

# Industrial Motherboards

Flexible Integration, Fast Development  
for Vertical Applications

- / Industrial Motherboards
- / EPC Systems
- / UTX Gateways



**ADVANTECH**

*Enabling an Intelligent Planet*



**AMD**



[www.advantech.com](http://www.advantech.com)

# Full Spectrum Form Factor

From Industrial Motherboards, Systems, to Gateways

Advantech Industrial Motherboards offer a full range of standard form factors from compact UTX, Mini-ITX, Micro-ATX to ATX. With strong industrial motherboard expertise, we've launched a whole new "Embedded PC" series – EPC enclosures and systems, integrated with Mini-ITX motherboards to meet a variety of industrial application requirements. To embrace the exciting future of IoT and facilitate IoT deployment, UTX IoT gateway was launched with multi-connectivity and IoT software integration, UTX IoT gateway is your only choice.



## Full Spectrum Offerings

- From boards and systems, to gateways
- Entry to server grade performance
- Early engagement with AMD & Intel



## Customization & Integration Service

- Certification/validation
- Thermal solution & IO extension
- Peripheral & SW integration



## Pioneering Design

- -20~70°C optional temperature support
- 9~36 V wide-range DC power input
- Optimized thermal solutions



## Value-added Software Services

- Embedded OS/BIOS/iManager 2.0
- Advantech WISE-PaaS/EdgeSense
- IoT software integration for gateways

## Industrial Motherboards



### UTX

- UTX measures 112 X 117 mm
- UTX-E measure 112 X 137 mm
- Equipped with max connectivity, low power consumption with wide temp, and fanless design
- Small form factor for AI, robotics, IoT gateway solutions



### Mini-ITX

- Measures 170 X 170 mm
- Full range platforms mITX offering from Entry (ATOM), ULT, Mobile, Desktop, Workstation to server grade
- Reliable I/O port and expansion slots, supports dual to triple displays with high resolution.
- Diversity hardware features suitable for different vertical applications



### Micro-ATX

- Measures 244 X 244 mm
- Equipped with massive connectivity, multi-display, high performance computing power.
- Designed for kiosk, surveillance, medical devices and instrumentation.



### ATX

- Measures 304.8 x 244mm
- Offers Intel core i highly computing capacities with high expansion capability.
- Focused on Industrial automation, AOI and more

## Embedded Systems



### Embedded PC T Series

#### EPC-T1000

1U THIN fanless embedded PC with low profile Mini-ITX motherboards

#### EPC-T2000

1U THIN embedded PC with Desktop Core™ i3/i5/i7 computing performance

#### EPC-T3000

- 1U desktop THIN embedded PC with Desktop Core™ i3/i5/i7 computing performance
- Two 2.5" shock-resistant drive bay
- One Full-Height PCIe Card



### Embedded PC B Series

- Fit Advantech Mini-ITX motherboard range from low power Intel® Atom™ to the most advanced Intel® Core™ i processor solutions
- One low profile PCIe card expandability and rich I/O connectivity
- Two 2.5" shock-resistant drive bays



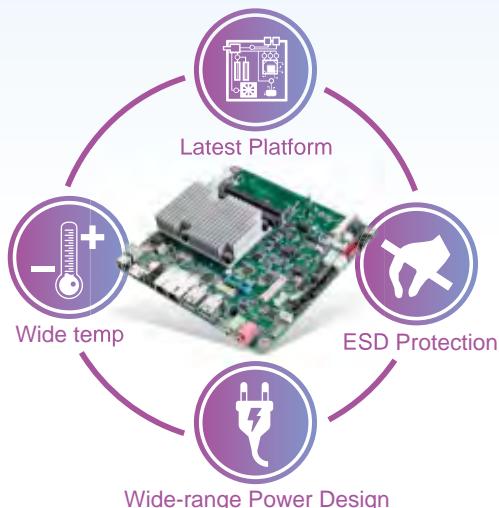
### UTX IoT Gateway

- Palm sized fanless embedded box w/ wide-temp support.
- 4-5 RF antenna for 2-3 RF module expansion capability.
- Modified for FA/MA, smart street lighting, smart buildings, HVAC facility control

# Off-the-shelf Industrial Motherboards

From Entry to Server Grade Performance

Advantech offers you a full range of industrial motherboards with the latest platform experience and industrial know-how, and services which aim to give you the cutting edge in technology to stay ahead of the competition.



## Latest Platforms and Pioneering Designs

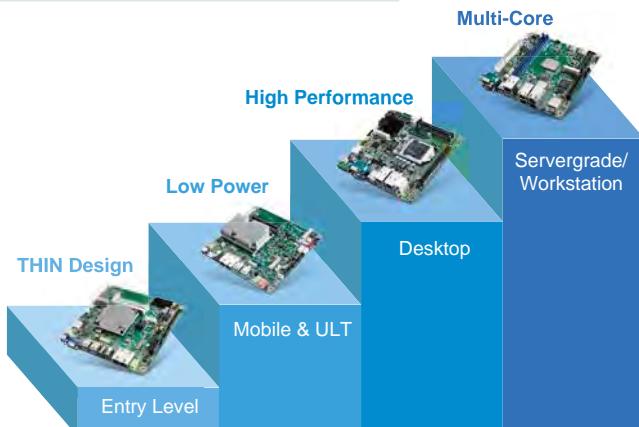
Leading the embedded market, Advantech industrial motherboards adopt the latest Intel and AMD platforms with designs.

- Early engagement with Intel & AMD
- -20~70°C optional temperature support
- 12-24V wide range DC input & dual power input source
- ESD level 4 protection & USB stability enhancement

## Entry to Server-grade Performance

We provide a full range of industrial motherboards from performance to entry-level to server-grade. Our complete product offering is designed to meet different vertical requirements.

- THIN design for entry level
- High reliability for mobile & ULT
- Desktop performance
- Server-grade & workstation CPU computing



## Global Service & Technical Support

Advantech leverages its global networks to provide one-stop global services and total solutions to provide the maximum amount of flexibility and efficiency for our customers.

- 14+ global service networks
- Local & online technical support
- Configure-to-order Service (CTOS)
- Customization service: thermal solution, I/O extension, and certification/validation

## Embedded IoT Software Service

### Embedded BIOS

Advantech provides fully featured Embedded BIOS solutions that deliver the superior performance compatibility and functionality that system integrators need. A variety of options and extensions let customers tailor their products to a wide range of target markets. Secure boot options are optimized to make sure the POST operation is fast with coreboot performing the absolute minimal amount of hardware initialization before passing control to the OS. Furthermore, a BIOS suite is included for building custom firmware tools for multiple OS, such as DMI, BIOS configurations, and other modules.

### Advantech WISE-PaaS/RMM for Remote Monitoring and Management

Advantech strives to help our customers integrate IoT solutions by providing pre-integrated, pre-validated hardware and software building blocks that enable secure and seamless data flow from sensors to cloud. WISE-PaaS/RMM is one of Advantech's IoT Software Platform Services, focusing on IoT device remote monitoring and management, bridging layers of IoT architecture and anchoring predictive maintenance, big data analysis, and other domain-specific cloud applications.

