IoT-focused Industrial Motherboards & Systems

- UTX & Systems
- Mini-ITX & Systems
- MicroATX
- ATX
- Vertical Focused Platforms
- One-Stop Integrated Solutions

ADVANTECH

Enabling an Intelligent Planet

intel IoT Solutions Alliance Premier

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Advantech Industrial Motherboards and Systems

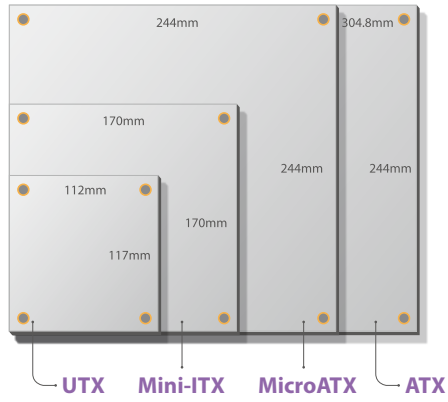
Easily Integrated, Flexible Development for Internet-of-Things Applications

Industrial motherboards are a mature form factor that have been used in the IPC field for many years because they offer greater reliability, longer lifetime support and strict revision control which ensures a high ROI. Embedded developers are presented with many similar product choices in the market, so we at Advantech keep thinking of how to offer more valuable embedded features that really help customers achieve their specific embedded application goals. Particularly in today's IoT world, more and more applications will require a simplified solution for immediate deployment. That's where Advantech comes in and provide a full selection of readily-available motherboards and systems for any IoT applicaitons.

Advantech is committed to supplying a power efficient, intelligent industrial motherboards and systems, so we've introduced some key features for our next generation industrial motherboards and systems to serve multiple specific applications, and to provide a higher quality of service and system integration.

Full Spectrum Form Factor and Innovative Hardware Design

With a complete range of industrial motherboards to offer, Advantech Industrial motherboards are highly integrated and deliver advanced features. Besides the existing standard form factor offering, Advantech introduces a new innovative form factor to fulfill market requirements. All products include 5 to 7 years longevity support with strict revision control, and Windows/Linux/QNX embedded operating systems.



UTX and Systems

- 4.4" x 4.6" with max. connectivity, low power consumption with wide temp. and fanless design in a palm size motherboard.
- For digital signage, transportation, portable medical devices and IoT gateway.

THIN Mini-ITX and Systems

- Only 25mm in height, includes a variety of I/O and low power features.
- Compact and thin design, ideal for universal application as slim panel PC, signage box, vending machines, small POS systems, and portable medical devices.

Mini-ITX and Systems

- Designed with rich functionality and high performance in a small footprint with industrial features and DC input design.
- For KIOSK, ATM, digital signage, gaming, medical devices, automation equipment etc.

MicroATX

- Equipped with massive connectivity, multi-display, high performance with longevity and revision control services.
- Designed for KIOSK, surveillance, medical devices and instrumentation.

ATX

- Offers a wide range of computing capacities from lowest to the latest multi-core processors.
- For industrial automation, AOI and more.

Design Features & Services

To provide ultra reliable high quality products, Advantech develop Industrial Motherboards with advanced technologies and design processes.

- Slim & low profile
- Board blending-proof design
- Multi I/O compact system design
- Fanless and smart fan quiet system design
- EMI/ESD protection
- USB signal enhanced design
- OCP (over current protection) design

SUSIAccess - Ensuring Manageability Security and Connectivity

With the rise of IoT, managing large quantities of equipment and devices through cloud technology has become a fundamental feature. In order to satisfy the real needs of applications, Advantech provides powerful, yet simple management software services in SUSIAccess, making it easier to manage your IoT devices. SUSIAccess features remote management functions and incorporates system security from McAfee and back-up recovery from Acronis to help customers centralize monitoring and management of remote embedded devices in real-time.

SUSIAccess/ Remote Management

SUSIAccess features remote device monitoring through Intel AMT or OpenVNC to control devices with Power On/Off and Remote KVM (Keyboard, Mouse, and Monitor) in a flexible setting; so customers can easily manage devices via auto-notifications and respond quickly.

- Device Monitoring
- Remote Control
- Auto-Notification

SUSIAccess+Security

In the IoT era, more and more embedded devices are becoming connected so sophisticated security is critical. SUSIAccess Security ensures your IoT devices are protected from cyber threats and attacks, including application whitelisting and change management using built in McAfee Whitelisting technology.

- Operation Protection
- Anti-virus
- Internet Security

SUSIAccess+Recovery

Rapid Restore brings devices back to normal operation. Backup/Recovery is one of the efficient ways SUSIAccess leverages Acronis technology. The Backup/Recovery engine with remote control simplifies the scheduling mechanism for remote backup or recovery; all from a SUSIAccess centralized console.

- Remote Recovery
- Remote Backup
- Scheduled Backup

Vertical Focused Platforms

Standard motherboards are hard to satisfy all of the functionality required for specific industrial market segment. Normally vertical market developers need customization services in order to design for their key application requirements , which might make development cycle longer with extra customization budget. By leveraging key customer customization experience, Advantech offers vertical off-the-shelf standard motherboard with SUSIAccess, iManager as a quick turnkey solution, which dramatically save customer develop cycle and budget to business success.

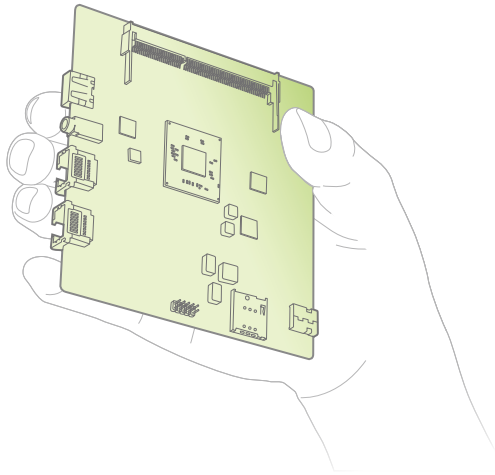
			
KIOSK/ POS/ ATM	**Digital Signage**	**Medical**	**Surveillance**
Hardware Features			
• Rich I/O for effortless connection • Multi independent display	• Multi-HDMIs with CEC • Ultra-slim signage box	• Highest computing power & enhanced graphics • Robust design for medical regulations	• Designed for massive video storage devices • Linux RAID with Hot Plug support
Software Features			
• Extra system protection • Advanced watchdog • Security storage • Aconis recovery • Remote monitoring • EWF manager	• Scheduling power on/off • SmartFan • Display brightness control • Content delivery • Remote monitoring • System recovery (Acronis)	• H/W monitoring • Sync with kiosk • Health status • Smart self hardware control • Real-time monitoring and reaction	• Simple backup and recovery • Efficient cost saving data maintenance • H/W monitoring • Logs of critical events • Instant alarm notification • Remote monitoring • Remote KVM
Suggested Model			
• Mini-ITX: AIMB-215, AIMB-203, AIMB-281 • MicroATX: AIMB-501, AIMB-503, AIMB-501KS, AIMB-501CW	• UTX: AIMB-115 • Mini-ITX: AIMB-201, AIMB-230, AIMB-231, AIMB-225, AIMB-226	• Mini-ITX: AIMB-274, AIMB-230, AIMB-231 • MicroATX: AIMB-582, AIMB-584	• AIMB-502, 582WG2, 584WG2

Innovative Hardware Design

Industrial Motherboards are favored and widely used by System Integrators in many embedded applications. However, traditional Industrial Motherboards have limitations such as fitting into low-profile enclosures or space-critical applications. But Advantech has managed to optimize Industrial Motherboard design with tailor-made component placement and connectivity while keeping traditional industrial motherboard functionality, thereby providing the most flexibility for enclosure designers to make their embedded system small and attractive. What's more, Advantech continues to revolutionize this mature form factor and your state-of-the-art embedded device with new design concepts.

Ultra Compact Design

UTX



Design Concept

To satisfy the trend for miniature embedded devices. Features the most wanted embedded features in a tiny motherboard.

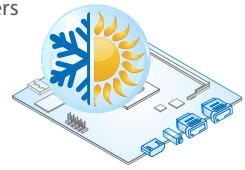
Advantech Development

Advantech developed UTX motherboards to satisfy the trend for miniature embedded devices. The first UTX motherboard is co-developed between Advantech and Intel. Its key feature is extremely compact-size, fanless operation, great graphics performance, and versatile I/O.

Design Features

UTX Motherboard

- A motherboard with dimensions of 4.4" x 4.6"
- Rich I/O for max. connectivity in a palm size MB
- Non-stacking & Wide-temp -20 ~ 70°C board design
- Low power consumption design that offers ample storage and expansion capability



UTX System Solution

- An industrial-grade system in a 4.6"(L) x 5.6"(W) x 1.4"(H) box
- A passive-cooling "Noise-free System"
- -20 ~ 60°C operating temp. in severe environments
- Lock type HDMI and screw type DC-input connectors to stable the plug-in-out usage reliability
- Easy implementation as embedded computers

Target Applications

Transportation, smart building, portable medical devices, retail

• AIMB-115

• UTX-3115

Ultra Compact Design Product Highlight

UTX-3115 Fanless & Wide-temp Embedded Box Computer

To facilitate IoT deployment, Advantech introduces the new UTX-3115 gateway to its family. A prerequisite for IoT gateways is designed-in flexibility to support a range of functions, which has limited the effectiveness of existing systems with monolithic architectures. Consequently, ad hoc hardware and software components are often added to networking equipment, such as routers, resulting in disjointed systems that are incapable of providing the optimized security, management, and development capabilities needed for applications like building automation.

