410	45 nm	4	2.33 GHz	12 MB	1333 MHz	50W	60CFM	35CFM
L5408	45 nm	4	2.13 GHz	12 MB	1066 MHz	40W	50CFM	30CFM
L5238	45 nm	2	2.66 GHz	6 MB	1333 MHz	35W	40CFM	25CFM
L5215	45 nm	2	1.86 GHz	6 MB	1066 MHz	20W	20CFM	15CFM
L3014	45 nm	1	2.4 GHz	3 MB	1066 MHz	30W	50CFM*	30CFM

*Note: These CPUs support extended case temperature and are qualified for NEBS environments
**Note: Strong airflow required for the L3014 CPU is restricted to its thermal specification (Tc 60° C)

Recommended Configurations

CPU Board	Extension Module	Rear I/O Board
MIC-3393A-M2E	-	RIO-3311-A1E or RIO-3311-A2E
MIC-3393B-M2E	MIC-3312-A1E	RIO-3311-A1E or RIO-3311-A2E
MIC-3393C-M2E	MIC-3312-A2E	RIO-3311-A1E or RIO-3311-A2E
MIC-3393D-M2E	MIC-3313-A1E	RIO-3311-A1E, RIO-3311-A2E or RIO-3313-A1E*

*Note: RIO-3313-A1E must be used with MIC-3313-A1E

Ordering Information

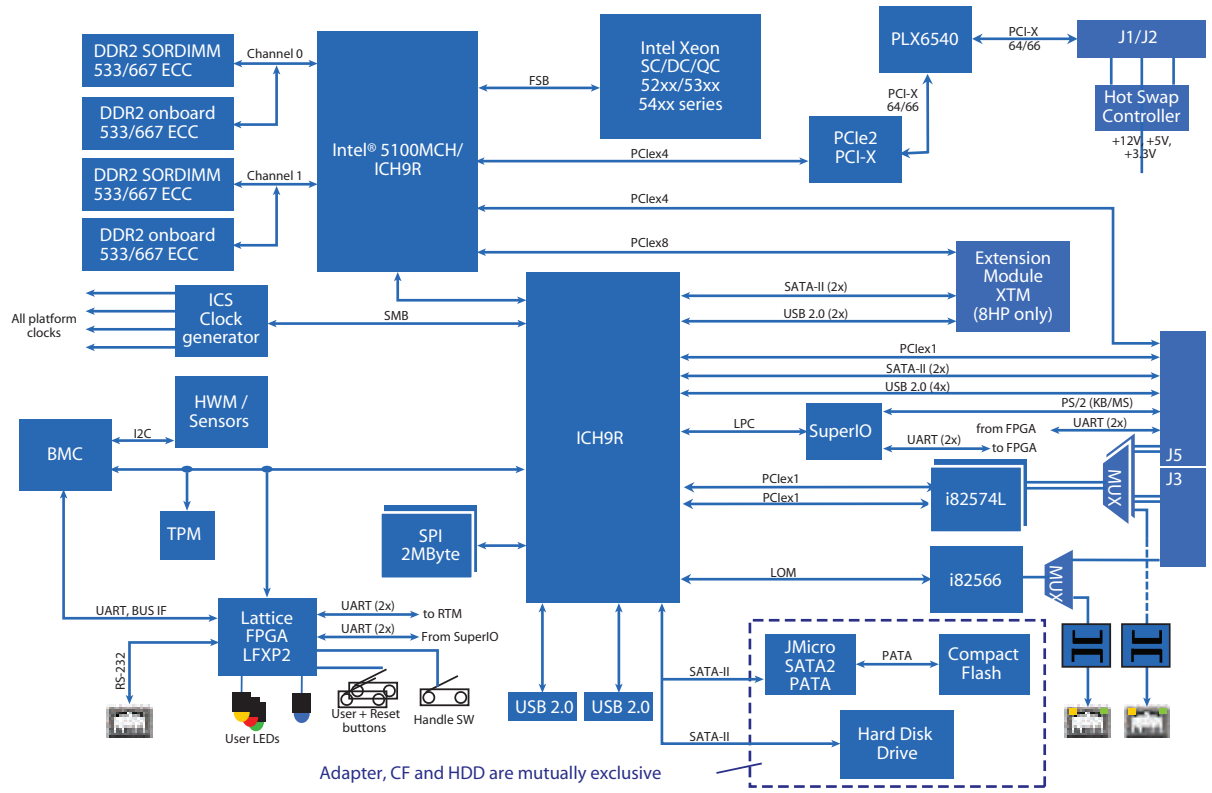
System Board	Front Panel					Main On-board Features				Extension Module
	LAN	COM	USB	XMC/PMC Knockout	VGA Knockout	Memory	SATA HDD Socket	CF Socket	Slot Width	
MIC-3393A-M2E	2	1	2	-	-	2 GB	1	1	1	-
MIC-3393B-M2E	2	1	2	2	-	2 GB	1	1	2	MIC-3312-A1E
MIC-3393C-M2E	2	1	2	-	-	2 GB	1	1	2	MIC-3312-A2E
MIC-3393D-M2E	2	1	2	-	1	2 GB	1	1	2	MIC-3313-A1E

*Note: Use of single rank, dual die package stack (3.8 mm) SORDIMM is advised
**Note: CF board is included as accessory

RTM Model	Rear Panel							On-board Header/Socket/Connector					
	LAN	COM	VGA	DVI-D	PS/2*	USB	MiniSAS	USB	USB Flash**	SATA	SAS (SATA interface)	Slot Width	Conn.
RIO-3311-A1E	3	2	1	-	1*	2	1	1	-	2	4	1	J1, J3, J5
RIO-3311-A2E	3	2	1	-	1*	2	-	1	1	2	-	1	J1, J3, J5
RIO-3313-A1E	-	-	1	2	-	-	-	-	-	1	-	-	J5