## Vertical Solutions



Medical



CNC/ AI /Robot



Surveillance/ Server



Self-service Kiosk

### HW Features

- High stability programming
- Extreme graphics performance
- ESD Level 4 Design
- Multi expansions

- Industrial reliability
- Longevity support
- Wide-range computing offering from ATOM to Core i

- Workstation grade computing
- Massive SATA and expansion slots
- Multiple CPU Core (4 to 16) with low TDP
- Jumbo frame LAN (up to 10GbE) and IPMI supported

- Massive I/O
- Reliable USB design
- Dual displays up to 4K
- Multiple expansions
- THIN to double stack offering

### SW Features

- Remote device management
- Remote software update

- Centralized device and data protection
- BIOS/OS/API customization

### HW Features

#### mITX

AIMB-232 AIMB-275  
AIMB-242 AIMB-285

#### mITX

AIMB-215 AIMB-275  
AIMB-217

#### mITX

AIMB-242WG2 AIMB-290

#### mITX

AIMB-203 AIMB-205  
AIMB-232 AIMB-285

#### uATX

AIMB-584 AIMB-585

#### uATX

AIMB-584 AIMB-U117  
AIMB-585

#### uATX

AIMB-584WG2 AIMB-502  
AIMB-585SV

#### uATX

AIMB-503 AIMB-505

# Embedded PC

To meet different vertical needs, Advantech offers 6 series of Embedded PCs (EPC), providing high-performance graphics, various I/O expansion options, multiple display connections, and a rugged enclosure. With these product features, Advantech's EPC is ideal for applications in self-service kiosks, passenger information systems, gaming and industrial automation



## Features



### Full Range Offerings

- Low-power to server-grade performance
- 1U & 2U compact design
- Reliable fanless design



### Quick Integration Services

- Fast local CTOS assembly
- One-stop peripheral integration
- Customized safety certification



### Optimized Mechanical Design

- I/O design flexibility
- Rich expansion capability
- Multiple mounting: Wall/VESA/DIN rail



### Software Integration

- Advantech WISE-PaaS/EdgeSense
- Windows OS image ready
- SUSI API unified interface



EPC-T Series

- Featuring thin design
- Designed for THIN Mini-ITX motherboards, under 1U height
- Supports CPU processors from Atom up to 65W Core i7
- Fan/ Fanless system for different application/environments
- Supports multiple mounting kit, as wall/ VESA/ din rail/ rack mounting kits



EPC-B Series

- Featuring scalable design with LP PCIe expansion
- Designed for standard Mini-ITX and THIN Mini-ITX motherboards
- Reserved openings for USB, COM, Antenna, and low profile PCIe cards
- Supports both ATX and DC-input mITX

# UTX IoT Gateway

Advantech's UTX series of embedded IoT gateways are designed for end device data analysis and transmission, increasing operational efficiency by giving you the information you need to make effective decisions. This aids in deriving intelligence to drive new design innovations and makes business transformation a viable option. In addition, the UTX series supports multiple connectivity options and IoT software integration, making it ideal for Industry 4.0 solutions in smart city, and smart energy applications.



## Innovative Design Features



### Optimized Thermal Solutions

- Wide operating temperature, -20~60°C
- Double-sided optimized thermal solution



### Wide Power Input & Rich I/O

- 12-24V power input
- Supports RS-232/422/485



### Multi-connectivity Design

- 5-antenna design: 3G/LTE, WiFi, Zigbee, and LoRA
- 3 x RF modules for add-on flexibility



### IoT Software Integration

- OS support: Windows 10, WindRiver Pulsar
- IoT software integration: WISE-PaaS IoT software platform, AWS Greengrass, Microsoft IoT Edge



**UTX-3115**

- Intel® Atom™ E3800 series SoC
- 2 RF modules with 4 antennas design
- 12VDC input
- Multiple mounting kit



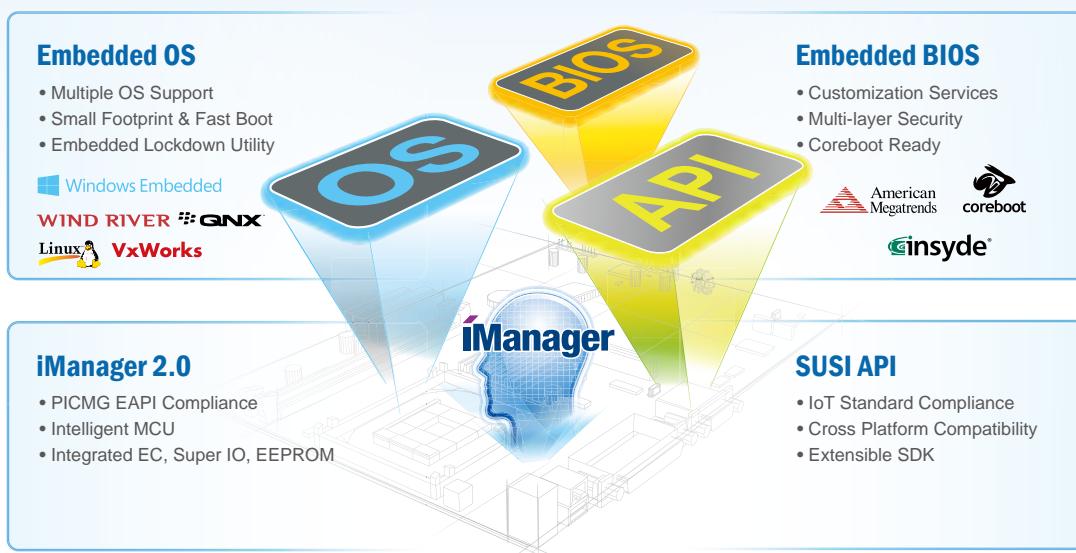
**UTX-3117**

- Intel® Atom™ E3900 series SoC
- 3 RF modules with 5 antennas design
- 12-24V wide range DC input
- Multiple mounting kit

# Software Integration Service

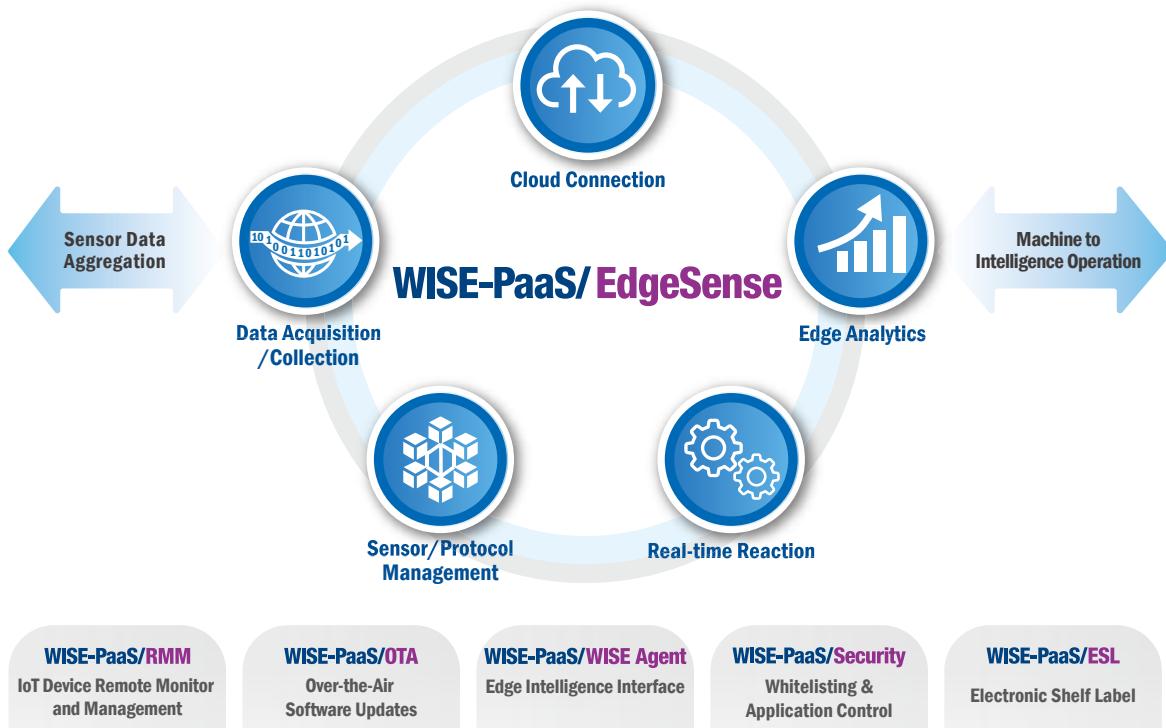
## Embedded Software Capabilities

Advantech Embedded Software Services includes Embedded BIOS Services, OS Services and Industrial Cloud Services. Embedded Software Services help decrease design effort and project complexity, and accelerates product development.