In order to consolidate these functions in a single platform, the UTX-3115 fanless & wide-temp embedded box computer comes with Intel® Gateway Solutions for the Internet of Things (IoT), a pre-integrated software and hardware platform containing a Linux operating system, and security and management features. This out-of-the-box solution greatly simplifies customer deployment of IoT applications because it allows secure data aggregation, filtering, and analysis from edge devices to the cloud through WiFi and/or 4G technologies. Measuring only 5.5 x 1.4 x 4.6 inches, UTX-3115 is a mini-size system supporting a wide-range of operating temperatures from -20 ~ 60 °C, and rich I/O expansion. Built in with the Intel® Atom™ E3800 processor, UTX-3115 delivers the high performance and low power consumption required for IoT applications.

Built with AIMB-115
UTX Motherboard

Intel® Atom™ Processor E3826

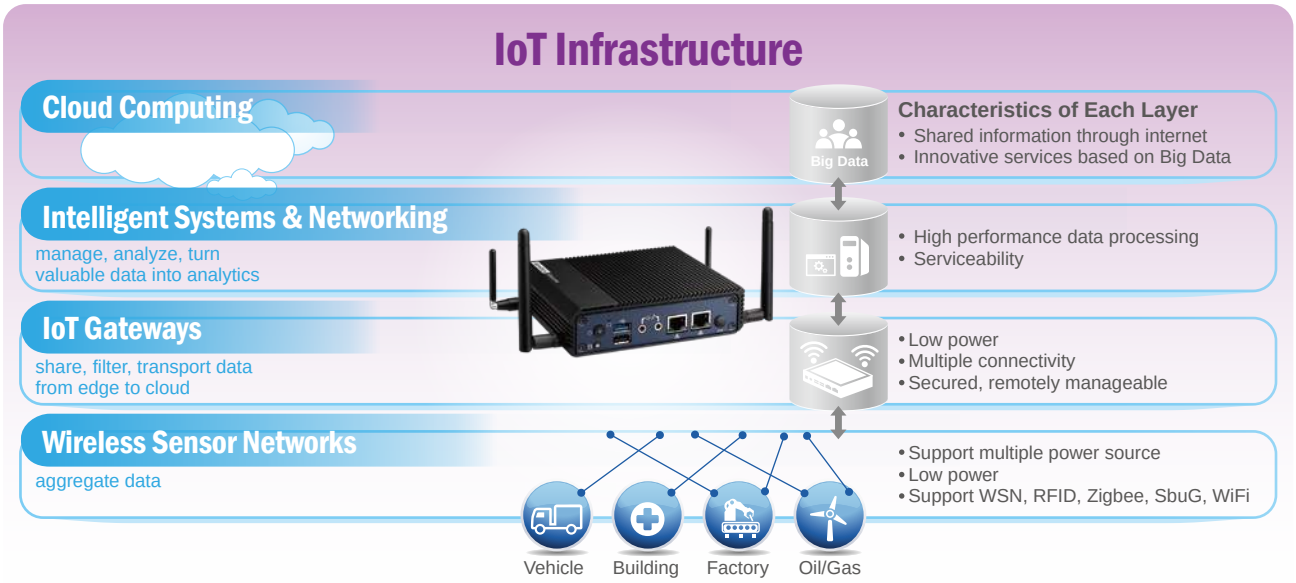
Beyond sub-10 watt power consumption and performance enhancements, theIntel® Atom™ processor E3826 allows the UTX-3115 to take advantage of advanced technologies such as Intel® Virtualization Technology (Intel® VT), which increases the throughput and performance of networked devices and peripherals by securelypartitioning essential tasks from operations that are less important. In a Building Automation Systems gateway, this capability is imperative for ensuringthat key functions receive priority execution, and that the resulting data is transmitted to the UTX-3115 platform in an expedient manner. Data integrity is further supplemented by technologies such as Intel® Advanced Encryption Standard New Instructions (Intel® AES-NI) and Secure Boot, which respectively work to accelerate data packet encryption and verify that the UTX-3115 boots in a known-good state, validating both network

McAfee Embedded Control

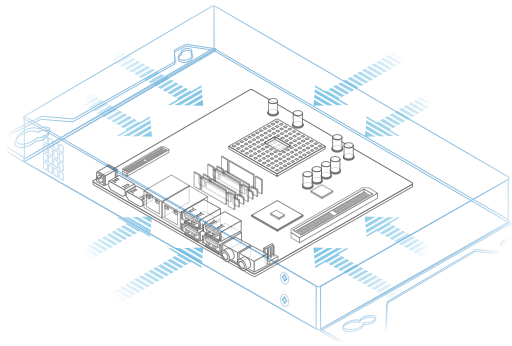
McAfee Embedded Control takes a new approach to system security by implementing application whitelists – as opposed to the blacklisting methodology traditionally utilized by antivirus (AV) companies – that block all undesignated software from running on a system. In effect, this protects the UTX-3115 from malicious malware that infiltrates a BAS network by only allowing authorized code to run or pre-approved software changes to be made. Furthermore, this architecture can help prevent viruses and rootkits from propagating to clean parts of the network. These protections can also be extended to the application layer to help secure scripts, batch files, and other components.

Wind River Intelligent Device Platform (IDP) XT* 2.0

Designed using Wind River software and tools, IDP XT 2.0 provides a secure environment for developing Java-, Lua-, and OSGi-based gateway applications, and also contains a communications stack that extends UTX-3115 connectivity to the cloud while supporting wireless protocols such as Bluetooth, ZigBee, Wi-Fi, and MQTT. Equally as important, IDP XT* 2.0 supports the management protocols OMA DM and TR-069, along with a web interface, so that facility managers can remotely access and control BAS systems in situations that involve multiple buildings and/or cover large geographic areas. Wind River also recently announced a partnership with cloud provider Axeda that will offer users direct access to an established backend cloud platform, making the UTX-3115 a scalable, end-to-end gateway solution with implications on each level of the IoT ecosystem.



Thin Mini-ITX Design



• AIMB-225 • AIMB-215 • AIMB-230 • AIMB-231

• AIMB-1201 • AIMB-B1000

Design Concept

Thin and low profile Mini-ITX design to fulfill space-limited applications without sacrificing Mini-ITX's expansion capability and thermal reliability.

Design Features

Optimized Placement and Connectivity

- One-deck I/O for sufficient expansion possibilities
- Independent displays supported with Intel HD Graphics
- Lower power design with deep sleep support for energy saving and power efficiency.

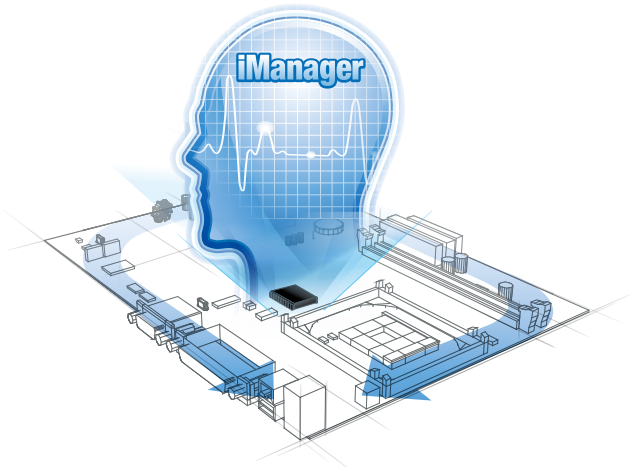
Fits into Low-profile Enclosure

- Fanless heatsink or slim cooler design
- Low profile IO design with 25mm max. height

Target Applications

Slim panel PC, slim signage box, vending machines, small POS systems, and portable medical devices.

Intelligence Built-in



• AIMB-273 • AIMB-274 • AIMB-201 • AIMB-230

Design Concept

To enhance the value and embedded features from hardware focused traditional industrial motherboard, Advantech integrated unique intelligent chip in motherboards.

Design Features

Power Saving Over 20%

- 10 times less power consumption in standby mode (100mA to 10mA)
- Programmable smart fan with dynamic fan speed self-control
- Power management with integrated flat panel displays for brightness and backlight frequency control

Enhanced System Reliability

- Advanced OS independent HW monitoring and control
- Smart fan for thermal and system protection
- Advance Watchdog for multi-level protection

Advanced Device Management

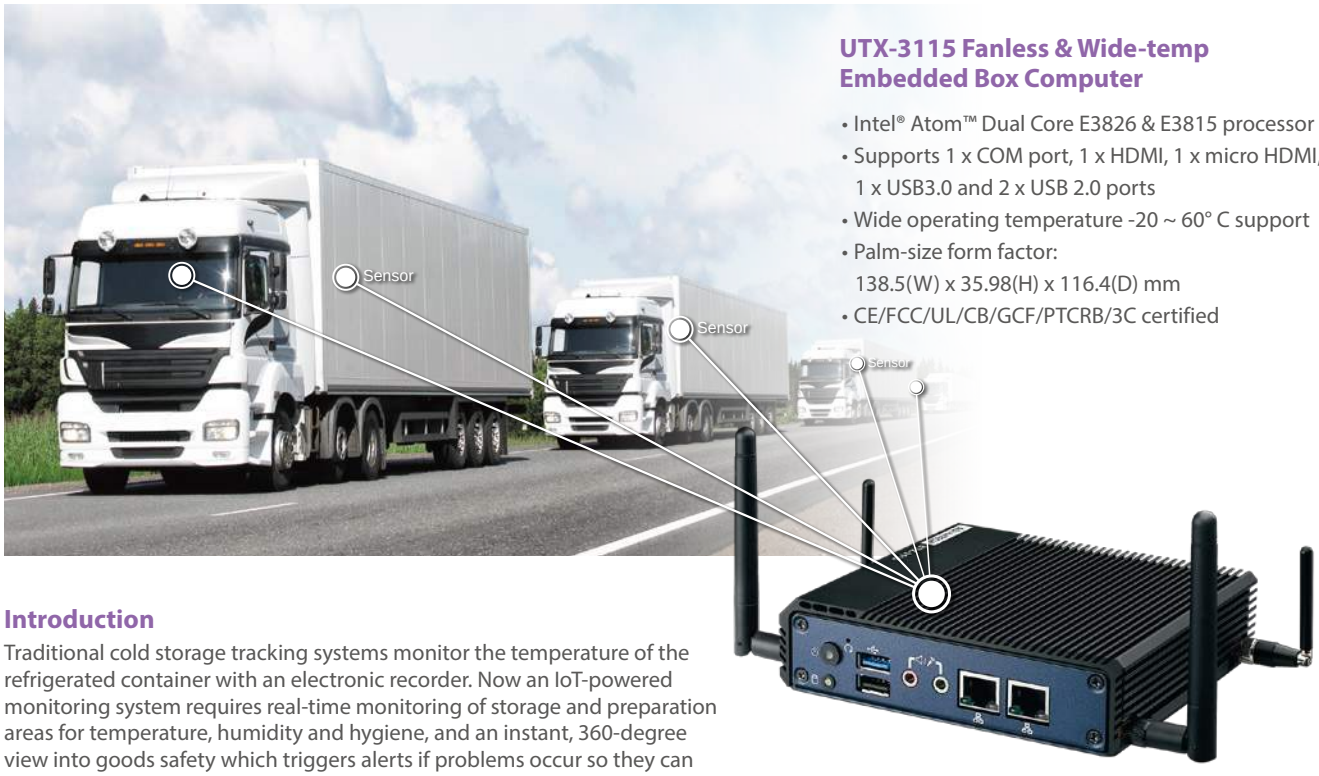
- Brightness control via hot-keys
- Remote control ability from SUSIAccess
- Cross-Platform & OS Independent Management