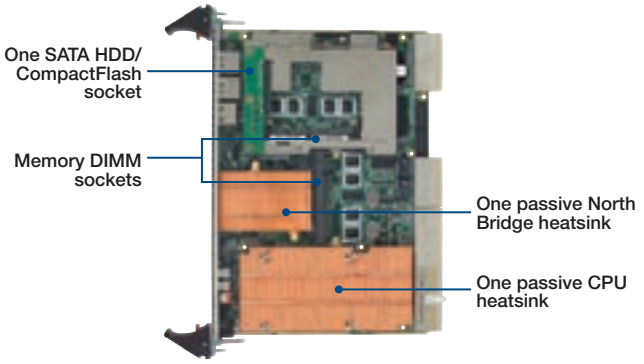
*Note: One PS/2 port carries the signals for both K/B and mouse. Y cable is included.
**Note: Use of Advantech EmbCore USB 2.0 Disk Module (Type C) recommended

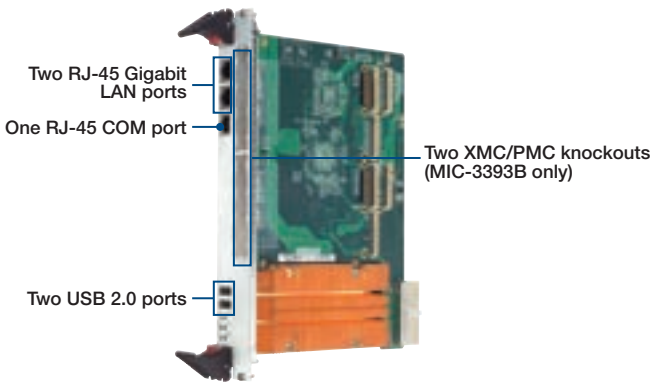
Board Diagram



Ordering Information (Cont.)

XTM Model	On-board Header/Socket/Connector		
	XMC/PMC	SATA HDD	VGA
MIC-3312-A1E	2	-	-
MIC-3312-A2E	-	2	-
MIC-3313-A1E	-	-	1





MIC-3395

6U CompactPCI® 2nd and 3rd Generation Intel Core i3/i5/i7 Processor Blade with ECC Support



Features

- Supports 2nd and 3rd Generation Intel® Core™ i3/i5/i7 Processors and Intel QM67 PCH with embedded graphics (dual independent display)
- Up to 16 GB (DDR3 1066/1333/1600) ECC memory (max 8GB on-board socket SO-UDIMM x1, max 8GB)
- Optimized single-slot SBC with 2.5" SATA-III HDD/CFast socket
- Integrated on-board 2KB NVRAM and min. 8GB flash (optional)
- TPM
- Two SATA ports, four USB 2.0 ports, two DVI ports, two RS-232 ports, one PS/2 connector, and PCIe x4 interfaces to the Rear Transition Module (RTM)
- Six gigabit Ethernet ports for PICMG 2.16, front and rear connectivity
- PICMG 2.16 R1.0, PICMG 2.1 R2.0, PICMG 2.6 R1.0 compliant

CompactPCI® FCC CE RoHS COMPLIANT 2002/95/EC

Introduction

Using Intel's 2nd and 3rd generation Core™ i3/i5/i7 processors based on 32nm and 22nm process technology supporting up to two Cores / four threads at 2.2 GHz and 4 MB level 2 cache, the MIC-3395 blade boosts computing performance deploying the latest virtualization, techniques and CPU enhancements. Onboard soldered DRAM with ECC support and optional memory expansion via an SODIMM socket extend the memory to a maximum of 16 GB to support the most demanding applications in high performance or virtualized environments, supporting up to 4GB per virtual machine. Dual channel design and memory speeds up to 1333MT/s for 2nd generation or 1600MT/s for 3rd generation processors along with increased cache size and cache algorithms guarantee maximum memory throughput. Combined with the powerful Intel QM67 chipset, these new processors offer improved I/O performance by leveraging 5GT/s DMI and PCIe interfaces. An onboard XMC/PMC site with PCIe x8 gen.2 connectivity can host high speed offload or I/O mezzanines such as the MIC-3666 dual 10GE XMC card. With SATA-III support and up to 6Gbps I/O, the latest enhancements in storage technology such as high speed SSDs can be employed. Six Gigabit Ethernet ports for PICMG 2.16, front and rear connectivity ensure best in class network connectivity. The processor's integrated enhanced graphics engine (HD3000/HD4000) offers twice the performance over previous generations. With dual independent display support, the MIC-3395 is an ideal fit for demanding workstation or imaging applications.
RASUM features integrated in the CPU and chipset combined with PICMG 2.9, IPMI-based management make the MIC-3395 a highly available and reliable computing engine. The RIO-3315 RTM module supports one PS/2 connector with both keyboard and mouse ports, two USB ports, two RS-232 ports, two SATA ports, two DVI ports, and two Gigabit Ethernet ports. In case the SATA disk drives and SATA RAID support of the QM67 do not meet performance and reliability requirements, the RIO-3315 SAS version supports a 4-port SAS controller with RAID and failover support.

Specifications

Processor System	CPU	Intel 2nd and 3rd Generation Core i3/i5/i7 up to 2.2 GHz (4MB L2 cache)
	Platform Controller Hub	Hub Intel QM67
	BIOS	Redundant AMI 8MByte SPI flash
CompactPCI Interface	J1 Connector	32-bit PCI local bus
	J2 Connector	64-bit PCI local bus
	J3 Connector	PICMG2.16 + RTM area
	J4~J5 Connectors	RTM area
XMC/PMC Socket	PCIe x8	Gen2 (5GT/s)
	PCI	64-bit/66 MHz
Memory	Technology	DDR3 1066/1333/1600 MHz, dual channel with ECC support
	Max. Capacity	Up to 16 GB (8 GB on-board, 8 GB SODIMM)
	Socket	204-pin SOUDIMM x1
Graphics	Controller	Intel embedded graphic controller HD3000/HD4000 (dual independent display)
	VRAM	Dynamic
	Resolution	Up to 2048 x 1536, 64k colors at 75Hz
Ethernet	Controller	5 Intel 82574L single-port Gigabit Ethernet controllers (on PCIe x1 channel)
	Interface	10/100/1000 Mbps Ethernet
	I/O Connector	PICMG 2.16 and RJ-45 x2 (RTM rear panel), RJ-45 x1 (front panel)
	Controller	1 Intel 82579LM single-port Gigabit Ethernet controller
	Interface	10/100/1000 Mbps Ethernet
	I/O Connector	RJ-45 (front panel)
Storage	Mode	SATA-III
	Channels	Onboard SATA-III connector
	Mode	SATA-II
	Channels	2 channels to RTM 1 channel to CFast socket 1 channel to on-board flash (optional)

Specifications (Cont.)