## WISE-PaaS/EdgeSense- Edge Intelligence & Sensing Integration

WISE-PaaS/EdgeSense is an edge intelligence and sensing integration software solution that incorporates sensor data aggregation, over-the-air software-in-time updates, edge analytics, cloud applications, and secure end-to-end data protection for fast and easy real-time device-to-cloud operational intelligence.



# Industrial Motherboards for Nursing Carts

## High Performance, Multiple Expansion, ESD Certification

Nursing carts are lightweight and durable mobile stations used in medical facilities for storing and conveying medications and emergency medical supplies, as well as for dispensing medication and assisting with nurse education. Nursing cart applications are designed to enhance patient care, decrease paper work, and ease the workload for nurses and other healthcare professionals.

### Customer Challenges

One of our customers based in Europe in the medical field wanted to upgrade and enhance their nursing carts' reliability and capability for data processing and medication delivery. As the nursing carts needed to transfer critical data back to the nursing station instantly, WiFi signal strength was crucial. The customer was looking for a control board with high CPU processing and graphic performance, and multiple expansion capability for WiFi/3G modules.

### Advantech Solutions

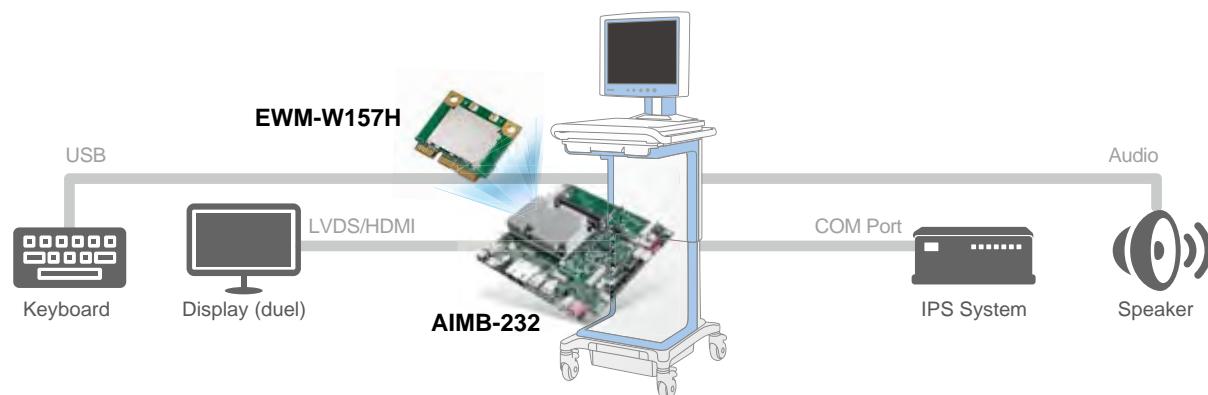
To meet the customer's requirements, Advantech provided AIMB-232 THIN Mini-ITX motherboard integrated with an EWM-W157H wireless module. AIMB-232 uses Intel® Mobile UTL processor's for better performance, along with 40-45% height reduced low profile I/O design and medical compliant thermal solution, which is ideal for portable medical applications. EWM-W157H allows 433Mbps wireless data rates for high-throughput wireless applications.

### High Graphic Performance and ESD Certification

Advantech's AIMB-232 is equipped with an Intel® Mobile UTL i3/i5/i7 processor, provides three independent displays, and supports high graphic performance up to 4K at 60Hz resolution. Most importantly, AIMB-232 is ESD level 4 test certified, which provides the highest ESD protection to avoid power surge damage.

### Expansion Capability for WiFi/3G/LTE modules

With two Mini PCIe expansion slots onboard for WiFi/3G/LTE and storage, AIMB-232 is compliant with EWM-W157H WiFi modules, which are fully compatible with windows and Linux OS.



# Application Story

## Surveillance

### Requirements

The current focus of developments in surveillance is on intelligent video systems (IVS), which provide advanced, accurate video analytics for both IP and analog cameras. A major system integrator of network video recording/digital video recorder (NVR/DVR) solutions in Taiwan needed to upgrade their hardware to fulfill more advanced requirements. They needed high-performance CPUs, multiple I/O, and security support.



### Solutions

The AIMB-585SV, a Micro-ATX industrial-grade motherboard specifically designed for IVS surveillance solutions, features an Intel® Core™ Xeon®/i7/i5/i3 processor. The AIMB-585SV provides software for surveillance applications, such as software RAID 0/1/5/10 support under Linux (or RAID 0/1/5/10 under WinServer 2012/2016), Acronis auto-recovery and auto-backup technology, McAfee banking-level security, and Wise-PaaS/RMM for remote monitoring and management.



## Print Monitor System

### Requirements

A printing industry customer needed to develop a highly sophisticated system to automate various print inspection works. The print monitoring system needed to have a highly reliable industrial PC-based system with high performance and multiple I/O connectivity for the control units.



### Solutions

Advantech provided the EPC-B2275 empowered with an Intel® 6th/7th Generation Core™ i3/i5/i7 processor integrated with dual GbE LAN ports, multiple USB 2.0 ports, USB 3.0, as well as RS232 ports (one RS232/422/485), one expansion slot (low profile), ATX power supply or AC-DC power adaptor, and two shock resistant 2.5" drive bays.



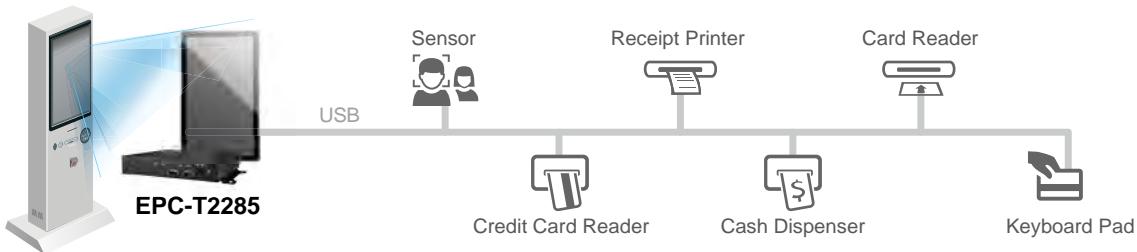
## Self-ordering Machine

### Requirements

Self-ordering machines assist customers in placing orders via an intuitive, multilingual and user-friendly touch screen interface. This reduces queues and waiting times during busy periods. It also helps retail stores reduce labor cost, increases working efficiency, facilitates managerial tasks, and improves customer service. In total it bring benefits for both the retail store and customers

### Solutions

Advantech EPC-T2285 embedded PC is equipped with an Intel 6th Gen. desktop low profile Mini- ITX motherboard and 1U height enclosure. It provides high computing power and enhanced graphic performance, and the efficient thermal solution draws heat from the inside out. Only 1U in height (44mm), this embedded PC can be quickly mounted behind a touch panel display for easy assembly/disassembly.