Target Applications

Medical device management, digital signage management, automation equipment management, and fleet management

Application Story

What Does Your Truck Fleet tell you?



UTX-3115 Fanless & Wide-temp Embedded Box Computer

- Intel® Atom™ Dual Core E3826 & E3815 processor
- Supports 1 x COM port, 1 x HDMI, 1 x micro HDMI, 1 x USB3.0 and 2 x USB 2.0 ports
- Wide operating temperature -20 ~ 60° C support
- Palm-size form factor: 138.5(W) x 35.98(H) x 116.4(D) mm
- CE/FCC/UL/CB/GCF/PTCRB/3C certified

Introduction

Traditional cold storage tracking systems monitor the temperature of the refrigerated container with an electronic recorder. Now an IoT-powered monitoring system requires real-time monitoring of storage and preparation areas for temperature, humidity and hygiene, and an instant, 360-degree view into goods safety which triggers alerts if problems occur so they can be caught before real damage is done.

Requirements and Solution

Traditional cold storage tracking systems monitor the temperature of the refrigerated container with an electronic recorder. Now an IoT-powered monitoring system requires real-time monitoring of storage and preparation areas for temperature, humidity and hygiene, and an instant, 360-degree view into goods safety which triggers alerts if problems occur so they can be caught before real damage is done.

Advantech provides the solution for cold chain application to deliver the highest efficiency at the lowest cost. Advantech IoT Gateway (UTX-3115 embedded box) and wireless sensor network solution can help transportation managers remotely access a variety of system and sensor data on a refrigerated truck; such as cargo temperature, door and hitch sensors, vehicle diagnostics and real-time locations. Bundled with Intel® Gateway Solutions for the IoT, a pre-integrated software and hardware platform containing a Linux operating system, security and management features, UTX-3115 is out-of-the-box gateway solution that simplifies the deployment of IoT products. It allows secure data aggregation, filtering, and analysis from edge devices to the cloud through WiFi and/or even 3G technologies. UTX-3115 is also a perfect fit for installation in a truck environment thanks to its -20 ~ 60 °C wide temperature support.

To better manage the fleet, SUSIAccess – the remote management software developed by Advantech is preloaded in UTX-3115 to assist the fleet owner to remotely monitor the temperature t, humidity and hygiene of the storage cabinet. If an application program crashes, SUSIAccess makes it easy to terminate and reactivate this program from any remote site. And of course all these important data are all well managed with the SUSIAccess security function.

Benefits

- Simplifying the implementation of IoT applications with an integrated solution of hardware and software (Intel® Gateway Solutions for IoT)
- UTX-3115 is only palm-size and supports wide temperature operations of -20 ~ 60 °C which is suitable for use in extreme outdoor environments
- SUSIAccess remote management software enables storage health monitoring, remote service maintenance and data security
- Dual miniPCIE slot supports WIFI and WWAN solution

Application Story

Thin Low Power Motherboard for Space-critical Nursing Cart Application

Mini-ITX AIMB-230

- Intel® Core™ i5-4300U and Intel® Celeron 2980U i7-4650U/i3-4010U
- Dual Channel DDR3L 1600 MHz SO-DIMM, up to 16 GB
- Multiple display I/O supports versatile Tri display functions for eDP/LVDS, DP/HDMI, and DP++

AIMB-B1000 Slim Mini-ITX Chassis

- Ultra Thin design with 35mm in height
- Easy opening design, quick installation for additional peripherals
- Locking type DC power jack

Introduction

Mobile nursing carts that optimize the patient care process and make portable point of care realistic play an increasingly important role in modern hospitals. Nursing carts have to able to run 24/7 in real time to update medical records and backup system information remotely.

SUSIAccess
iManager
Intelligent Self-Management
Acronis

Requirements and Solution

A major system integrator of eHealth solutions in Europe was planning to develop a high performance nursing cart. The nursing cart had to be low power, a compact size, with easy opening desk, and be easy to maintain. On the application side, remote maintenance and real-time data updates and recovery were further requirements. The customer adopted Advantech's THIN Mini-ITX AIMB-230 motherboard with low profile enclosure AIMB-B1000 as their solution. AIMB-230 provides extra advantages with SUSIAccess for remote monitoring and real-time medical record management, and iManager technology that can provide system self-testing and error checking, and also Acronis auto-recovery and auto-backup technology for patient data protection.

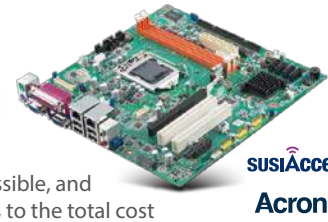
Benefits

- 25mm thin Industrial-grade motherboard and enclosure integration for space limited development.
- Remote device management: SUSIAccess inside.

ATM Focused MicroATX with SUSIAccess Pro 2.0 for Intelligent Banking Security

MicroATX AIMB-501KS/AIMB-503

- Intel® Core™ i7/i5/i3 processor + H61/B75/H81
- Dual channel DDR3 1333/1600 MHz SDRAM, up to 16GB
- Dual Display (CRT/DVI/LVDS option)
- 10 x COM, 10 x USB 2.0, dual GbE LAN



SUSIAccess
Acronis
McAfee

Introduction

Most ATMs are open 24 hours a day; therefore on-site support needs to be performed as quickly as possible, and system operators have to employ (or outsource) several engineers and pay costly overtime which adds to the total cost of ownership. Furthermore, a critical task of ATMs is to secure customer's personal information, so systems need to be installed with security software firewalls to avoid virus attacks, and data theft by hackers.

Requirements and Solution

An ATM manufacturer in China was looking for an Industrial motherboard with rich I/O features for their new security-sensitive ATM banking application. They needed it to have enhanced security functions for personal data protection and financial transactions. They discovered that Advantech's ATM/KIOSK focused MicroATX AIMB-501/AIMB-503 industrial motherboard pre-loaded with SUSIAccess Pro 2.0 provided them with intelligent remote device management and monitoring, system recovery and banking-level system security features.

Benefits

- Dedicated ATM focused MicroATX motherboard lowers customization effort
- Remote device management- SUSIAccess Pro 2.0 inside
- Rich I/O and expansion options for effortless connection
- Dual display with excellent graphics performance

Thin Embedded System for Digital Signage

Mini-ITX AIMB-215

- Intel Celeron Quad Core J1900/N2930
- Two 204-pin SO-DIMM up to 8 GB DDR3L 1333 MHz SDRAM
- 1 PCIE x1 and 2 mini-PCIE expansion slot, 6 COMs, 7 USB2.0, and 1 USB 3.0
- VGA/DP1.2 /24-bit dual channel LVDS

AIMB-T1000 Thin Mini-ITX Chassis

- Ultra Thin design with 43mm in height
- Easy opening design, quick installation for additional peripherals
- Locking type DC power jack

SUSIAccess

Introduction

Digital signage is very popular and widely adopted in convenience stores, department stores, airport, exhibition halls, restaurants. Therefore, easy installation and maintain, simple operation, remote management, real-time content delivery and monitoring, make it a dependable first choice for system integrators.

Requirements and Solution

A customer chose AIMB-T1215A embedded thin box PC (AIMB-215 Mini-ITX + AIMB-T1000 enclosure) bundled with SUSIAccess as their digital signage main system. AIMB-T1215A had an integrated graphic controller which included Intel® Dynamic Video Memory Technology and Intel® Clear Video Technology which delivers the high graphic signage performance it needed. With SUSIAccess, SI can do advertisement or content delivery, HD advertisement, music videos with graphic overlay, or device monitoring to View system status and auto notify the errors via warning popup and e-mail.

Benefits

- High Performance 4rd generation Intel® Mobile Bay Trail platforms
- Intelligent performance, power efficiency and Intel Gen 7 Graphics Engines and media code/decode engine support

Massive Storage Capacity MicroATX for NVR/DVR Surveillance Solution

MicroATX AIMB-502

- Intel® Xeon®/ Core™ i7/i5/i3 processor + Q77/C216
- DDR3 1333/1600 MHz SDRAM, up to 32GB
- 3 x independent display: CRT, DVI, HDMI
- 2x SATA 3.0, 6x SATA 2.0, 1x mSATA and 1x eSATA with software RAID 0,1,5,10 support
- 4 x USB 3.0, 2 x USB 2.0, and dual GbE LAN

SUSIAccess

Acronis

Introduction

As security concerns escalate, digital video surveillance solutions are increasingly deployed in applications within public security services, law enforcement and transportation. The spread of the Internet means megapixel IP CAMs are becoming more common, and the NVR architecture has become the favored solution in surveillance applications.