Front I/O	USB2.0	2 type A	
	COM	1 RS-232 on RJ-45	
	LAN	2 10/100/1000 Mbps on RJ-45	
	Front Panel LEDs	x1 blue/yellow for Hot Swap/HDD, x1 green for Master/Drone mode, x1 yellow BMC Heartbeat, and x1 green for Power	
	Buttons	CPU reset button and BMC reset button	
Rear I/O	USB2.0	4 ports	
	COM	2 ports	
	LAN	2 ports	
	SATA	2 SATA-II	
	PCIe	1 PCIe x4	
	Others	PS/2 for keyboard & mouse, DVI-I and DVI-D	
Watchdog Timer	Output	Local Rest and Interrupt	
	Interval	Programmable 1s ~ 255s	
Hardware Monitor	HWM	NCT6776F	
BMC	Controller	Renesas H8S 2167, IPMI v2.0 compliant	
Operating System	Compatibility	Windows 7, Windows 2008, Windows 2003, Windows XP SP3, RHEL 6.1, VxWorks 6.x (on request)	
Miscellaneous	NVRAM	2KB	
Power Requirement	Configuration	4HP	
	TDP	Maximum: up to 60 W (quad core), 50 W (dual core) or less, depending on CPU type	
Physical Characteristics	Dimensions (W x D)	233.35 x 160 mm (9.19" x 6.3")	
Environment		Operating	Non-operating
	Temperature	0 ~ 55° C (32 ~ 122° F)	-40 ~ 85° C (-40 ~ 185° F)
	Humidity	95 % @ 40° C, non-condensing	95 % @ 60° C, non-condensing
	Vibration (5-500 Hz)	2 Grms (without on-board 2.5" SATA HDD)	3.5 Grms
	Shock	20 G (without on-board 2.5" SATA HDD)	50 G
	Altitude	4, 000 m above sea level	10, 000 m above sea level
Regulatory	Conformance	FCC Class A, CE, RoHS	
	NEBS Level 3	Designed to meet GR-63-Core and GR-1089-Core	
Compliance	Standards	PICMG2.0 R3.0, PICMG2.1 R.0, PICMG2.9 R1.0, PICMG2.16 R1.0,	

Ordering Information

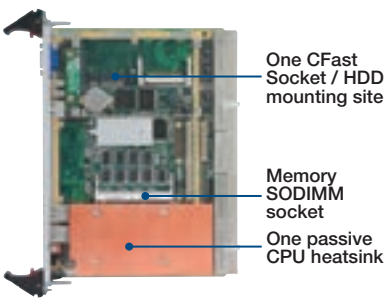
Part Number	Front Panel				Main On-board Features					
	VGA	USB2.0 (type A)	Ethernet (RJ-45)	Console (RJ-45)	CPU	Onboard Memory	CFast Socket	Storage Channel	SODIMM Socket	BMC Function
MIC-3395A1-M4E	1	2	2	1	i7-2655LE	4GB	1	1 SATA-III	1	No
MIC-3395A2-M4E	1	2	2	1	i7-2655LE	4GB	1	1 SATA-III	1	Yes
MIC-3395C1-M4E	1	2	2	1	i7-2715QE	4GB	1	1 SATA-III	1	Yes
MIC-3395IA-M8E	1	2	2	1	i7-3555LE	8GB	1	1 SATA-III	1	Yes
MIC-3395IB-M8E	1	2	2	1	i7-3612QE	8GB	1	1 SATA-III	1	Yes

* Note: For Sandy Bridge I3, I5 and Ivy Bridge I7-3615QE CPU and on-board flash available by request, please contact your local sales office.

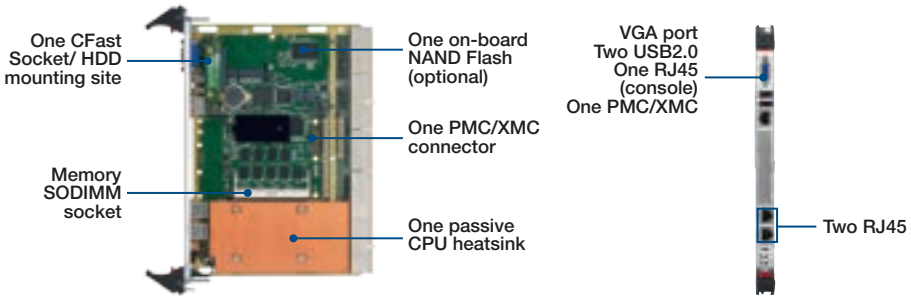
Related Products

Part Number	Description
RIO-3315-A1E	RTM Module with SAS Controller for MIC-3395
RIO-3315-B1E	RTM Module without SAS Controller for MIC-3395
RIO-3315-C1E	RTM Module with 4 LAN ports for MIC-3395
RIO-3316-D1E	RTM Module with HDD support for MIC-3395
MIC-3666-AE	Dual 10 Gigabit Ethernet XMC
MIC-3665-AE	CompactPCI PMC with dual copper (RJ-45) Gigabit Ethernet interfaces
MIC-3665-BE	CompactPCI PMC with dual fiber Gigabit Ethernet interfaces