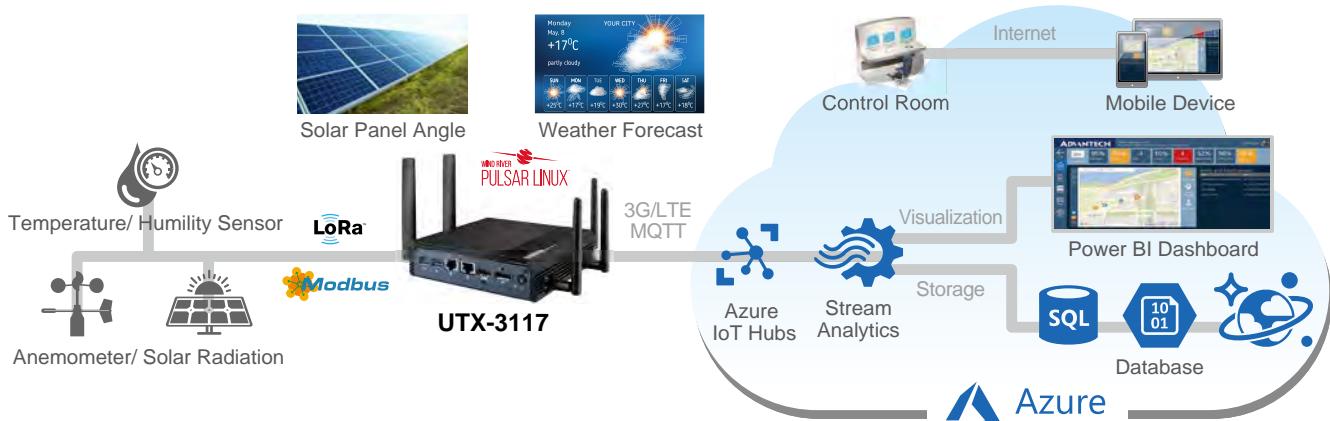
## Solar Power

### Requirements

Solar power is the fastest-growing source of new energy. However; current solar power transfer effectiveness is still very low. Solar tracker system are an efficient power generation system that is designed according to the sun's incident angle and follows the sun's position.

### Solutions

Advantech provided a UTX-3117 IoT gateway with LoRa solution to collect solar panel and solar radiation data in real time via LoRa from each solar panel in an area of over 10~15km. In addition, UTX-3117 uses an optimized thermal design that can sustain full load operation in -20~60 °C critical environments. UTX-3117 with Azure IoT Edge will analyze data and control the solar panels' angle based on the sun's incident angle through LoRa. Azure IoT Edge then transfers data to the Azure IoT hub cloud service via 3G/LTE. Finally, the end user remotely monitors the solar energy from the control station or through mobile devices.





Model Name	AIMB-115	AIMB-U117	AIMB-U217
Form Factor	UTX	UTX	UTX
Processor System	CPU	Intel E3826	Intel E3950/ E3930
	Socket	FCBGA	FCBGA
	Max. Speed	DC 1.46GHz/ SC 1.46GHz	QC 1.6/ DC 1.3 GHz
	TDP	7 W	12W/ 6.5W
	Front Side Bus	-	-
	L2 Cache	1 MB	2M
	L3 Cache	-	-
	Chipset	-	-
Expansion Slot	BIOS	AMI EFI 16 Mbit, SPI	AMI EFI 128 Mbit SPI
	PCI	-	-
	Mini PCIe	2	1
	PCIe	-	-
Memory	Technology	Dual channel DDR3L 1333 MHz SDRAM	Single channel DDR3L 1866/ 1600/ 1333 Mhz SDRAM
	Max. Capacity	8 GB	8GB
	Socket	2 x 204-pin SODIMM	1 X 204-pin SODIMM
Graphics	Controller	Intel HD Graphics	Intel HD Graphics
	LCD	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS (colay with eDP)
	HDMI	2	1
	DVI	-	-
Ethernet	Interface	10/100/1000 Mbps	10/100/1000 Mbps
	Controller	LAN1: Intel i210AT LAN2: Realtek RTL8111G	LAN1: Intel i211AT LAN2: Intel i211AT LAN3: Realtek RTL8111G
	Connector	RJ-45 x2	RJ-45 x2
TPM	-	Optional	Optional
SATA	Max Data Transfer Rate	300 MB/s	600 MB/s
	Channel	1	1
	eSATA/mSATA	1	-/-
Rear I/O	VGA/DVI/HDMI/DP	-/-/2/-	-/-/1/1
	Ethernet	2	2
	USB	3 (1x USB3.0, 1x USB2.0, 1x Micro USB2.0)	4 x USB3.0
	Audio	Mic-in, Line-out	Line out
	Serial	-	-
	PS/2	-	-
	DC Jack	1	1
Internal Connector	LVDS & Inverter	1	1
	DVI	-	-
	USB	-	2 (USB2.0)
	Serial	2 (1 X RS-232; 1 X RS-232/422)	2 (1 X RS-232; 1 X RS-422/485)
	Parallel	-	-
	SATA	1	1
	CompactFlash	-	-/1 (32GB)
	GPIO	-	8-bit GPIO
			16-bit GPIO

Model Name	UTX-3115	UTX-3117
Processor System	CPU	Intel E3826 / E3815 processor
	Core Number	Dual core / Single Core
	BIOS	AMI EFI 64 Mbit, SPI
	Chipset	-
Memory	Technology	DDR3L 1333/1600 MHz SDRAM
	Max. Capacity	4 GB/update to 4GB/per DIMM
	Socket	1 x 204-pin DDR3L SODIMM (Non-ECC)
Display	Controller	Intel HD Graphics
	VGA	1
	HDMI	2
	Display Port	-
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 (1xF/S miniPCIe slot, 1x H/S miniPCIe slot)
	SIM socket	1
Front Panel	USB	2 (1x USB 3.0, 1x 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	2 (1xRS-232, 1xRS-422)
Power	Power jack	1(DC12V)
	Control	1 (Power Button)
	Voltage	12V <sub>DC</sub> ± 10%
	Power Consumption	12V@0.88A
Environment	Power Adapter	AC to DC DC12V/3A, 36W
	Operating Temperature	-20 ~ 60 °C (32 ~ 104 °F) with RF module by max system performance
	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/KC/VCCI/BSMI
	Safety	UL,CB,BSMI,CCC