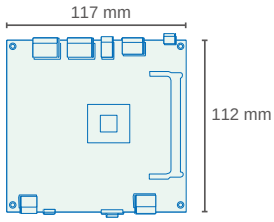
Requirements and Solution

A major system integrator of NVR solutions in China needed to upgrade their hardware to fulfill more advanced specification requirements. These demands include advanced processing for intelligent facial identification, and support for multi-displays and IP Cameras. AIMB-502 MicroATX industrial motherboard is specifically designed for NVR surveillance solutions. It provides two GbE LANs, as well as software RAID0, 1 support for data reliability and recovery, plus expansion slots for graphic cards or HW RAID cards.

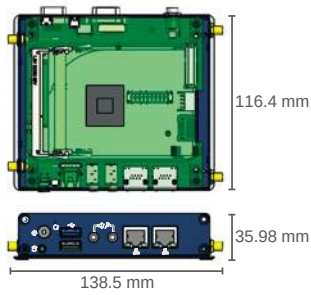
Benefits

- Dedicated surveillance focused MicroATX motherboard lowers customization effort
- Remote device management- SUSIAccess inside
- Auto recovery and auto backup technology- from Acronis
- 3 independent display support (CRT, HDMI, DVI-D)

UTX



UTX is a new form factor that was co-developed with Intel in 2013. The UTX form factor is 117 mm wide by 112mm depth with max. connectivity, low power consumption with wide temp. and fanless design in a palm size motherboard.



UTX-3115 Fanless & Wide-temp Embedded Box Computer

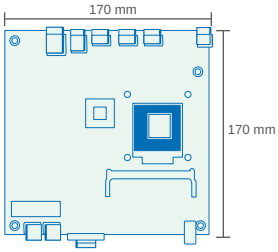
- Simplifies IoT gateway deployment
- Intel® Atom™ Dual Core E3826 & E3815 processor
- Supports 1 x COM port, 1 x HDMI, 1 x micro HDMI,1 x USB3.0 and 2 x USB 2.0 ports
- Wide operating temperature -20 ~ 60° C support
- Palm-size form factor
- CE/FCC/UL/CB/GCF/PTCRB/ 3C certified

New

Model Name		AIMB-115
Form Factor		UTX
Processor System	CPU	Intel E3826
	Socket	FCBGA
	Max. Speed	DC 1.46GHz/ SC 1.46GHz
	TDP	7 W
	Front Side Bus	-
	L2 Cache	1 MB
	L3 Cache	-
	Chipset	-
	BIOS	AMI EFI 16 Mbit, SPI
Expansion Slot	PCI	-
	Mini PCIe	2
	PCIe	-
Memory	Technology	Dual channel DDR3L 1333 MHz SDRAM
	Max. Capacity	8 GB
	Socket	2 x 204-pin SODIMM
Graphics	Controller	Intel HD Graphics
	LCD	Dual channel 48-bit LVDS
	HDMI	2
	DVI	-
Ethernet	Interface	10/100/1000 Mbps
	Controller	LAN1: Intel i210AT LAN2: Realtek RTL8111G
	Connector	RJ-45 x2
TPM		-
SATA	Max Data Transfer Rate	300 MB/s
	Channel	1
	eSATA/mSATA	1
Rear I/O	VGA/DVI/HDMI/DP	-/-/2/-
	Ethernet	2
	USB	3 (1 x USB3.0, 1 x USB2.0, 1 x Micro USB2.0)
	Audio	Mic-in, Line-out
	Serial	-
	PS/2	-
	DC Jack	1
Internal Connector	LVDS & Inverter	1
	DVI	-
	USB	-
	Serial	2 (1 x RS-232; 1 x RS-232/422/485)
	Parallel	-
	SATA	1
	CompactFlash	-
	GPIO	-

Model Name		UTX-3115
Processor System	Compatible Motherboard	AIMB-115
	CPU	Intel E3826 / E3815 processor
	Core Number	Dual core
	BIOS	AMI EFI 64 Mbit, SPI
	Chipset	-
Memory	Technology	DDR3L 1333/1600 MHz SDRAM
	Max. Capacity	8 GB/up to 8 GB per SODIMM
	Socket	1 x 204 PIN DDR3L SODIMM (Non-ECC)
Display	Controller	Intel HD Graphics
	VGA	1
	HDMI	2
	DVI	-
Storage	2.5" HDD bay	1 (support 2.5" HDD/SSD, max 7.5 mm height)
	mSATA	1, colay with F/S miniPCIE
Ethernet	Interface	10/100/1000 Mbps
	Controller	LAN1: Intel I210AT LAN2: Realtek 8111G
	Connector	2(RJ-45)
Audio	Chipset	Realtek ALC892, High Definition Audio(HD)
	Connector	Mic in / Line out
Internal expansion Slot	Mini-PCIe	2,(1 F/S and 1 H/S)
	SIM socket	1
Front Panel	USB	2 (1 x USB 3.0, 1 x USB 2.0)
	Audio	Mic in / Line out
	LAN	2
	Power button	1
	LED Indicators	1(HDD LED)
Rear Panel	HDMI	2 (1xHDMI, 1x Micro HDMI)
	VGA	1
	USB	1(Micro USB)
	USB	1 (USB3.0)
	COM	1(RS-232)
	Power jack	1(DC12V)
Power	Control	1 (Power Button)
	Voltage	12V DC power input
	Power Consum[ption	12V@0.88A
	Power Adapter	AC to DC DC12V/3A, 36W
Environment	Operating Temperature	-20 ~ 60° C (32 ~ 104° F)
	Non-operating Temperature	-40 ~ 85° C and 95% @ 40 ° C Non-Condensing
	Vibration	3G (with 2.5" SSD)
Dimensions (W x H x D)	Dimensions (W x H x D)	138.5 x 35.98 x 116.4 mm (5.5" x 1.4" x 4.6")
Weight	Weight	1.0kg
Certification	EMC	CE/FCC /CCC
	Safety	UL, PTCRB, GCF, RFIC

Mini-ITX



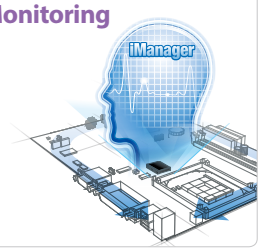
Designed with rich functionality and solid performance in a small footprint, the highly integrated Mini-ITX motherboard platform features low power consumption of less than 100 Watts and a single basic expansion slot. The Thin Mini-ITX series is only 25 mm in height with low power features that are ideal for universal applications.

Intelligence Built-in

iManager 2.1 for Operating System Independent Hardware Control/Monitoring

- Simplified integration
- Enhanced system reliability
- Secure system
- Easy configuration

iManager
Intelligent Self-Management







Model Name		AIMB-203	AIMB-213	AIMB-214	AIMB-215 B1	AIMB-223
Form Factor		Mini-ITX	Mini-ITX	Mini-ITX	Thin Mini-ITX	Mini-ITX
Processor System	CPU	Intel Core i7/ i5/ i3/ Pentium/ Celeron	Intel Atom D525/N455	Intel Atom D2550/N2600	Intel Celeron J1900 / N2930 / N2807	AMD Mobile G-series
	Socket	LGA 1150	FCBGA	FCBGA	FCBGA	FCBGA
	Max. Speed	3.1 / 2.9 / 2.4 GHz	DC 1.8 / SC 1.66 GHz	DC 1.86/1.6 GHz	QC 2.0 / 1.83 GHz; DC 1.58 GHz	DC 1.56 GHz / 1.0 GHz
	TDP	95 W / 65 W / 54 W / 45 W / 35 W	12 W/6 W	10 W/3.5 W	10 / 7.5 / 4.3 W	17 W/6.5 W
	Front Side Bus	-	-	-	-	-
	L2 Cache	-	1 MB /512 KB	1 MB	2 MB / 2 MB / 1 MB	1 MB /512 KB
	L3 Cache	8 MB / 6 MB / 4 MB / 3 MB	-	-	-	-
	Chipset	Intel H81	Intel ICH8M	Intel NM10	-	AMD A55E
	BIOS	AMI EFI 64 Mbit, SPI	AMI 16 Mbit, SPI	AMI EFI 16 Mbit, SPI	AMI EFI 16 Mbit, SPI	AMI EFI 16 Mbit, SPI
Expansion Slot	PCI	-	1	1	-	1
	Mini PCIe	2	1	1	2	1
	PCIe	PCIe x16, 1 slot	-	-	PCIE x1, 1 slot	PCIe x1, 1 slot
Memory	Technology	Dual channel DDR3L 1333/1600 MHz SDRAM	Single channel DDR3 1066 MHz SDRAM	Single channel DDR3 1066 MHz SDRAM	Dual / Dual / Single channel DDR3L 1333 MHz SDRAM	Single channel DDR3 1066/1333 MHz SDRAM
	Max. Capacity	16 GB	4 GB	4 GB	8 / 8 / 4 GB	4 GB
	Socket	2 x 204-pin SODIMM	1 x 204-pin SODIMM	1 x 204-pin SODIMM	2 / 2 / 1 x 204-pin SODIMM	1 x 204-pin SODIMM
Graphics	Controller	Intel HD Graphics	Embedded Gen3.5+ GFX Core, 400/640-MHz render clock frequency for N2600/D2550	Embedded Gen3.5+ GFX Core, 400/640-MHz render clock frequency for N2600/D2550	Intel HD Graphics	Integrated ATI Radeon RV7x0
	LCD	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS; Single Channel 18/24-bit LVDS	Dual channel 48-bit LVDS; Single Channel 18/24-bit LVDS	Dual channel 48-bit LVDS	Dual channel 36/48-bit LVDS
	HDMI	-	1	1	-	1
	DVI	1	-	-	-	-
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1:Realtek RTL8111E LAN2: Realtek RTL8111E	LAN1: Intel 82574L LAN2: Intel 82583V	LAN1: Intel 82574L LAN2: Intel 82583V	LAN1:Realtek RTL8111E LAN2:Realtek RTL8111E	LAN1:Realtek RTL8111DL LAN2: Realtek RTL8111DL
	Connector	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x2	RJ-45 x 2
TPM		Optional	optional	optional	optional	optional
SATA	Max Data Transfer Rate	600 MB/s, 300MB/s	300 MB/s	300 MB/s	300 MB/s	600 MB/s
	Channel	2, 1	2	3	2	4
	eSATA/mSATA	-/1	-/1	-/1	-/1	-
Rear I/O	VGA/DVI/HDMI/DP	1/1/-/1	1/-/1/-	1/-/1/-	1/-/-/1	1/-/1/-
	Ethernet	2	2	2	2	2
	USB	4 (2 x USB 3.0; 2 x USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	4 (1 x USB 3.0/3 x USB 2.0)	4 (USB 2.0)
	Audio	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Line-out	Mic-in, Line-in, Line-out
	Serial	1 (RS-232)	2 (1 x RS-232, 1 x R-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	-	2 (RS-232)
	PS/2	2	1	1	-	1
	DC Jack	-	1	1	1	1
	LVDS & Inverter	1	2/2	2	1	1
Internal Connector	DVI	-	-	-	-	-
	USB	4 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)
	Serial	8 (7 x RS-232; 1 x RS-232/422/485)	4 (RS-232)	4(RS-232)	6 (5 x RS-232; 1 x RS-232/422/485)	4 (RS-232)
	Parallel	1	-	-	-	-
	SATA	3	3	3	2	4
	CompactFlash	-	CFast x 1	Cfast x 1	-	Cfast x 1
	GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO

Mini-ITX

Thin Mini-ITX Industrial Motherboard for Smart, Slim Digital Signage Players

Hardware Features

- Multi-HDMI with CEC
- Ultra-slim signage box

Software Features

- Scheduling power on/off
- Smart fan
- Display brightness control
- Content delivery
- Remote monitoring
- System recovery (Acronis)

Suggested Models

- AIMB-215
- AIMB-201
- AIMB-230
- AIMB-231

Suggested Mini-ITX Chassis

- AIMB-T1000
- AIMB-B2000

Model Name		AIMB-224	AIMB-225	AIMB-226	AIMB-230	AIMB-231
Form Factor		Mini-ITX	Thin Mini-ITX	Mini-ITX	Thin Mini-ITX	Thin Mini-ITX
Processor System	CPU	AMD R-series processor	AMD Mobile G-series GX-424CC/GX-412HC	AMD Bald Eagle RX-427BB/RX-225FB	Intel® Core™ i5-4300U/ Celeron 2980U/i7-4650U/ i3-4010U	Intel Core i5-5350U/ Celeron 3755U
	Socket	FS1r2	FT3b	FP3	MCPBGA	MCPBGA
	Max. Speed	2.3 / 1.9 / 2.7 / 1.5 GHz	QC 2.4 GHz/1.2 GHz	QC 2.7GHz/DC 2.2GHz	1.9 GHz / 1.6 GHz	1.8GHz / 1.7GHz
	TDP	35 W	25W/7W	35W/17W	15 W / 15 W	15W / 15W
	Front Side Bus	-	-	-	-	-
	L2 Cache	2 MB/1MB	2 MB/2 MB	2 MB	256 KB	512 KB
	L3 Cache	-	-	-	3 M/2 M	3M /2M
	Chipset	AMD A75M	-	AMD A77E	Lynx Point	Wildcat Point LP
	BIOS	AMI EFI 16 Mbit, SPI	AMI EFI 16 Mbit, SPI	AMI EFI 32Mb, SPI	AMI EFI 16 Mbits, SPI	AMI EFI 128 Mbit, SPI
Expansion Slot	PCI	-	-		-	-
	Mini PCIe	2	2	2	2	2
	PCIe	PCIe x8, 1 slot	PCIE x4, 1 slot	PCIex x16, 1 slot PCIex1, golden-finger	-	-
Memory	Technology	Dual channel DDR3 1066/1333/1600 MHz SDRAM	Single channel DDR3L 1600/1333 MHz SDRAM	Dual channel DDR3(L) 2133/1866/1600 MHz SDRAM	Dual channel DDR3L 1600 MHz SDRAM	Single channel DDR3L 1600 MHz SDRAM
	Max. Capacity	16 GB	16 GB	16 GB	16 GB	16 GB
	Socket	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM
Graphics	Controller	Integrated Radeon HD7000 series	AMD Radeon™ R5E/R3E Graphics	AMD Radeon™ HD 9000	Intel HD Graphics	intel HD 6000/ intel HD
	LCD	Dual channel 36/48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS; Single Channel 24-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS
	HDMI	-	-	2	1	1
	DVI	-	1 (DVI-I)	-	-	-
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1:Realtek RTL8111E LAN2:Realtek RTL8111E	LAN1: Realtek 8111G LAN2: Realtek 8111G	LAN1: Realtek 8111G LAN2: Realtek 8111G	LAN1:Realtek RTL8111E LAN2:Realtek RTL8111E	LAN1: Intel PHY i218-LM LAN2: Intel i210
	Connector	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2
TPM		optional	Optional	optional	Optional	Optional
SATA	Max Data Transfer Rate	600 MB/s	600 MB/s	600 MB/s	600 MB/s	600 MB/s
	Channel	3	2	3	3	3
	eSATA/mSATA	-/1	-/1	1/2	-	-/1
Rear I/O	VGA/DVI/HDMI/ DP	1/-/-/2	-/1/-/1	-/-/2/2	-/-/1/1	-/-/1/2
	Ethernet	2	2	2	2	2
	USB	4 (2 x USB 3.0, 2 x USB 2.0)	4 (2 x USB 3.0, 2 x USB 2.0)	4 (2 x USB 3.0, 2 x USB 2.0)	4 (USB 3.0)	4 (USB 3.0)
	Audio	Mic-in, Line-in, Line-out	Line-out	Mic In, Line-out, Line-in	Mic-in, Line-out	Mic-in, Line-out
	Serial	1 (RS-232)	-	2 (RS-232)	-	-
	PS/2	1	-	-	-	-
	DC Jack	1	1	1	1	1
Internal Connector	LVDS & Inverter	1	1	1	1	1
	DVI	-	-	-	-	-
	USB	6 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0)
	Serial	5 (4 x RS-232; 1 x RS-232/422/485)	5 (4 x RS-232; 1 x RS-232/422/485)	4 (3 xRS232; 1 x RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)
	Parallel	-	1	-	-	-
	SATA	3	2	3	3	3
	CompactFlash	-	-	-	-	-
	GPIO	8-bit GPIO	8-bit GPIO	16-bit GPIO	8-bit GPIO	8-bit GPIO

Mini-ITX Industrial Motherboard for KIOSK/POS/ATM

Hardware Features

- Rich I/O for effortless connection

Software Features

- Advanced watchdog
- Security storage
- Aconis recovery
- Remote monitoring
- EWF manager

Suggested Models

- AIMB-267
- AIMB-281
- AIMB-501
- AIMB-503
- AIMB-203

FCC/CE Certified Mini-ITX Chassis

Advantech provides a full series of FCC/CE certificated Industrial level compact chassis. These series are compatible with Mini-ITX motherboards of Intel and AMD solution to fulfil a wide range of application environments .

FCC CE





AIMB-272	AIMB-273	AIMB-274	AIMB-281	SIMB-M02
Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
Intel 2nd gen. Core i7/i5/i3/Celeron	Intel 3rd gen. Core i7/i5/i3/Celeron	Intel Core i7/ i5/ i3/ Pentium/ Celeron	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel Atom D2550/N2600
µFC-PGA 988 Socket	µFC-PGA 988 Socket	LGA 1150	LGA 1155	FCBGA
2.1 / 2.5 / 2.2 / 1.6 GHz	2.3 / 2.1 / 2.5 / 2.2 / 1.6 GHz	3.1 / 2.9 / 2.4 GHz	3.5 / 3.0 / 3.1 / 2.7 GHz	DC 1.86 / 1.6 GHz
45 W/35 W	45 W/35 W	95W / 65W /54W / 45W / 35W	95W/ 45W/ 65W/ 55W	10 W/3.5 W
-	-	-	-	-
-	-	-	-	1 MB
6 MB/3 MB/2 MB	6 MB/3 MB/2 MB	8 MB/6 MB/4 MB/3 MB	8 MB/6 MB/3 MB/2 MB	-
Intel QM67/HM65	Intel QM77	Intel Q87	Intel H61	NM10
AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI EFI 128 Mbit, SPI	AMI EFI 32 Mbit, SPI	AMI 16 Mbit, SPI
-	-	-	-	-
1	1	2	1	1
PCIe x16, 1 slot	PCIe x16, 1 slot	PCIe x16, 1 slot	PCIe x4, 1 slot	PCIe x1, 1 slot
Dual Channel DDR3 1066/1333 MHz SDRAM	Dual Channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3/DDR3L 1333/1600 MHz SDRAM	Dual channel DDR3 1066/1333/1600 MHz SDRAM	Single channel DDR3 1066 MHz SDARM
8 GB	16 GB	16 GB	8 GB	4 GB/ 2 GB
2x 204-pin SODIMM	2x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM	1x 204-pin SODIMM
Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Embedded Gen3.5+ GFX Core, 400/640-MHz render clock frequency for N2600/D2550
Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS; Single Channel 24-bit LVDS	Single channel 18-bit LVDS
1	1	1	-	1
1	-	-	1	-
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
LAN1: Intel 82579LM, LAN2: Intel 82583V	LAN1: Intel 82579LM, LAN2: Intel 82583V	LAN1: Intel I217LM, LAN2: Intel I211AT	LAN1:Realtek RTL8111E LAN2: Realtek RTL8111E	LAN1:Realtek RTL8111E
RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 1
Optional	Optional	Optional	-	Optional
600 MB/s, 300 MB/s	600 MB/s, 300 MB/s	600 MB/s	300 MB/s	300 MB/s
2, 2	2, 2	4	3	2
-	-/1	1/1	-/1	
1/1/1/-	1/-/1/2	1/-/1/1	1/1/-/-	1/-/1/-
2	2	2	2	1
4 (USB 2.0)	4 (USB 3.0)	4 (USB 3.0)	6 (USB 2.0)	4 (USB 2.0)
Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-out	Mic-in, Line-in, Line-out
2 (RS-232)	-	1 (RS-232)	2 (RS-232)	2 (RS-232)
2	2	-	1	1
-	-	-	-	1
1	1	1	1	1
1	1	-	-	-
4 (USB 2.0)	4 (USB 2.0)	6 (USB 2.0)	2 (USB 2.0)	3 (USB 2.0)
4 (RS-232)	2 (RS-232)	1 (RS-232/422/485)	4 (RS-232)	4 (RS-232)
-	-	-	-	-
4	4	4	3	2
Cfast x 1	Cfast x 1	-	-	Cfast x 1
8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO

Mini-ITX System

Mini-ITX System for Multiple Applications

CE/FCC Certified Mini-ITX System

These series are compatible with profile Mini-ITX motherboards to support the low power Intel Atom/ Intel Haswell-ILT / AMD G-series solutions. Advantech provides a full series of CE/FCC certificated Mini-ITX System.