MIC-3395x-MxE Series

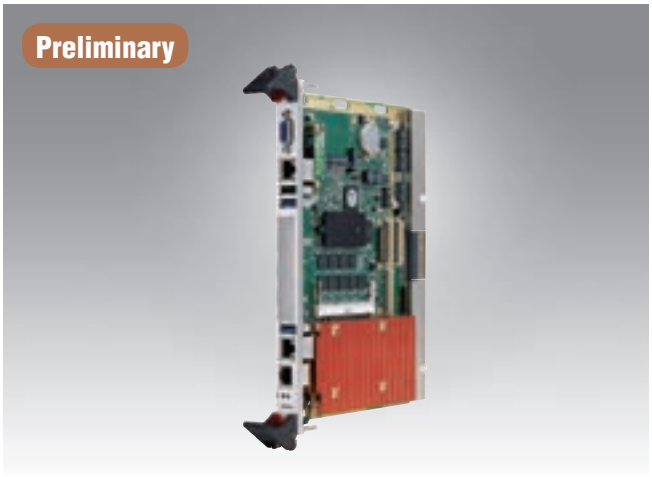


MIC-3395Ix-MxE Series



MIC-3396

6U CompactPCI 4th Generation Intel® Core™ i3/i5/i7 Processor Blade with ECC support



Features

- Supports 4th Generation Intel® Core™ i3/i5/i7 processors and Intel® QM87 PCH with embedded graphic (up to 3 independent displays)
- Up to 16 GB (DDR3 1600) low voltage ECC memory (max 8GB on board, socket SO-UDIMM x1, max 8GB)
- Optimized single-slot SBC with 2.5" SATA-III HDD/CFast socket/ on-board flash (optional)
- TPM
- Two SATA ports, 1x USB 3.0, four USB 2.0 ports, two DVI ports, two RS-232 ports, one PS/2 connector, and PCIe x8 interfaces to the Rear Transition Module (RTM)
- Five gigabit Ethernet ports for PICMG 2.16, front and rear connectivity
- PICMG 2.16 R1.0, PICMG 2.1 R2.0, PICMG 2.6 R1.0 compliant

CompactPCI® FCC CE RoHS COMPLIANT 2002/95/EC

Introduction

Using Intel's 4th generation core i3/i5/i7 processors based on 22nm process technology supporting up to four cores / eight threads at 2.4GHz and 6MB last level cache, the MIC-3396 blade boosts computing performance deploying the latest virtualization, techniques and CPU enhancements. Onboard soldered low voltage DRAM (1.35V) with ECC support and optional memory expansion via an SODIMM socket extend the memory to maximum of 16GB supporting the most demanding applications in high performance or virtualized environments. Dual channel design and memory speeds up to 1600MT/s along with increased cache size and cache algorithms guarantee maximum memory performance.

Combined with the powerful Intel® QM87 chipset, the 4th generation Core™ processors offer improved I/O performance by leveraging 5GT/s DMI and 3rd generation PCIe interfaces. An onboard XMC/PMC site with PCIe x8 gen.3 connectivity can host high speed offload or I/O mezzanines such as the MIC-3666 dual 10GE XMC card. With SATA-III support and up to 7Gbps I/O. the latest enhancements in storage technology such as high speed SSDs or traditional HDDs can be used on the MIC-3396. Five Gigabit Ethernet ports based on Intel's latest GbE controllers for PICMG 2.16, front and rear connectivity ensure best in class network connectivity.

The processor's integrated enhanced graphics engine (Iris) offers twice the performance over previous generations. With triple independent display support, the MIC-3396 is an ideal fit for demanding workstation applications.

RASUM features integrated in the CPU and chipset combined with PICMG 2.9, IPMI-based management make the MIC-3396 a highly available and reliable computing engine.

The RIO-3316 RTM module supports one PS/2 connector with both keyboard and mouse ports, one USB 3.0, two USB 2.0 ports, two RS-232 ports, two SATA ports, two DVI ports, and two Gigabit Ethernet ports. In case of the SATA disk drives and SATA RAID support of the QM87 do not meet performance and reliability requirements, the RIO-3315 SAS version supports a 4-port SAS controller with RAID and fail over support.

Specifications

Processor System	CPU	Intel 4th Generation Core i3/i5/i7 mobile processors up to 2.4 GHz (6MB LLC)
	Platform Controller Hub	Intel QM87
	BIOS	Redundant AMI 8MByte SPI flash
CompactPCI Interface	J1 Connector	32-bit PCI local bus
	J2 Connector	64-bit PCI local bus
	J3 Connector	PICMG2.16 + RTM area, 1x PCIex8
	J4~J5 Connectors	RTM area
XMC/PMC Socket	PCIex8	Gen3 (7GT/s)
	PCI	64-bit/66 MHz
Memory	Technology	DDR3 1600 MHz, dual channel with low voltage and ECC support
	Max. Capacity	Up to 16GB (max. 8GB on-board, max. 8GB SODIMM)
	Socket	SODIMM x1
Graphics	Controller	Intel embedded graphic controller Iris (triple independent display)
	VRAM	Dynamic
	Resolution	Up to 2048 x 1536, 64k colors at 75Hz
Ethernet	Controller	4 Intel I210AT single-port Gigabit Ethernet controllers (on PCIe x1 channel)
	Interface	10/100/1000Base-TX Ethernet
	I/O Connector	PICMG 2.16 and RJ-45 x2 (RTM rear panel), RJ-45 x1 (front panel)
	Controller	1 Intel I217LM single-port Gigabit Ethernet controller
	Interface	10/100/1000Base-TX Ethernet
	I/O Connector	RJ-45 (front panel)
Storage	Onboard HDD/SSD	1 2.5" (SATA-III)
	Channels	Onboard SATA-III connector
	Onboard Flash	SATA-II
	Channels	1 CFast socket (SATA-II) 1 on-board flash (SATA-II optional)
	RTM	SATA-III
	Channels	2 SATA-III connectors

Specifications (Cont.)