# Mini-ITX



Model Name		AIMB-203	AIMB-205	AIMB-215 B1	AIMB-216 A2	AIMB-217
Form Factor		Mini-ITX	Mini-ITX	THIN Mini-ITX	THIN Mini-ITX	THIN Mini-ITX
Processor System	CPU	Intel Core i7/ i5/ i3/ Pentium/ Celeron	Intel 7th & 6th Gen Core i7/ i5/ i3/ Pentium/Celeron	Intel Celeron J1900 / N2930 / N2807	Intel Pentium N3710 & Celeron N3160/N3010 & Atom x5-E8000	Intel Pentium N4200/Celeron N3350/Atom x7-E3950
	Socket	LGA 1150	LGA1151	FCBGA	FCBGA	FCBGA
	Max. Speed	3.1 / 2.9 / 2.4 GHz	3.6/3.3/2.4/3.4/3.2/ 2.8/2.6 GHz	QC 2.0 / 1.83 GHz; DC 1.58 GHz	QC 1.6/QC 1.6/DC 1.04/QC 1.04 GHz	QC 1.1/DC 1.1/QC 1.6 GHz
	TDP	95 W / 65 W / 54 W / 45 W / 35 W	65W/51W/54W/35W	10 / 7.5 / 4.3 W	6 / 6 / 4 / 5 W	6 W/6 W/12 W
	Front Side Bus	-	-	-	-	-
	L2 Cache	-	-	2 MB / 2 MB / 1 MB	2MB	2MB
	L3 Cache	8 MB / 6 MB / 4 MB / 3 MB	8 MB/6 MB/4 MB/3 MB/2 MB	-	-	-
	Chipset	Intel H81	H110	-	-	-
Expansion Slot	BIOS	AMI EFI 64 Mbit, SPI	AMI EFI 128 Mbits,SPI	AMI EFI 16 Mbit, SPI	AMI EFI 16 Mbit, SPI	AMI EFI 128 Mbit, SPI
	M.2	-	1 (B Key)	-	1 (B Key)	1 (E Key)
	Mini PCIe	2	1	2	1	1
	PCIe	PCIe x16, 1 slot	PCIe x 16	PCIE x1, 1 slot	PCIE x1, 1 slot	PCIE x1, 1 slot
Memory	Technology	Dual channel DDR3L 1333/1600 MHz SDRAM	Dual Channel DDR4 2133/2400 MHz SDRAM	Dual / Dual / Single channel DDR3L 1333 MHz SDRAM	Dual channel DDR3L 1600/1066 MHz SDRAM	Dual channel DDR3L 1866 MHz SDRAM
	Max. Capacity	16 GB	32GB	8 / 8 / 4 GB	8GB/ up to 8GB per DIMM	8GB/ up to 8GB per DIMM
	Socket	2 x 204-pin SODIMM	2 x 260-pin SODIMM	2 / 2 / 1 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM
Graphics	Controller	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel HD Graphics
	LCD	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS
	HDMI	-	-	-	1	1
	DVI	1	1	-	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: Realtek 8111G LAN2:Realtek 8111G	LAN1:Realtek RTL8111E LAN2:Realtek RTL8111E	LAN1:Realtek RTL8111G LAN2:Realtek RTL8111G	LAN1: Realtek 8111G LAN2:Realtek 8111G
	Connector	RJ-45 x 2	RJ-45 x 2	RJ-45 x2	RJ-45 x 2	RJ-45 x 2
TPM		Optional	Optional	optional	Optional	Optional
SATA	Max Data Transfer Rate	600 MB/s, 300MB/s	600 MB/s	300 MB/s	600 MB/s	600 MB/s
	Channel	2, 1	2	2	2	2
	eSATA/mSATA	-/1	-/1	-/1	-/-	-/1
Rear I/O	VGA/DVI/HDMI/DP	1/1/-/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)	8 (4x USB 3.0; 4xUSB2.0 )	4 (1 x USB 3.0/3 x USB 2.0)	4 ( USB 3.0 )	4 ( USB 3.0 )
	Audio	Mic-in, Line-in, Line-out	Mic-in, Line-in, Line-out	Line-out	Line-out	Line-out
	Serial	1 (RS-232)	-	-	-	-
	PS/2	2	-	-	-	-
	DC Jack	-	-	1	1	1
Internal Connector	LVDS & Inverter	1	1	1	1	1
	DVI	-	-	-	-	-
	USB	4 (USB 2.0)	6 (USB 2.0), USB11/12/13/14 is optional	4 (USB 2.0)	6 (USB 2.0), USB7/8/9/10 is optional	8 (USB 2.0), USB9/10/11/12 is optional
	Serial	8 (7 x RS-232; 1 x RS-232/422/485)	8 (7 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	-	-	-	-
	SATA	3	2	2	2	2
	CompactFlash	-	-	-	-	-
	GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO

# Mini-ITX

NEW								
Model Name		AIMB-225	AIMB-226	AIMB-227	AIMB-230	AIMB-231	AIMB-232	AIMB-242
Form Factor		THIN Mini-ITX	Mini-ITX	THIN Mini-ITX	THIN Mini-ITX	THIN Mini-ITX	THIN Mini-ITX	Mini-ITX
Processor System	CPU	AMD Mobile G-series GX-4240C/GX-412HC	AMD Bald Eagle RX-427BB/RX-225FB	AMD Merlin Falcon RX-421BD/RX-216GD	Intel Celeron 2980U/i3-4010U/i5-4300U/i7-4650U	Intel Celeron 3765U/i3-5010U/i5-5350U/i7-5650U	Intel core i7-6600u / i5-6300u / i3-6100u / celeron 3955u / Intel core i7-7600u / i5-7300u / i3-7100u / celeron 3965u	Intel core i7-6820EQ / core i7-6822EQ / core i5-6440EQ/Xeon E3-1515M v5
	Socket	FT3b	FP3	FP4	MCPBGA	MCPBGA	BGA1356	BGA 1440
	Max. Speed	QC 2.4 GHz/1.2 GHz	QC 2.7GHz/DC 2.2GHz	QC 2.1GHz/DC 1.6GHz	1.6 GHz/1.7 GHz/1.9 GHz/3.3 GHz	1.9 GHz/2.1 GHz/1.8 GHz/3.1 GHz	2.6GHz/2.4GHz/2.3GHz/2GHz	2.8GHz/2.0GHz/2.7GHz/2.8GHz
	TDP	25W/7W	35W/17W	35W/15W	15W/15W/15W/15W	15W/15W/15W/15W	15W/15W/15W/15W	45W/25W/45W/45W
	Front Side Bus	-	-	-	-	-	-	-
	L2 Cache	2 MB/2 MB	2 MB	2 MB/1 MB	256 KB	512 KB	-	-
	L3 Cache	-	-	-	2 M/3 M/3 M/4 M	2 M/3 M/3 M/4 M	4 MB/3 MB/3 MB/2 MB	8MB/8MB/6MB/8MB
Expansion Slot	Chipset	-	AMD A77E	-	-	-	-	Intel QM170/CM236
	BIOS	AMI EFI 32Mbit, SPI	AMI EFI 32Mb, SPI	AMI EFI 64Mbit, SPI	AMI EFI 64Mbit, SPI	AMI EFI 128 Mbit, SPI	AMI uEFI 16 Mbit, SPI	AMI EFI 128 Mbit, SPI
	M.2	-	-	1 E key	-	-	-	1 (B Key)
	Mini PCIe	2	2	1	2	2	2	2
	PCIe	PCIE x4, 1 slot	PClex x16, 1 slot PClex1, golden-finger	PCIE x8, 1 Slot (PF support PCIE x4)	-	-	-	PCIe x16, 1 slot
Memory	Technology	Single channel DDR3L 1600/1333 MHz SDRAM	Dual channel DDR3(L) 2133/1866/1600 MHz SDRAM	Dual Channel DDR4 2133MHz SDRAM	Dual channel DDR3L 1600 MHz SDRAM	Dual Channel DDR4 2133 MHz SDRAM	Dual channel DDR4 2133 MHz SDRAM	Dual channel DDR4 2133 MHz SDRAM
	Max. Capacity	16 GB	16 GB	16GB	16 GB	16 GB	16GB	32GB / up to 16GB per DIMM
	Socket	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 260-pin SO-SIMM	2 x 204-pin SODIMM	2 x 204-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM
Graphics	Controller	AMD Radeon™ R5E/R3E Graphics	AMD Radeon™ HD 9000	AMD Radeon 3rd Generation GCN (Up to 8 CU)	Intel HD Graphics 5000	Intel HD Graphics 6000	Intel HD Graphics 520	Intel® HD Graphics 530/Intel® Iris™ Pro Graphics P580
	LCD	Dual channel 48-bit LVDS; Single Channel 24-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS
	HDMI	-	2	1	1	1	1	1 (HDMI 2.0)
	DVI	1 (DVI-I)	-	1 (MF Only)	-	-	-	-
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	10/100/1000 Mbps
	Controller	LAN1: Realtek 8111G LAN2: Realtek 8111G	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	LAN1: Intel PHY i219-LM LAN2: Intel i211	LAN1: Intel PHY i219-LM LAN2: Intel i211AT (WG2: i210)
	Connector	RJ-45 x 2	RJ-45 x 2	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	Optional	Optional
SATA	Max Data Transfer Rate	600 MB/s	600 MB/s	600 MB/s	600 MB/s	600 MB/s	600 MB/s	600 MB/s
	Channel	2	3	2	3	3	2	2
	eSATA/mSATA	-/1	1/2	0/1(colay SATA1)	-	-/1	-/1	-/1
Rear I/O	VGA/DVI/HDMI/DP	-/-/-/1	-/-/2/	-/1/1	-/-/1	-/-/2	-/-/1	-/-/2
	Ethernet	2	2	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 ) 1 (USB 2.0)	4 (USB 3.0) 1 (USB 2.0)	8 (USB 3.0)
	Audio	Line-out	Mic In, Line-out, Line-in	Line out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-in, Line-out
	Serial	-	1 (RS-232)	-	-	-	-	1
	PS/2	-	-	-	-	-	-	-
	DC Jack	1	1 (4pin phoenix connector)	1	1	1	1	-
Internal Connector	LVDS & Inverter	1	1	1	1	1	1	1
	DVI	-	-	-	-	-	-	-
	USB	4 (USB 2.0)	8 (USB2.0)	4(2 x USB3.0, 2 x USB2.0)	2 (USB 2.0)	2 ( USB 2.0 ) 2 ( USB 3.0 )	2 ( USB 2.0 ) 2 ( USB 3.0 )	1 (USB 2.0)
	Serial	5 (4 x RS-232; 1 x RS-232/422/485)	4 (3 xRS232; 1 x RS-232/422/485)	6(5 RS232,1 x RS232/ 422/485,1support CCtalk, 1 Support TTL)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	2 (RS-232)	1 (RS-232/422/485)
	Parallel	1	-	-	-	-	-	-
	SATA	2	3	2	3	3	2	2
	CompactFlash/eMMC	-/-	-/-	-/-	-/-	-/-	-/-	-/-
	GPIO	8-bit GPIO	16-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO

Product Comparison Chart							
<b>AIMB-274</b>		<b>AIMB-275</b>		<b>AIMB-276</b>		<b>AIMB-281</b>	
Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
Intel Core i7/ i5/ i3/ Pentium/ Celeron	Intel 7th & 6th Gen Core i7/ i5/ i3/ Pentium/Celeron	Intel 8th Core i7/ i5 /i3 / Pentium/Celeron	Intel Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel 7th & 6th Gen Core i7/ i5/ i3/ Pentium/Celeron	Intel 8th Core i7/ i5 /i3 / Pentium/Celeron	Intel ATOM C3958/ C3758/ C3558	
LGA 1150	LGA1151	LGA1151	LGA 1155	LGA1151	LGA1151	FCBGA1310	
3.1 / 2.9 / 2.4 GHz	3.6/3.3/2.4/3.4/3.2/ 2.8/2.6 GHz	3.7/3.6/3.2/3.1/3.0/2.9/ 2.4/2.1GHz	3.5 / 3.0 / 3.1 / 2.7 GHz	3.6/3.3/2.4/3.4/3.2/ 2.8/2.6 GHz	3.7/3.6/3.2/3.1/3.0/2.9/ 2.4/2.1GHz	2.0GHz/ 2.2GHz/ 2.2GHz	
95W / 65W /54W / 45W / 35W	65W/54W/ 51W/ 35W	65W/35W	95W/ 45W/ 65W/ 55W	65W/54W/ 51W/ 35W	65W/35W	31W/ 25W/ 16W	
-	-	-	-	-	-	-	
-	-	-	-	-	-	16MB/ 16MB/ 8MB	
8 MB/6 MB/4 MB/3 MB	8 MB/6 MB/4 MB/3 MB/2 MB	12MB/9 MB/6 MB/ 4 MB/2 MB	8 MB/6 MB/3 MB/2 MB	8 MB/6 MB/4 MB/3 MB/2 MB	12MB/9 MB/6 MB/ 4 MB/2 MB	-	
Intel Q87	Intel Q170/H110	Intel Q370	Intel H61	Intel H110	Intel H310	-	
AMI EFI 128 Mbit, SPI	AMI EFI 128 Mbits,SPI	AMI EFI 256 Mbits, SPI	AMI EFI 32 Mbit, SPI	AMI EFI 128 Mbits,SPI	AMI EFI 128 Mbits, SPI	AMI EFI 128Mbit SPI	
-	1 (B Key)	2	-	-	2	-	
2	1	0	1	2	0	1	
PCIe x16, 1 slot	PCIe x16, 1 slot	PCIe x 16, 1 slot	PCIe x4, 1 slot	PCIe x 4, 1 slot	PCIe x 4, 1 slot	PCIE x4, 1 slot	
Dual channel DDR3/DDR3L 1333/1600 MHz SDRAM	Dual Channel DDR4 2133/2400 MHz SDRAM	Dual Chaneel DDR4 2666 MHz SDRAM	Dual channel DDR3 1066/1333/ 1600 MHz SDRAM	Dual Channel DDR4 2133/2400 MHz SDRAM	Dual Chaneel DDR4 2666 MHz SDRAM	Dual Channel DDR4 2133/2400MHz Non-ECC U-DIMM	
16 GB	32GB	32 GB	8 GB	32GB	32 GB	32GB	
2 x 204-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM	2 x 204-pin SODIMM	2 x 260-pin SODIMM	2 x 260-pin SODIMM	2 x 288-pin DDR4 DIMM	
Intel HD Graphics	Intel® HD Graphics	Intel HD Graphics	Intel HD Graphics	Intel® HD Graphics	Intel HD Graphics	ASPEED AST2500/2510 (VGA)	
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	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS		
1	1(HDMI 2.0)	1 (HDMI2.0a)	-	1	1	-	
-	-	-	1	-	-	-	
10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000/10GbE Mbps	
LAN1: Intel I217LM, LAN2: Intel I211AT	LAN1: Intel PHY i219-LM LAN2: Intel i211	LAN1: Intel i219LM LAN2: Intel i211AT	LAN1:Realtek RTL8111E LAN2: Realtek RTL8111E	LAN1: Realtek 8111G LAN2:Realtek 8111G	LAN1: Realtek 8111G LAN2: Realtek 8111G LAN3: Intel i211 (optional)	LAN 1/2: Marvell 88E1512 (1GbE) LAN3/LAN4: Intel X557-AT2 (10GbE) LAN 5: RTL8201 (IPMI)	
RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 2	RJ-45 x 3 (LAN3 is optional)	RJ-45 x 5	
Optional	Optional	Optional	-	Optional	Optional	Optional	
600 MB/s	600 MB/s	600 MB/s	300 MB/s	600 MB/s	600 MB/s	600 MB/s	
4	3	3	3	3	3	6	
1/1	-/1	-/-	-/1	-/1	-/-	-/1	
1/-1/1	1/-1/1	-/-1/2	1/1/-	-/-1/1	-/-1/1	1/-/-	
2	2	2	2	2	3 (LAN3 optional)	5	
4 (USB 3.0)	4 (USB 3.0)	5 USB3.1 + 1 USB 3.1 type C (optional) + 2 USB3.0	6 (USB 2.0)	4 (USB 3.0)	4 (USB3.0)	4 (3x USB3.0, 1x USB2.0)	
Mic-in, Line-in, Line-out	Mic-in, Line-out, Line-in	Mic-in, Line-out, Line-in	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out		-
1 (RS-232)	1 (RS-232)	-	2 (RS-232)	-	-	1	
-	-	-	1	-	-	-	
-	-	1 (4-pin phoenix connector)	-	1	1	-	
1	1	1	1	1	1	-	
-	-	-	-	-	-	-	
6 (USB 2.0)	6 (2 USB 3.0, 4 USB 2.0)	2 (USB 3.0)	2 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	0~2 (USB 2.0) (by sku)	
1 (RS-232/422/485)	1 (RS-232/422/485)	2 (1 x RS-232; 1 x RS-232/422/485)	4 (RS-232)	2 (1 x RS-232; 1 x RS-232/422/485)	6 (4 x RS-232; 2 x RS-232/422/485), RS-422/485 support by BOM option	1 (RS-232/422/485)	
-	-	-	-	-	-	-	
4	3	3	3	3	3	6	
-/-	-/-	-/-	-/-	-/-	-/-	-/eMMC	
8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	8-bit GPIO	