FCC CE



New

New


Model Name		AIMB-B12010	AIMB-B12300/ AIMB-B12305	AIMB-T1215A	AIMB-T1225A
Processor System	Compatible Motherboard	AIMB-201	AIMB-230	AIMB-215	AIMB-225
	Thermal solution	Heat Pipe cooler included(support CPU up to 45W)	Heat Pipe cooler included	1x chassis fan (4cm/23.8CFM each)	1x chassis fan (4cm/23.8CFM each)
	CPU	3rd Gen. Intel Core i7/i5/i3 CPU, (uPGA 988B socket, up to 45W)	4rd Gen. Intel Core™ i5-4300U/Celeron 2980U (on board)	Intel® Bay Trail Quad core Celeron™ J1900 (on board)	AMD G-series Quad Core GX-424CC (on board)
	Chipset	QM77	4th Generation Intel® Core™ ULT processors + Lynx Point-LP		
	BIOS	AMI EFI 64 Mbit, SPI	AMI EFI 128 Mbit, SPI	AMI 16 Mbit SPI	AMI 16 Mbit SPI
Memory	Technology	DDR3 1333/1600 MHz SDRAM	DDR3L 1600 MHz SDRAM	DDR3L 1066/1333 MHz SDRAM	DDR3L 1333/1866 MHz SDRAM
	Max. Capacity	16 GB/up to 8 GB per SODIMM	16 GB/up to 8 GB per SODIMM	8 GB/up to 4 GB per SODIMM	16 GB/up to 8 GB per SODIMM
	Socket	2 x 204 PIN DDR3 SODIMM (Non-ECC)	2 x 204 PIN DDR3 SODIMM (Non-ECC)	2 x 204 PIN DDR3 SODIMM (Non-ECC)	2 x 204 PIN DDR3 SODIMM (Non-ECC)
Graphics	Chipset integrated	Integrated Intel HD Graphics	Integrated Intel HD Graphics	Integrated Intel HD Graphics	AMD Radeon™ HD 8000 series Graphics
Storage	2.5" HDD bay	1 (support 2.5" HDD/SSD, max 9.5 mm height)	1 (support 2.5" HDD/SSD, max 9.5 mm height)	1 (support 2.5" HDD/SSD, max 9.5 mm height)	1 (support 2.5" HDD/SSD, max 9.5 mm height)
	Cfast	1 (Front panel access)	NA	NA	NA
	mSATA	NA	1 (share w/ full size Mini-PCIe slot)	1 (share w/ full size Mini-PCIe slot)	1 (share w/ full size Mini-PCIe slot)
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	Intel 82579LM	LAN1: Realtek RTL8111E; LAN2: Realtek RTL8111E;	LAN1: Realtek RTL8111E; LAN2: Realtek RTL8111E;	LAN1: Realtek RTL8111G; LAN2: Realtek RTL8111G;
	Connector	1 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)
Audio	Chipset	Realtek ALC892, High Definition Audio(HD)	Realtek ALC892, High Definition Audio(HD)	Realtek ALC892, High Definition Audio(HD)	Realtek ALC892, High Definition Audio(HD)
Internal expansion Slot	Mini-PCIe	1 (Full-size)	1+1 (Full-size, Half-size)	1+1 (Full-size, Half-size)	1+1 (Full-size, Half-size)
Front Panel	USB	2 (USB2.0)	2 (USB2.0)	up to 4 (USB2.0)	up to 4 (USB2.0)
	COM	1 (RS-232)	2 (RS-232)	up to 5 (RS-232)	up to 5 (RS-232)
	Audio Jack	NA	NA	up to 2 (Line-Out, Mic-In)	up to 2 (Line-Out, Mic-In)
	Antenna (optional)	NA	1 knock-out	up to 2	up to 2
Rear Panel	HDMI	3	1 (Compatible with DP)	NA	NA
	DP++	NA	1	1	1
	Lan	1 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)
	USB	1 (USB3.0)	4 (USB3.0)	1 (USB3.0); 3 (USB2.0)	1 (USB3.0); 3 (USB2.0)
	COM	NA	NA	up to 1 (RS-232/422/485)	NA
	Audio Jack	1 (Line-Out)	2 (Line-Out, Mic-In)	1 (Line-Out)	1 (Line-Out)
	Antenna (optional)	2 knock-out	2 knock-out	up to 2	up to 2
	Power Input	1 (DC Jack)	1 (DC Jack)	1 (DC Jack)	1 (DC Jack)
Miscellaneous	LED Indicators	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)
	Control	1 (Power Button)	1 (Power Button)	1 (Power Button)	1 (Power Button)
Power Requirements	Voltage	19V DC power input	12V DC power input	12V DC power input	12V DC power input
	Power Consumption	17.4W (idle with Core i3)	13.8W (idle with Core i5)	10.17W (idle with Intel Celeron J1900)	20.28W (idle with AMD G-series GX-424CC)
Environment	Operating	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)	0 ~ 40° C (32 ~ 104° F)
	Temperature Non-operating	-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)	-20 ~ 60° C (-4 ~ 140° F)
	Temperature Humidity	10~85% @ 40° C, non-condensing	10~85% @ 40°C, non-condensing	10~85% @ 40°C, non-condensing	10~85% @ 40°C, non-condensing
	Vibration (5 ~500Hz)	0.2G (with 2.5" HDD) / 1G (with SSD)	0.5G (with 2.5" HDD) / 1G (with SSD)	1 Grms (HDD*1)	1 Grms (HDD*1)
Dimensions (W x H x D)	Dimensions (W x H x D)	250 x 35 x 190 mm (9.84" x 1.38" x 7.48")	250 x 35 x 190 mm (9.84" x 1.38" x 7.48")	250 x 43 x 210 mm (9.84" x 1.69" x 8.27")	250 x 43 x 210 mm (9.84" x 1.69" x 8.27")
Weight	Weight	1.98kg	2.02kg	3.1kg	3.1kg

Mini-ITX Chassis

Mini-ITX Chassis for Multiple Applications

- Thin/compact chassis for all Mini-ITX motherboards
- Shock-resistant one 2.5" drive bay
- Simple steps to assemble a system

FCC/CE Certified Mini-ITX Chassis

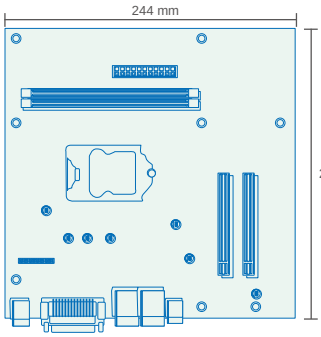
Advantech provides a full series of FCC/CE certificated Industrial level compact chassis. These series are compatible with Mini-ITX motherboards of Intel and AMD solution to fulfil a wide range of application environments .

FCC CE

New

Model Name		AIMB-B2000	AIMB-T1000
Processor Chassis/ System	Fan/ Cooling	2 x fan / 1x fan (7cm/39.45CFM each)	1x fan (4cm/23.8CFM each)
	CPU	Ddepend on Mini-ITX board (Support CPU up to 45W)	Depend on low profile Mini-ITX board (Support CPU up to 47W)
	Chipset		
	Memory		
Driver Bay	2.5" HDD and Slim ODD	2 x 2.5" HDD or 1 x 2.5" HDD + 1 x Slim ODD	1 x 2.5" HDD
Expansion Slot	Slot	Low Profile Expansion slot	NA
Front Panel	I/O Ports	Reserved 4 x USB; 4 x COM 2 x WLAN Antenna	Reserved 4 x USB 2.0; 5 x COM 2 x WLAN Antenna
	Power Switch, Indicators	1 x Power Switch 1 x Reset Button 1 x Power LED Indicator 1 x HDD LED Indicator	1 x Power Switch 1 x Reset Button 1 x Power LED Indicator 1 x HDD LED Indicator
Rear Panel	I/O Ports	Base on Mini-ITX board Reserved 1 x Expansion slot (low profile)	Base on Mini-ITX board Reserved 2 x USB; 1 x COM; 2 x Antenna
	Power Input	AC Inlet / DC-in Jack	DC-in Jack
Power Requirements	Voltage	AC input with 150 W ATX power supply / DC input with power adaptor	DC input with power adaptor
Environment	Operating Temperature	0 ~ 40°C (32 ~ 104°F)	0 ~ 40°C (32 ~ 104°F)
	Non-operating Temperature	-20 ~ 60°C (-4 ~ 140°F)	-20 ~ 60°C (-4 ~ 140°F)
	Humidity	10~85% @ 40°C, non-condensing	10~85% @ 40°C, non-condensing
	Vibration (5 ~500 Hz)	1 Grms (HDD*1+ODD*1); 0.5 Grms (HDD*2)	1 Grms (HDD*1)
Dimensions (W x H x D)	Dimensions (W x H x D)	250 x 98 x 255 mm (9.84" x 3.86" x 10.04")	250 x 43 x 210 mm (9.84" x 1.69" x 8.27")
Weight	Weight	3.8 / 3.1 kg	2.12kg

MicroATX



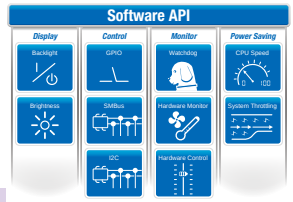
Industrial MicroATX enables the same high integration of ATX but with a smaller footprint that fills the gap between Mini-ITX and full size ATX, balancing performance and expansibility. Equipped with LVDS interface, longevity and revision control, MicroATX is ideally suited for medical and instrumentation applications.