Front I/O	USB3.0	2 type A	
	USB2.0	1 type A	
	VGA	1	
	COM	1 RS-232 on RJ-45	
	LAN	2 10/100/1000 Mbps on RJ-45	
	Front Panel LEDs	x1 blue for Hot Swap, 1x yellow for HDD, x1 green for Master/Drone mode, x1 green BMC Heartbeat, and x1 green for Power	
	Buttons	CPU reset button and BMC reset button	
Rear I/O	USB2.0	4 ports	
	USB3.0	1 port	
	COM	2 ports	
	LAN	2 ports	
	SATA	2 SATA-III	
	PCIe	1 PCIex8 Gen3 7GT/s	
	Display	1 DVI-I and 1 DVI-D	
	Others	PS/2 for keyboard & mouse	
Watchdog Timer	Output	Local Rest and Interrupt	
	Interval	Programmable 1s ~ 255s	
Hardware Monitor	HWM	NCT7904	
BMC	Controller	LPC1768, IPMI v2.0 compliant	
Operating System	Compatibility	Windows XP/2000/Win7, Linux, VxWorks 6.x (on request)	
Power Requirement	Configuration	4HP	
	TDP ()	Maximum: up to 80W (quad core), 50W (dual core) or less, depending on CPU type	
Physical	Dimensions (W x D)	233.35 x 160.0 mm	
Environment		Operating	Non-operating
	Temperature	0 ~ 55° C (32 ~ 122° F)	-40 ~ 85° C (-40 ~ 185° F)
	Humidity	95 % @ 40° C, non-condensing	95 % @ 60° C, non-condensing
	Vibration (5-500 Hz)	3.5Grms (without on-board 2.5" SATA HDD)	
	Bump		25G, 6ms
	Altitude	15000ft, 55° C above sea level	40000 ft, -40° C above sea level
Regulatory	Conformance	FCC Class A, CE, RoHS, CCC	
Compliance	Standards	PICMG2.0 R3.0, PICMG2.1 R.0, PICMG2.9 R1.0, PICMG2.16 R1.0,	

Ordering Information

System Board Model Number	Front Panel					Main On-board Features				
	VGA	USB3.0 (type A)	USB2.0 (type A)	Ethernet (RJ-45)	Console (RJ-45)	CPU	Onboard Memory	CFast Socket	Storage Channel	SODIMM Socket
MIC-3396A1-M8E	1	2	1	2	1	I5-4402E	8GB	1	1 SATA-III	1
MIC-3396B1-M8E	1	2	1	2	1	i5-4400E	8GB	1	1 SATA-III	1
MIC-3396C1-M8E	1	2	1	2	1	i7-4700QE	8GB	1	1 SATA-III	1

*Note: For i3 CPU, 4GB on-board memory and on-board flash available by request, please contact your local sales office.

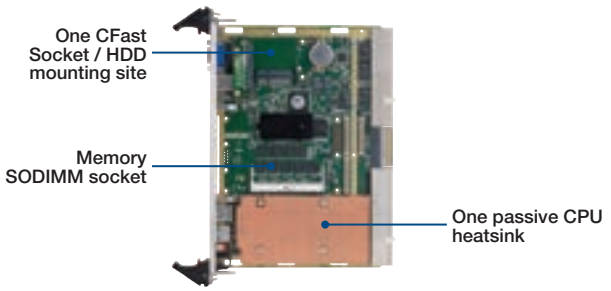
CPU Configurations

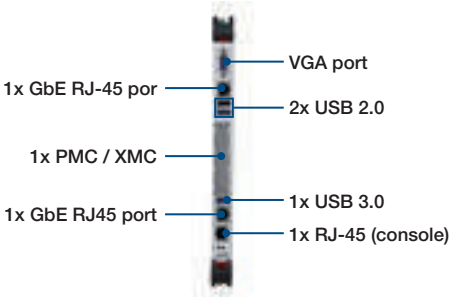
Intel® CPU Model Number	CPU Architecture	# Cores	# Threads	Freq.	Cache	CPU TDP	ECC
i3-4100E	22 nm	2	4	2.4 GHz	3 MB	37W	Yes
i5-4402E	22 nm	2	4	1.6 GHz	3 MB	25W	Yes
i5-4400E	22 nm	2	4	2.7 GHz	3 MB	37W	Yes
i7-4700EQ	22 nm	4	8	2.4 GHz	6 MB	47W	Yes

Related Products

Model number	Configuration
RIO-3316-C1E	RTM Module with 4 LAN ports and USB 3.0 for MIC-3396
RIO-3315-A1E	RTM Module with SAS Controller for MIC-3395 and MIC-3396
MIC-3666-AE	Dual 10 Gigabit Ethernet XMC
MIC-3665-AE	CompactPCI PMC with dual copper (RJ-45) Gigabit Ethernet interfaces
MIC-3665-BE	CompactPCI PMC with dual fiber Gigabit Ethernet interfaces

MIC-3396x-MxE Series





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iConnectivity

ISE-2748FI **ISE-2748CI**	Industrial 4 GE + 4 Gigabit SFP port Managed Switch Industrial 6 GE + 2 Gigabit Combo port Managed Switch	*18-2*
ISE-7656C/CI	Industrial 16 FE + 2 Gigabit Combo port Managed Switch	*18-3*
ISE-7659CPI	Industrial 8 FE + 2 Gigabit Combo port with POE Managed Switch	*18-4*
ISE-1503-PHDA **ISE-1502-PHDA**	Industrial 2-port Media Converter with PoE+ Injection Industrial 1-port Media Converter with PoE+ Injection	*18-5*
ISE-1561-PHDA **ISE-1563-PHDA**	Industrial 1-port Media Converter with 60W High Power PoE Injection Industrial 1-port 60W High Power PoE Injector	*18-6*
ISE-7516-PHDA	Industrial 16-port Full GbE Managed PoE+ Switch	*18-7*

To view all iConnectivity products, please visit www.advantech.com/products.