# Micro-ATX

**NEW**



Model Name		AIMB-501	AIMB-502	AIMB-503	AIMB-505
Form Factor		Micro-ATX	Micro-ATX	Micro-ATX	Micro-ATX
Processor System	CPU	Intel 3th Gen Core i7/ i5/ i3/ Pentium/ Celeron	Intel 3th Gen Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel 4th Gen Core i7/ i5/ i3/ Pentium/ Celeron	Intel 6th & 7th Gen Core i7/ i5/ i3 / Pentium/ Celeron
	Socket	LGA 1155	LGA 1155	LGA 1150	LGA1151
	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	3.4/3.2/2.8/2.7/2.6/2.4/2.3 GHz
	TDP	95W / 77W / 65W / 55W	95W / 77W / 65W / 55W	65 W / 45 W / 35 W	65W / 51W / 35W
	L2 cache	-	-	-	-
	L3 cache	8MB/6MB/3MB/2MB	8MB/6MB/3MB/2MB	8 MB/6 MB/4 MB/3 MB	8 MB/6 MB/4 MB/3 MB/2 MB
	Chipset	Intel H61	Intel Q77/C216	Intel H81	Intel H110
Expansion Slot	BIOS	AMI EFI 64 Mbit, SPI	AMI EFI 64 Mbit, SPI	AMIEFI 64 Mbit, SPI	AMI EFI 128 Mbits,SPI
	PCI	2	1	1 (G2)	1
	PCIe x16	1	1 (QG2), 2 (WG2)	1	1
	PCIe x 8	-	-	-	-
	PCIe x4	-	-	1 (F)	-
	PCIe x1	1	1	1 (F); 2 (G2/L)	2
Memory	mini-Pcie / M.2	- / -	- / -	1/-	1/-
	Technology	Dual channel DDR3 1066/1333 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR4 2133/2400 MHz SDRAM
	Max. Capacity	16 GB	32 GB	16 GB	32GB
Graphics	Socket	2 x 240-pin DIMM	4 x 240-pin DIMM	2 x 240-pin DIMM	2 x 288-pin DIMM
	Controller	Intel HD Graphics	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	Shared system memory up to 1 GB
	VGA	-	1	1	1
	LCD	Dual channel 48-bit LVDS	-	Dual channel 48-bit LVDS (Optional)	Dual channel 48-bit LVDS (Optional)
	DVI-D	1	1	1	1
	HDMI	-	1	-	-
	DP/eDP	-	-	1/-	1/1
	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)	VGA + DVI, VGA + DP, VGA + eDP, DVI + DP, DVI + eDP, DP + eDP
Ethernet	Triple Display	-	CRT + HDMI + DVI	-	-
	Interface	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 82579LM LAN2: Intel 82574L	LAN1: Realtek RTL8111E LAN2: Realtek RTL8111E	LAN1: Realtek RLT8111G LAN2: Realtek RLT8111G
	Connector	RJ-45 x2	RJ-45 x2	RJ-45 x2	RJ-45 x2
TPM		Optional	Optional	Optional	Optional
SATA	Max Data Transfer	300 MB/s	300 MB/s 600 MB/s	300 MB/s 600 MB/s	600 MB/s
	Channel	4	6 / 2	1 / 2	3
	eSATA/mSATA	-	1 / 1	0 / 1	-/1
I/O Interface	VGA	2/ 1	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)	6(USB 2.0),8(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)	10 (8 x RS-232; 2 x RS-232/422/485)
	Parallel	1	-	1	1
	SIM Card Holder	-	-	1	-
	PS/2	2	-	2	1(onboard)
	Ethernet (GbE)	2	2	2	2
	IEEE 1394	-	-	-	-
	Audio	Mic-in, Line-out	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	8-bit

					<b>NEW</b>						<b>NEW</b>	
												
Model Name		AIMB-582	AIMB-584	AIMB-585	AIMB-586	Model Name		SIMB-A31				
Form Factor		Micro-ATX	Micro-ATX	Micro-ATX	Micro-ATX	Form Factor		ATX				
Processor System	CPU	Intel 3th Gen Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel 4th Gen Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel 6th & 7th Gen Xeon/ Core i7/ i5/ i3/ Pentium/ Celeron	Intel 8th Xeon/Core i7/ i5/ i3 / Pentium/Celeron	Processor System		Expansion Slot			CPU	Intel Core i7/ i5/ i3/ Pentium/ Celeron
	Socket	LGA 1155	LGA 1150	LGA1151	LGA1151						Socket	LGA 1150
	max. speed	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	3.6/3.3/2.4/3.4/3.2/2.8/ 2.6 GHz	3.7/3.6/3.4/3.2/3.1/ 3.0/2.9/2.4/2.1 GHz						Max. Speed	3.5 / 3.1 / 2.9 / 2.4 GHz
	TDP	95W / 77W / 65W / 55W	95 W / 65 W / 45 W / 35 W	80W / 65W / 51W / 35W	80W/71W/65W/35W						Front Side Bus	-
	L2 cache	-	-	-	-						L2 Cache	8 MB / 6 MB / 4 MB / 3 MB
	L3 cache	8 MB/6 MB/3 MB/2 MB	8 MB/6 MB/4 MB/3 MB	8 MB/6 MB/4 MB/3 MB/2 MB	12MB/9 MB/8 MB/6 MB/4 MB/2 MB						TDP	65 W / 54 W / 45 W / 35 W
	Chipset	Intel Q77/C216	Intel Q87/C226	Intel Q170/C236/H110	Intel Q370/C246						Chipset	Intel H81
	BIOS	AMI EFI 64 Mbit, SPI	AMI EFI 128 Mbit, SPI	AMI EFI 128 Mbits, SPI	AMI EFI 256 Mbits, SPI						BIOS	AMI EFI 64 Mbit, SPI
Expansion Slot	PCI	2	2	-	-	Memory		Graphics			PCI	3
	PCIe x16	1	1	1	1						MINI PCI	1
	PClex8	1	1	1(L sku: 0)	(2 PClex8 option from 1 PClex16)						PCIe	PCIe x1, 2 slot PCIe x16, 1 slot
	PCIe x4	1	1	1(L sku: 0)	1						Technology	Dual channel DDR3/L 1333/1600 MHz SDRAM
	PCIe x1	-	-	1(L sku: 2 )	1						Max. Capacity	16 GB
	mini-Pcie / M.2	- / -	- / -	1/-	- / 2 (M-key, E-key)						Socket	2 x 240-pin DIMM
Memory	Technology	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR3 1333/1600 MHz SDRAM	Dual channel DDR4 2133/2400 MHz SDRAM	Dual Channel DDR4 2666 MHz SDRAM	Ethernet		TPM			Controller	Intel HD Graphics
	Max. Capacity	32 GB	32 GB	64 GB	64 GB						Max. Capacity	16 GB
	Socket	4 x 240-pin DIMM	4 x 240-pin DIMM	4x288- pin DIMM	4 x 288-pin DIMM						Socket	2 x 240-pin DIMM
	Controller	Intel HD Graphics	Intel HD Graphics	intel HD Graphics	Intel HD Graphics						Controller	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	Shared system memory up to 1 GB						DVI	1
	VGA	1	1	1 (onboard)	-						Interface	10/100/1000 Mbps
	LCD	Dual channel 48-bit LVDS	Dual channel 48-bit LVDS	-	Dual channel 48-bit LVDS(option)						Controller	LAN1: Realtek 8111G LAN2: Realtek 8111G
	DVI-D	1	1	1	-						Connector	RJ-45 x 2
Graphics	HDMI	-	-	1 (option to HDMI2.0a)	SATA		Rear I/O			DP/eDP	1 / 1	
	Dual Display	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)	DP++ + HDMI, DP++ + DVI-D, DP++ + eDP/VGA, DVI + DVI-D, HDMI + eDP/VGA, eDP/VGA + DVI-D						DP++ + HDMI, DP++ + DP++, eDP/LVDS, HDMI + eDP/VGA + DVI-D	Max Data Transfer Rate	300 MB/s (SATA 2.0) 600 MB/s (SATA 3.0)
	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)	eDP/VGA + DP++ + HDMI, eDP/VGA + HDMI + DVI-D, DP++ + eDP/VGA + DVI-D, DVI-D + DP++ + HDMI						DP++ + DP++ + HDMI, DP++ + DP++ + eDP/LVDS, DP++ + HDMI + eDP/LVDS	Channel	1/2 (SATA2.0 / SATA3.0)
	Interface	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps						10/100/1000 Mbps	VGA/DVI/HDMI	1/1/-
	Controller	LAN1: Intel I2579LM LAN2: Intel I2583V	LAN1: Intel I217LM LAN2: Intel I211AT	LAN1: Intel I219LM LAN2: Intel I211AT(WG2: I210)						LAN1: Intel I219LM LAN2: Intel I211AT LAN3/LAN4 : Realtek 8111G (option)	Ethernet	2
	Connector	RJ-45 x2	RJ-45 x2	RJ-45 x2						RJ-45 x 4 (2 option)	USB	4 (2 x USB 3.0, 2 x USB 2.0)
	TPM	Optional	Optional	Optional						Optional	Audio	Mic-in, Line-in, Line-out
	SATA	Max Data Transfer	300 MB/s 600 MB/s	300 MB/s 600 MB/s						600 MB/s	Parallel	-
Channel		4 (SW RAID) / 2 (SW RAID)	6 (SW RAID)	4 (SW RAID)	Serial	1 (RS-232/422/485, supplies 5 V/ 12 V); 1 (RS-232)						
eSATA/mSATA		-	-	-/1	PS/2	2						
VGA		1	1	1 (on board, option)	USB	5 (USB 2.0)						
USB	8 (USB 2.0), 4 (USB 3.0)	8 (USB 2.0), 4 (USB 3.0)	2 (USB 2.0), 12 (USB 3.0)	Serial	2 (RS-232, supplies 5 V/ 12 V); 2 (RS-232)							
Serial	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							
Parallel	1	1	-	IDE	-							
SIM Card Holder	-	-	-	SATA	3 (2 x SATA III, 1 x SATA II)							
PS/2	2	2	1(onboard)	CompactFlash	-							
Ethernet (GbE)	2	2	2	GPIO	8-bit GPIO							
IEEE 1394	-	-	-									
Audio	Mic-in, Line-out	Mic-in, Line-out	Mic-in, Line-out									
GPIO	8 bit	8 bit	16-bit									