Value-Added Services

SUSI API & Utilities for Easier and Simpler Integration

Directly monitor and control digital I/O, I2C, CPU stepping speed, watchdog timers, smart fans and access hardware monitoring sensors.

Designed for all industrial motherboards



New

Model Name		AIMB-501	AIMB-502	AIMB-503
Form Factor		micro-ATX	micro-ATX	micro-ATX
Processor System	CPU	Intel Core i7/ i5/ i3/ Pentium/ Celeron	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel Core i7/ i5/ i3/ Pentium/ Celeron
	Socket	LGA 1155	LGA 1155	LGA 1150
	max. speed	3.4 G/3.3 G/3.1 G/ 3.0G/2.9 G/2.5 GHz	3.5 G/3.4 G/3.0 G/3.3 G/2.9 G/2.7G/2.5 G	3.5 G/3.1 G/2.9 G/2.4 G
	TDP	95W / 77W / 65W / 55W	95W / 77W / 65W / 55W	65 W / 45 W / 35 W
	L2 cache	-	-	-
	L3 cache	8MB/6MB/3MB/2MB	8MB/6MB/3MB/2MB	8 MB/6 MB/4 MB/3 MB
	Chipset	Intel H61	Intel Q77/C216	Intel H81
	BIOS	AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMIEFI 64 Mbit, SPI
Expansion Slot	PCI	2	1	1 (G2)
	PCIe x16	1	1 (QG2), 2 (WG2)	1
	PCIe x4	-	-	1 (F)
	PCIe x1	1	1	1 (F); 2 (G2/L)
Memory	Technology	Dual channel DDR3 1066/1333 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM
	Max. Capacity	16 GB	32 GB	16 GB
	Socket	2 x 240-pin DIMM	4 x 240-pin DIMM	2 x 240-pin DIMM
Graphics	Controller	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
	VRAM	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 (Optional)
	DVI-D	1	1	1
	HDMI	-	1	-
	DP/eDP	-	-	1
	Dual Display	CRT1+LVDS, CRT1+DVI, CRT1+CRT2 (G2)	CRT+HDMI, CRT+DVI, HDMI+DVI	CRT+DP, CRT+DVI, DVI+DP, CRT+LVDS (Option), DVI+LVDS (Option), DP+LVDS (Option)
	Triple Display	-	CRT + HDMI + DVI	-
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Realtek RTL8111E LAN2: Realtek RTL8111E	LAN1: Intel 82579LM LAN2: Intel 82574L	LAN1: Realtek RTL8111E LAN2: Realtek RTL8111E
	Connector	RJ-45 x2	RJ-45 x2	RJ-45 x2
TPM		Optional	Optional	Optional
SATA	Max Data Transfer	300 MB/s	300 MB/s 600 MB/s	300 MB/s 600 MB/s
	Channel	4	6 / 2	1 / 2
	eSATA/mSATA	-	1 / 1	0 / 1
EIDE	Mode	-	-	-
	Channel	-	-	-
I/O Interface	VGA	2/ 1	1	1
	USB	10 (USB2.0)/ 8(USB2.0), 2(USB 3.0)	2 (USB 2.0), 4 (USB 3.0)	7 (USB 2.0), 2 (USB 3.0)
	Serial	10 (8 x RS-232; 2 x RS-232/422/485)	6 (5 x RS-232, 1 x RS-485)	10 (8 x RS-232; 2 x RS-232/422/485)
	Parellel	1	-	1
	SIM Card Holder	-	-	1
	FDD	-	-	-
	PS/2	2	-	2
	Ethernet (GbE)	2	2	2
	IEEE 1394	-	-	-
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
	GPIO	8 bit	14 bit (6 bit non-programmable, 8 bit programmable)	8 bit

Value-Added Services

Intelligent Display Integration

- 100% Compatible with Advantech Industrial Motherboards
- 5.7" - 55" LCD Panels and Open Frame Monitors

Designed for all industrial motherboards

Value-Added Services

Fast Design with Module Integration Services

- Industrial Flash/Memory/Wireless Modules
- Compatibility Examination
- Software API/AP Support
- Wide-temp Design

Designed for all industrial motherboards

AIMB-562 Kiosk	AIMB-564	AIMB-567	AIMB-580
micro-ATX	micro-ATX	micro-ATX	micro-ATX
Intel Core 2 Duo/Pentium 4/Pentium Dual-Core/ Celeron	Intel Core 2 Quad/Core 2 Duo/ Pentium Dual-Core/ Celeron	Intel Core 2 Quad/Core 2Duo/ Pentium Dual-Core/ Celeron	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron
LGA775	LGA775	LGA775	LGA 1156
2.8 G/2.2 G/3.4 G/2.0 GHz	2.66 G/2.8 G/2.2 G/3.8 G/3.2 GHz	2.66 G/3.16 G/2.6 G/2.2 GHz	2.93 G/2.66 G/3.3 G/3.06 G/2.8 G
86 W / 65 W / 35 W	115 W / 95 W / 86 W / 65 W	95 W / 65 W	95 W / 73 W/ 65 W
4 MB/2 MB/1 MB/512 KB	8 MB/3 MB/1 MB/512 KB	6 MB/512 KB	8 MB/4 MB/3 MB
-	-	-	-
Intel 945G/GC + ICH7	Intel Q965 + ICH8 DO	Intel G41 + ICH7R/ICH7	Intel Q57/3450
Award 16 Mbit, SPI	AMI 16 Mbit, SPI	AMI 16 Mbit, SPI	AMI 64 Mbit, SPI
2	2	2	2
-	1	1	1
-	1	1 (G2)	1
1	-	1 (VG)	-
Dual channel DDR2 533/667 MHz SDRAM	Dual channel DDR2 533/667/800 MHz SDRAM	Dual channel DDR3 800/1066 MHz SDRAM	Dual channel DDR3 800/1066/1333 MHz SDRAM
4 GB	8 GB	4 GB	16 GB
2 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM
Intel GMA 950	Intel GMA 3000	Intel GMA X4500	Intel HD Graphics
Share with system memory up to 224 MB	Share with system memory up to 256 MB	Share with system memory up to 352MB	Shared system memory up to 1 GB
Dual channel 48-bit LVDS	-	-	-
-	-	1	1
-	-	-	-
-	-	-	-
CRT+LVDS, CRT+CRT	-	CRT+DVI	CRT+DVI
-	-	-	-
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
LAN1: Realtek RTL8111C	LAN1: Intel 82566DM	LAN1: Intel 82583V LAN2: Intel 82583V	LAN1: Intel 82578DM LAN2: Intel 82583V
RJ-45 x 1	RJ-45 x 1	RJ-45 x2	RJ-45 x2
-	-	-	Optional
300 MB/s	300 MB/s	300 MB/s	300 MB/s
2	7 (SW RAID)	4(SW RAID)	6 (SW RAID)
-	1 / 0	-	-
ATA 100/66/33	ATA 100/66/33	ATA 100/66/33	-
1	1	1	-
2	1	1	1
8 (USB 2.0)	10 (USB 2.0)	8 (USB 2.0)	10 (USB 2.0)
10 (8 x RS-232; 2 x RS-232/422/485)	1 (RS-232)	4 (3 x RS-232; 1 x RS-232/422/485)	4 (3 x RS-232; 1 x RS-232/422/485)
1	1	1	1
-	-	-	-
-	1	-	1
2	2	2	2
1	1	2	2
-	2 (1 x external & 1 x onboard)	-	-
Mic-in, Line-out	Line-in, Line-out, Mic-in, CD-in, 6 jacks	Mic-in, Line-out	Mic-in, Line-out
16-bit	-	8 bit	-

MicroATX

Massive Storage Capacity MicroATX Industrial Motherboard for NVR/ DVR Surveillance Solution

Hardware Features

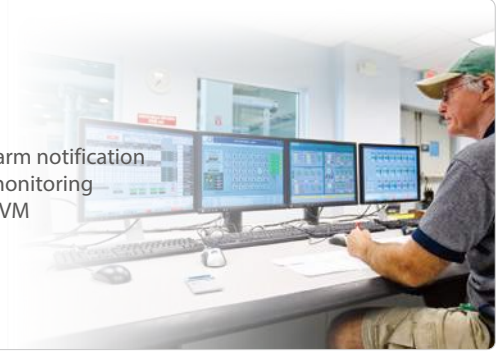
- Designed for massive video storage devices
- Linux RAID with hot plug support

Software Features

- Auto backup and recovery
- Efficient cost saving
- Data maintenance
- H/W monitoring
- Logs of critical events
- Instant alarm notification
- Remote monitoring
- Remote KVM