ISE-2748FI
ISE-2748CI

Industrial 4 GE + 4 Gigabit SFP port Managed Switch

Industrial 6 GE + 2 Gigabit Combo port Managed Switch



FCC CE RoHS

Features

- Support DMI (Digital Monitoring Interface) on SFP ports
- High relaibility by X-Ring+ 10ms network recovery
- Full range VLAN ID, GVRP, 802.1p QoS, 128 IGMP Snooping table and port rate limiting for traffic managment
- Comperhansive security feature by IP/MAC and port binding, IP access control list and 802.1X
- 12 ~ 48V DC dual power inputs plus 1 relay output

Specifications

Properties	MAC Address	8K
	Switching Bandwidth	16Gbps
	Packet Buffer	1Mb
	Priority Queue	4
Communication	Standard	IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1d, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab
	LAN	100Base-T(X), 10/1000Base-T, Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX
	Transmission Speed	Gigabit Copper:10/100/1000 Mbps, SFP: Up to 1000 Mbps
Interface	Connectors	RJ-45 x 4; SFP Combo: 100/1000 SFP *4 (ISE-2748FI) RJ-45 x 6; SFP Combo: RJ-45 x 2; 100/1000 SFP x 2 (ISE-2748CI) Console port : RJ45 x 1
	LED Indicators	System: PWR1, PWR2, P-Fail, R-Master Gigabit Copper: Link/Activity, Speed SFP: Link/Activity
	Console	RS-232 (RJ-45)
Network Management	Configuration	SNMP v1/v2c/v3, Web, Telnet, CLI
	VLAN	IEEE 802.1Q, GVRP, Port-based VLAN
	Redundancy	Advanced X-Ring+ (Recovery time <10ms within 250 nodes), Dual Homing, Couple Ring, RSTP/STP
	Security	IP Access security, port security, DHCP Server, Port and IP Binding, 802.1X Port Access Control
	Traffic Control	IGMP Snooping/Query for multicast group management Port Trunking, Static IEEE802.1p QoS/CoS/ToS/DSCP priority queuing, IEEE802.3x Flow Control
	Diagnostics	Port Mirroring, Real-time traffic statistic, MAC Address Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON, DMI
Mechanism	Enclosure	IP30, metal shell with solid mounting kits
	Dimensions (W x H x D)	59.6 x 152 x 105 mm
	Mounting	DIN-Rail, Wall
Power	Power Consumption	15.12 Watts max. @ 12 V_{DC} ; 13.3 Watts max. @ 24 V_{AC} / 60Hz
	Power Input	12~ 48 V_{DC}, 24 V_{AC} (18 ~ 30 V_{AC}), redundant dual inputs
	Fault Output	1 Relay Output
Protection	Power Reverse	Present
Environment	Operating Temperature	-40 ~ 75° C (-40 ~ 167° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Operating Humidity	5 ~ 95% (non-condensing)
	Storage Humidity	0 ~ 95% (non-condensing)
	MTBF	248,507 hours (ISE-2748CI); 289,385 hours (ISE-2748FI)
Certifications	Safety	UL 508, Class I, Division 2
	EMC	CE, FCC Class A, EN61000-3-2/3 IEC61000-4-2/3/4/5/6/8/11, EN61000-6-2/4
	Shock	IEC60068-2-27
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6

Ordering Information

Part Number	Description
ISE-2748FI	4GE+4SFP Managed Ethernet Switch w/ Wide Temp
ISE-2748CI	6GE+2 Combo Managed Ethernet Switch w/ Wide Temp

ISE-7656C/CI

Industrial 16 FE + 2 Gigabit Combo port Managed Switch



Features

- High relaibility by X-Ring+ 10ms network recovery
- Support dual stack for IPv4 and IPv6 , and IPv6 Logo Committee certified
- Comperhansive management security by IP access control list ,802.1X, SSH and SSL function
- Harden ESD, Surge and C1D2 Complance design
- 12 ~ 48V DC dual power inputs plus 1 relay output

Specifications

Properties	MAC Address	8K
	Switching Bandwidth	7.2Gbps
	Packet Buffer	1Mb
	Priority Queue	4
Communication	Standard	IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab
	LAN	10/100/1000Base-T(X), Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX
	Transmission Distance	Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ-45 cable suggested for Gigabit port)
	Transmission Speed	Ethernet: 10/100Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, SFP: Up to 1000 Mbps
Interface	Connectors	16 x RJ-45 (Ethernet) + 2 x RJ-45/SFP (mini-GBIC) combo ports 6-pin removable screw terminal (Power&Relay)
	LED Indicators	System: PWR, PWR1, PWR2, R.M., P-Fail Ethernet: Link/Activity, Duplex/Collision Gigabit Copper: Link/Activity, Speed (1000Mbps) SFP: Link/Activity
	Console	RS-232 (RJ-45)
Network Management	Diagnostics	Port Mirroring, Real-time traffic statistic, MAC Address Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON
	VLAN	IEEE 802.1Q, GVRP, Port-based VLAN
	Configuration	Web browser, Telnet, Serial consloe, TFTP, SNMPv1/ v2c/v3, Port Speed/Duplex Configuration
	Redundancy	Advanced X-Ring+ (Recovery time<10ms within 250 nodes), Dual Homing, Couple Ring, RSTP/STP
	Security	IP Access security, port security, DHCP Server, Port and IP Binding, 802.1X Port Access Control
	Traffic Control	IGMP Snooping/Query for multicast group management Port Trunking, Static/802.3ad LACP Rate limit and storm control IEEE 802.1p QoS CoS/TOS/DSCP priority queuing IEEE 802.3x Flow Control
Mechanism	Enclosure	IP30, metal shell with solid mounting kits
	Dimensions (W x H x D)	79 x 152 x 105 mm
	Mounting	DIN-Rail, Wall
Power	Power Consumption	Max. 11.5 W
	Power Input	12~ 48 V_{DC}, redundant dual inputs
	Fault Output	1 Relay Output
Protection	Power Reverse	Present
	Overload	3.5A @ 12 V_{DC} (Fuse)
Environment	Operating Temperature	-10 ~ 60° C (14 ~ 140° F) Wide Temp. Model -40 ~ 75° C (-40 ~ 167° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Operating Humidity	5 ~ 95% (non-condensing)
	Storage Humidity	0 ~ 95% (non-condensing)
	MTBF	295,000 hours
Certifications	Safety	UL 60950-1, CAN/CSA-C22.2 No.60950
	EMC	EU: EN55011, EN61000-6-4, EN55022 Class A, EN61000-3-2/3, EN55024, IEC61000-4-2/3/4/5/6/8, EN61000-6-2
	Shock	IEC60068-2-27
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6

Ordering Information

Part Number	Description
ISE-7656C	16+2G Managed Gigabit Ethernet Switch
ISE-7656CI	16+2G Managed Gigabit Ethernet Switch w/ Wide Temp

ISE-7659CPI

Industrial 8 FE + 2 Gigabit Combo port with POE Managed Switch



Features

- Support 8 port IEEE 802.3af up to 15.4 Watts per port
- 48V DC power input for POE
- High relaibility by X-Ring+ 10ms network recovery
- Completed traffic management by IGMP Snooping, IEEE802.1P QoS, Rate control per port
- -40 ~ 75°C working temperature
- IP31 Protection

Specifications

Properties	MAC Address	8K
	Switching Bandwidth	5.6Gbps
	Packet Buffer	1Mb
	Priority Queue	4
Communication	Standard	IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1d, 802.1w, 802.1p, 802.1Q, 802.1x, 802.3ad, 802.3ab, 802.3af
	LAN	10/100/1000Base-T(X), Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX
	Transmission Distance	Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ-45 cable suggested for Gigabit port) SFP: Up to 110 km (depends on SFP)
	Transmission Speed	Ethernet: 10/100Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Gigabit Fiber: Up to 1000 Mbps
Interface	Connectors	8 x RJ-45 (Ethernet) ,2 x RJ-45/SFP (mini-GBIC) combo ports 6-pin removable screw terminal (Power&Relay)
	LED Indicators	System: PWR, PWR1, PWR2, R.M., P-Fail 10/100T(X): Link/Activity, Duplex/Collision Gigabit Copper: Link/Activity, Speed (1000Mbps) SFP: Link/Activity
	Console	RS-232 (RJ-45)
Network Management	Configuration	Web browser, Telnet, Serial console, TFTP, SNMPv1/ v2c/v3, Port Speed/Duplex Configuration
	VLAN	IEEE 802.1Q, GVRP, Port-based VLAN
	Redundancy	Advantech X-Ring+ (Recovery time < 10ms at 30pcs full loading ring structure), Dual Homing, Couple Ring, 802.1w/D RSTP/STP
	Security	IP Access security, port security, DHCP Server, Port and IP Binding, 802.1X Port Access Control
	Traffic Control	IGMP Snooping/Query for multicast group management Port Trunking, Static/802.3ad LACP Rate limit and storm control IEEE 802.1p QoS CoS/TOS/DSCP priority queuing IEEE 802.3x Flow Control
	Diagnostics	Port Mirroring, Real-time traffic statistic, MAC Address Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON
Mechanism	Enclosure	IP30, metal shell with solid mounting kits
	Dimensions (W x H x D)	79 x 152 x 105 mm
	Mounting	DIN-Rail, Wall
Power	Power Consumption	Max 142 @ 48 V_{DC}
	Power Input	48 V_{DC}, redundant dual power inputs
	Power Output	15.4W at 48V (per PoE port)
	Fault Output	1 Relay Output
Protection	Power Reverse	Present
	Overload	3.5 A @ 12 V_{DC} (Fuse)
Environment	Operating Temperature	-40 ~ 75° C (-40 ~ 167° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Operating Humidity	5 ~ 95% (non-condensing)
	Storage Humidity	0 ~ 95% (non-condensing)
	MTBF	190,200 hours
Certifications	Safety	UL 60950-1, CAN/CSA-C22.2 No.60950
	EMC	EU: EN55011, EN61000-6-4, EN55022 Class A, EN55024, IEC61000-4-2/3/4/5/6/8, EN61000-6-2
	Shock	IEC60068-2-27
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6

Ordering Information

Part Number	Description
ISE-7659CPI	8+2G Managed Gigabit PoE Switch w/Wide Temp

ISE-1503-PHDA
ISE-1502-PHDA

Industrial 2-port Media Converter with PoE+ Injection

Industrial 1-port Media Converter with PoE+ Injection



Features

- Support IEEE 802.3at up to 30 Watts per port
- Link fault pass through support
- 48V DC power input
- Harden ESD, Surge and CS level-4 design
- -40 ~ 75°C working temperature
- IP31 Protection

Specifications

Interface	I/O Port	ISE-1502-PHDA: 1 x 100/1000BASE-X (SFP) + 1 x 10/100/1000BASE-T/TX ISE-1503-PHDA: 1 x 100/1000BASE-X (SFP) + 2 x 10/100/1000BASE-T/TX
	PoE Pinout	V+: Pin - 1, 2 V -: Pin - 3, 6
	Power Connector	2-Pin Screw Terminal Block
Physical	Enclosure	Aluminum Shell
	Protection Class	IP31
	Installation	DIN-Rail
	Dimensions (WxHxD)	36.7x108.4x94.5 (mm)
Display	LED	System LED: PWR, PoE Power ,Port LED: Link/Activity, Speed(RJ-45 only), PoE
	DIP Switch	SFP mode:Mode (1): 100Mbps, Mode (2): 1000Mbps
Environment	Operating Temperature	-40 ~ 75° C (-40 ~ 167° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Ambient Relative Humidity	5 ~ 95% (non-condensing)
Technology Compliance	IEEE	802.3 10BaseT 802.3ab 1000BaseT(X) 802.3at Power-over-Ethernet Enhancement 802.3u 100BaseT(X) and 100BaseFX 802.3z 1000Base-X
Power	Power Consumption	~3.525 Watts (system) ~34 Watts (ISE-1502-PHDA; with PoE+) ~63.5 Watts (ISE-1503-PHDA; with PoE+)
	Power Input	48 V_{DC} (single input)
Certifications	Safety	UL508
	EMC	CE, FCC Class A EN61000-6-4 EN61000-6-2 EN61000-4-2 (ESD) Level 4 EN61000-4-3 (RS) Level 4 EN61000-4-4 (EFT) Level 4 EN61000-4-5 (Surge) Level 4 EN61000-4-6 (CS) Level 3 EN61000-4-8 (Magnetic Field) Level 4
	Shock	IEC60068-2-27
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6