Suggested Model

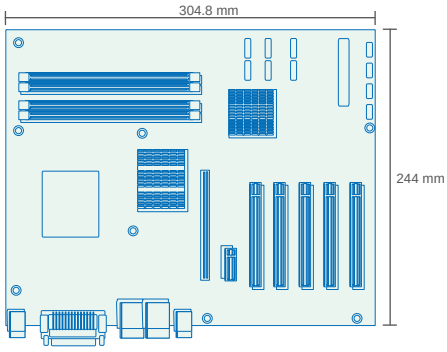
AIMB-502QG2/WG2



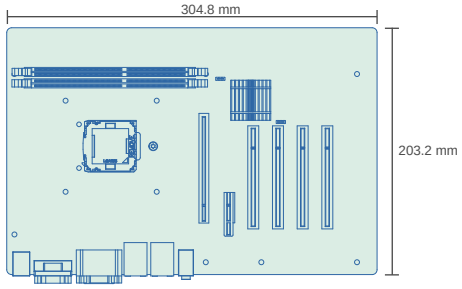
New

Model Name		AIMB-581	AIMB-582	AIMB-584
Form Factor		micro-ATX	micro-ATX	micro-ATX
Processor System	CPU	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron
	Socket	LGA 1155	LGA 1155	LGA 1150
	max. speed	3.4 G/3.3 G/3.1 G/ 3.0G/2.9 G/2.5 GHz	3.5 G/3.4 G/3.0 G/3.3 G/2.9 G/2.7G/2.5 G	3.5 G/3.1 G/2.9 G/2.4 G
	TDP	95W / 77W / 65W / 55W	95 W / 77 W / 65 W / 55 W	95 W / 65 W / 45 W / 35 W
	L2 cache	-	-	-
	L3 cache	8 MB/6 MB/3 MB/2 MB	8 MB/6 MB/3 MB/2 MB	8 MB/6 MB/4 MB/3 MB
	Chipset	Intel Q67/C206	Intel Q77/C216	Intel Q87/C226
	BIOS	AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMI EFI 128 Mbit, SPI
Expansion Slot	PCI	2	2	2
	PCIe x16	1	1	1
	PCIe x4	1	1	1
	PCIe x1	-	-	-
Memory	Technology	Dual channel DDR3 1066/1333 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM
	Max. Capacity	16 GB	32 GB	32 GB
	Socket	4 x 240-pin DIMM	4 x 240-pin DIMM	4 x 240-pin DIMM
Graphics	Controller	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
	VRAM	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 (Optional)	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS
	DVI-D	1	1	1
	HDMI	-	-	-
	DP/eDP	-	1 / 1	1 / 1
	Dual Display	CRT+LVDS, CRT+DVI, LVDS+DVI	CRT+DP, CRT+DVI, DVI+DP, CRT+LVDS (or eDP), DVI+LVDS (or eDP), DP+LVDS (or eDP)	CRT+DP, CRT+DVI, DVI+DP, CRT+LVDS (or eDP), DVI+LVDS (or eDP), DP+LVDS (or eDP)
	Triple Display	-	CRT+DVI+DP, CRT+LVDS (or eDP)+DP, CRT+LVDS (or eDP)+ DVI, DVI+DP+LVDS (or eDP)	CRT+DVI+DP, CRT+LVDS (or eDP)+DP, CRT+LVDS (or eDP)+ DVI, DVI+DP+LVDS (or eDP)
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel 82579LM LAN2: Intel 82583V	LAN1: Intel 82579LM LAN2: Intel 82583V	LAN1: Intel I217LM LAN2: Intel I211AT
	Connector	RJ-45 x2	RJ-45 x2	RJ-45 x2
TPM		Optional	Optional	Optional
SATA	Max Data Transfer	300 MB/s 600 MB/s	300 MB/s 600 MB/s	300 MB/s 600 MB/s
	Channel	4 (SW RAID) / 2 (SW RAID)	4 (SW RAID) / 2 (SW RAID)	4 (SW RAID) / 2 (SW RAID)
	eSATA/mSATA	-	-	-
EIDE	Mode	-	-	-
	Channel	-	-	-
I/O Interface	VGA	1	1	1
	USB	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)	6 (5 x RS-232; 1 x RS-232/422/485)	6 (5 x RS-232; 1 x RS-232/422/485)
	Parellel	1	1	1
	SIM Card Holder	-	-	-
	FDD	-	-	-
	PS/2	2	2	2
	Ethernet (GbE)	2	2	2
	IEEE 1394	-	-	-
	Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out
	GPIO	8 bit	8 bit	8 bit

ATX



ATX motherboards support up to 7 expansion slots. Advantech's ATX motherboards offer a wide range of computing capacities from low power Intel Pentium M based solutions to the latest multi-core processors.



Model Name		SIMB-A01	SIMB-A21	SIMB-A31
Form Factor		ATX	ATX	ATX
Processor System	CPU	Intel Core 2 Quad/Core 2 Duo/Pentium Dual-Core/ Celeron	Intel Core i7/ i5/ i3/ Celeron	Intel Core i7/ i5/ i3/ Pentium/ Celeron
	Socket	LGA775	LGA 1155	LGA 1150
	Max. Speed	2 GHz ~ 2.66 GHz	2.5 GHz ~ 3.1 GHz	3.5 / 3.1 / 2.9 / 2.4 GHz
	Front Side Bus	-	-	-
	L2 Cache	6 MB / 2 MB / 512 KB	8 MB / 6 MB / 3 MB / 2 MB	8 MB / 6 MB / 4 MB / 3 MB
	TDP	105 W / 95 W / 65 W / 35 W	95 W ~ 35 W	65 W / 54 W / 45 W / 35 W
	Chipset	Intel Q35 + ICH9R	Intel H61	Intel H81
	BIOS	AMI 32 Mbit, SPI	AMI 32 Mbit, SPI	AMI EFI 64 Mbit, SPI
Expansion Slot	PCI	5	4	3
	MINI PCI	-	-	1
	PCIe	PCIe x16, 1 slot PCIe x1, 1 slot	PCIe x16, 1 slot PCIe x1, 1 slot	PCIe x1, 2 slot PCIe x16, 1 slot
Memory	Technology	Dual channel DDR2 667/800 MHz SDRAM	Dual channel DDR3 1066/1333 MHz SDRAM	Dual channel DDR3/L 1333/1600 MHz SDRAM
	Max. Capacity	8 GB	16 GB	16 GB
	Socket	4 x 240-pin DIMM	2 x 240-pin DIMM	2 x 240-pin DIMM
Graphics	Controller	Intel GMA 3100	Intel HD Graphics 2000/3000	Intel HD Graphics
	DVI	-	1	1
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1:Realtek RTL8111C LAN2:Realtek RTL8111C	LAN1:Realtek RTL8111E LAN2:Realtek RTL8111E	LAN1: Realtek 8111G LAN2: Realtek 8111G
	Connector	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2
TPM		Infineon® 9635 TT 1.2 on board	-	Optional
SATA	Max Data Transfer Rate	300 MB/s	300 MB/s	300 MB/s 600 MB/s
	Channel	6	4	1/2
EIDE	Mode	1	-	-
	Channel	ATA 100/66/33	-	-
Rear I/O	VGA/DVI/HDMI	1/-/-	1/1/-	1/1/-
	Ethernet	2	2	2
	USB	4 (USB 2.0)	4 (USB 2.0)	4 (2 x USB 3.0, 2 x USB 2.0)
	Audio	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out
	Parallel	1	-	-
	Serial	1 (RS-232)	1 (RS-232, supplies 5 V/ 12 V)	1 (RS-232/422/485, supplies 5 V/ 12 V); 1 (RS-232)
	PS/2	2	2	2
Internal Connector	USB	8 (USB 2.0)	6 (USB 2.0)	6 (USB 2.0)
	Serial	1 (RS-232/422/485); 2 (RS-232)	1 (RS-232/422/485); 4 (RS-232)	2 (RS-232, supplies 5 V/ 12 V); 2 (RS-232)
	Parallel	-	1	1
	IDE	1	-	-
	SATA	6 (SATA II)	4 (SATA II)	3 (2 x SATA III, 1 x SATA II)
	CompactFlash	-	-	-
	GPIO	16-bit GPIO	8-bit GPIO	8-bit GPIO

One-Stop Integrated Solutions with 5-years Longevity

At Advantech, we try to think beyond what a customer needs. A single motherboard solution is fine but customers are always looking for easier, more complete and more elegant solutions. Advantech provides a series of hardware solutions with add-on software tools and APIs, ranging from boards, chassis, and storage peripherals, to software Apps, Utilities and APIs. Advantech not only assembles, installs and embeds, we also provide a selection of intelligent platforms and build-to-order-services for any customization requests required by customers. Plus, we provide 5 year longevity and revision control services.

1 4-week Sample Delivery

- Conceptual drawing
- 3D model preview
- Thermal simulation

2 Quality & Certification Services

- Functional verification
- Reliability testing
- Safety certification

3 Universal Peripheral & S/W Integration

- Compatibility services
- Embedded storage, RAM, touch and wireless modules
- Intelligent display integration
- Microsoft embedded OS, McAfee distribution

4 Global Logistic & Services

- CTOS flexible integration services
- Local fast RMA
- Revision control
- 5 Year longevity

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Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118
Taiwan	0800-777-111
Rueiguang	886-2-2792-7818
Yang Guang	886-2-2792-7818
Xindian	886-2-2218-4567
Taichung	886-4-2378-6250
Kaohsiung	886-7-229-3600

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Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887
Korea	080-363-9494
Seoul	82-2-3663-9494
Singapore	
Singapore	65-6442-1000
Malaysia	1800-88-1809
Kuala Lumpur	60-3-7724-3555
Penang	60-4-397-3788
	60-4-397-4188
Indonesia	
Jakarta	62-21-769-0525
Thailand	
Bangkok	66-2-248-3140
India	1800-425-5070
Bangalore	91-80-25450206
Australia	1300-308-531
Melbourne	61-3-9797-0100
Sydney	61-2-9476-9300

Europe

Europe	00800-2426-8080
Germany	
Münich	49-89-12599-0
Hilden	49-2103-97-885-0
France	
Paris	33-1-4119-4666
Italy	
Milano	39-02-9544-961
Benelux & Nordics	
Breda	31-76-5233-100
UK	
Reading	44-0118-929-4540
Poland	
Warsaw	48-22-33-23-740/741
Russia	8-800-555-01-50
Moscow	7-495-232-1692

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