Ordering Information

Part Number	Description
ISE-1502-PHDA	1 x 100/1000BASE-X (SFP) + 1 x 10/100/1000BASE-T/TX with IEEE802.3at PoE PSE function
ISE-1503-PHDA	1 x 100/1000BASE-X (SFP) + 2 x 10/100/1000BASE-T/TX with I IEEE802.3at PoE PSE function

ISE-1561-PHDA
ISE-1563-PHDA

Industrial 1-port Media Converter with 60W High Power PoE Injection

Industrial 1-port 60W High Power PoE Injector



FCC CE RoHS COMPLIANT 2002/95/EC

Features

- Support IEEE 802.3at up to 30 Watts and high power PoE 60 Watts
- 48V DC power input
- Harden ESD, Surge and CS level-4 design
- -40 ~ 75° C working temperature
- IP31 Protection

Specifications

Interface	I/O Port	ISE-1561-PHDA: 1 x 10/100/1000Base-T/TX + 100/1000Base-X(SFP) ISE-1563-PHDA: 2 x 10/100/1000Base-T/TX
	PoE Pinout	V+: Pin - 1, 2 , 4 , 5 V -: Pin - 3, 6 , 7 , 8
	Power Connector	2-Pin Screw Terminal Block
Physical	Enclosure	Aluminum Shell
	Protection Class	IP31
	Installation	DIN-Rail
	Dimensions (WxHxD)	36.7x108.4x94.5 (mm)
Display	LED	System LED: PWR, PoE Power ,Port LED: Link/Activity, Speed(RJ-45 only), PoE
	DIP Switch (ICE-1561)	SFP mode:Mode (1): 100Mbps, Mode (2): 1000Mbps
Environment	Operating Temperature	-40 ~ 75° C (-40 ~ 167° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Ambient Relative Humidity	5 ~ 95% (non-condensing)
Technology Compliance	IEEE	802.3 10BaseT 802.3ab 1000BaseT(X) 802.3at Power-over-Ethernet Enhancement 802.3u 100BaseT(X) and 100BaseFX 802.3z 1000Base-X
Power	Power Consumption	~3.525 Watts (system) ~63.525 Watts (with PoE+)
	Power Input	48 V_{DC} (single input)
Certifications	Safety	UL508
	EMC	CE, FCC Class A EN61000-6-4 EN61000-6-2 EN61000-4-2 (ESD) Level 4 EN61000-4-3 (RS) Level 4 EN61000-4-4 (EFT) Level 4 EN61000-4-5 (Surge) Level 4 EN61000-4-6 (CS) Level 3 EN61000-4-8 (Magnetic Field) Level 4
	Shock	IEC60068-2-27
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6

Ordering Information

Part Number	Description
ISE-1561-PHDA	Media Converter 1 x 10/100/1000Base-T/TX + 100/1000Base-X (SFP) with High Power (60W) PoE PSE Function
ISE-1563-PHDA	Power Injector 2 x 10/100/1000Base-T/TX with High Power (60W) PoE PSE Function

ISE-7516-PHDA

Industrial 16-port Full GbE Managed PoE+ Switch



Features

- Support IEEE 802.3at up to 30 Watts per port
- X-Ring+ 10ms network recovery
- Cat.5 cable length diagnostics
- Reduandant 24/48V DC power input
- Completed features for QoS, Traffic management
- -40 ~ 75° C working temperature
- IP31 Protection

Specifications

Properties	MAC Address	16K
	Switching Bandwidth	26Gbps
	Packet Buffer	1.5MB
	Priority Queue	8
	Jumbo Frame	12KB
	VLAN	4K
Interface	I/O Port	12 x 10/100/1000Base-T/TX RJ-45 ,4 x 100/1000Base-FX/X SFP
	Console port	RJ-45
	F/W backup port	USB
	PoE Pinout	V+: Pin - 1, 2 , V -: Pin - 3, 6
	Power Connector	6-pin screw Terminal Block (including relay)
Physical	Enclosure	Aluminum Shell
	Protection Class	IP31
	Installation	DIN-Rail
	Dimensions (WxHxD)	72 x 165 x 115 (mm)
LED Display	System LED	PWR1, PWR2, SYS, CFG and Alarm
	Port LED	Link / Speed / Activity / PoE
Environment	Operating Temperature	-40 ~ 75° C (-40 ~ 167° F)
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Ambient Relative Humidity	5 ~ 95% (non-condensing)
Technology Compliance	IEEE	802.1AB LLDP, 802.1ad provider bridging, 802.1D STP, 802.1p CoS, 802.1Q VLAN Tagging, 802.1s MSTP, 802.1w RSTP, 802.1X Authentication, 802.3 10BaseT, 802.3ab 1000BaseT(X), 802.3ad Port Trunk with LACP, 802.3af PoE, 802.3at PoE Enhancement, 802.3u 100BaseT(X) and 100BaseFX, 802.3x Flow Control, 802.3z 1000BaseX, 1588v2 PTP, 1613 Industrial standard for networking devices in electric power substations
	SNMP MIBs	1213, 1493, 1643, 2233, 2618, 2674, 2737, 2819
Power	Power Consumption	~ 21.82 Watts (System) ~ 381.83 Watts (Up to 12 PoE+ ports)
	Power Input	48 (46 to 57 V) V_{DC} dual inputs (>52 V_{DC} for PoE+ output recommended)**
Certifications	Safety	UL60950-1 Compliant UL508*
	EMC	CE, FCC Class A, EN61000-6-4 EN61000-6-2, EN61000-4-2 (ESD) Level 4 EN61000-4-3 (RS) Level 4, EN61000-4-4 (EFT) Level 4 EN61000-4-5 (Surge) Level 4, EN61000-4-6 (CS) Level 3 EN61000-4-8 (Magnetic Field) Level 4
	Marine	DNV Compliant
	Railway	EN50121-4 Compliant
	Hazardous Environment	UL/cUL Class 1 Division 2 Groups A/B/C/D
	Shock	IEC60068-2-27
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6

Ordering Information

Part Number	Description
ISE-7516-PHDA	12 x 10/100/1000Base-T/TX ports (supports PoE+) + 4 x 100FX/1000Base-X SFP slots

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Mission

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