# Embedded PC



EPC-T Series

Model Name		EPC-T1215	EPC-T1217	EPC-T1231	EPC-T1232	EPC-T2285
Barebone system	Description	Fan-base / Fanless barebone, w/ adapter, w/o HDD, memory	Fanless barebone, w/ adapter, w/o SSD, memory	Fan-based / Fanless barebone, w/ adapter, w/o HDD, memory	Fanless barebone, w/ adapter, w/o SSD, memory	Fan-base barebone, w/o adapter, HDD, memory
Processor System	Compatible Motherboard	AIMB-215D-S6B1E	AIMB-217D-S6A1E	AIMB-231G2-U5A1E AIMB-231G2-U3A1E	AIMB-T1232W-00Y10	AIMB-285G2-00A1E
	Thermal Solution	1x chassis fan (4cm/23.8CFM)/ Fanless	Fanless	1x chassis fan (4cm/23.8CFM)/ Fanless	Fanless (0.7 m/s air flow)	2x chassis fan (4cm/23.8CFM)
	CPU	Intel® Bay Trail Quad core Celeron™ J1900 (on board)	Intel Pentium N4200 (on board)	Intel Core i3-5010U / i5-5350U (on board)	Intel Core™ i5-6300U (on board)	Intel® 6th/7th Gen Core™ i processor (LGA1151)
	BIOS	AMI 16 Mbit SPI	AMI 128 Mbit SPI	AMI 128 Mbit SPI	AMI uEFI 16 Mbit	AMI EFI 128 Mbit, SPI
Memory	Socket	2 x 204-pin DDR3 SODIMM (Non-ECC)	2 x 204-pin SO-DIMM (Non-ECC)	2 x 204-pin DDR3 SODIMM (Non-ECC)	1 x 260-pin DDR4 SO-DIMM (Non-ECC)	260 PIN DDR4 SO-DIMM (Non-ECC)
	Technology	DDR3L 1066/1333 MHz SDRAM	Dual channel DDR3L 1866 MHz SDRAM	DDR3L 1600 MHz SDRAM	DDR4 2133 MHz SDRAM	Dual Channel DDR4 2133 MHz SDRAM
Graphics	Max. Capacity	8 GB/up to 4 GB per SODIMM	8 GB/8 GB per SO-DIMM	16 GB/up to 8 GB per SODIMM	8 GB per SO-DIMM	32 GB/up to 16 GB per SODIMM
	Chipset Integrated	Integrated Intel HD Graphics	Intel Gen 9 Graphics Engines and media encode/decode engine	Intel® HD Graphics 6000	Intel® HD Graphics, Supports OpenGL 5.x, DirectX11.2, OpenCL 2.1	Intel® HD Graphics, Supports OpenGL 5.x, DirectX12, OpenCL 2.X
	Storage	2.5" HDD Bay	1 (supports 2.5" HDD/SSD, max 9.5 mm height)	1 (supports 2.5" SSD, max 9.5 mm height)	1 (Fan-based supports 2.5" HDD/ Fanless supports 2.5" SSD, max 9.5 mm height)	1 (supports 2.5" SSD, max 9.5 mm height)
Ethernet	mSATA Slot	1 (share w/ full size Mini PCIe slot)	1 (share w/ full size Mini PCIe slot)	1 (share w/ full size Mini PCIe slot)	1 (share w/ full size Mini PCIe slot)	1+1 (Full-size, Half-size)
	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: Intel PHY I218-LM LAN2: Intel I210	LAN1: Intel Clarkville I219LM GBE PHY LAN2: Intel I211 GbE	LAN1: Realtel RTL8111G LAN2: Realtel RTL8111G
Audio	Connector	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)
	Codec	Realtek ALC892, High Definition Audio (HD)	Realtek ALC888S, 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+1 (Full-size, Half-size)	1 (Full-size)	1+1 (Full-size, Half-size)	1+1 (Full-size, SIM card holder)	1+1 (Full-size, Half-size)
	M.2	-	1 x M.2 Key E slot (2230)	-	-	-
	SIM slot	1	1	1	1	1
	SD slot	-	-	-	-	-
Front Panel	DP++	-	-	-	-	-
	DP/HDMI	-	-	-	-	-
	VGA	-	-	-	-	-
	DVI	-	-	-	-	-
	COM	5 (4 x RS-232, 1 x RS232/422/485, 1 support 5V/12V)	5 (4 x RS-232, 1 x RS232/422/485, 1 support 5V/12V)	2 (1 x RS-232, 1 x RS-232/422/485)	2 (1 x RS-232, 1 x RS-232/422/485)	2 (1x RS-232/422/485, 1 x RS-232/422/485 with 5V/12V)
Rear Panel	Lan	-	-	-	-	-
	USB	4 (USB2.0)	4 (USB2.0; optional)	2 (USB2.0)	2 (USB2.0)	4 (USB2.0)
	Audio Jack	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)
	Antenna (optional)	up to 2	up to 2	up to 2	up to 2	up to 2
	DP++	1	-	1	1	1
	DP/HDMI	-	1/1	1	1 (HDMI)	1 (HDMI 1.4)
	VGA	1	1	-	-	-
	DVI	-	-	-	-	-
	COM	1 (RS-232)	1 (RS232)	-	-	-
Miscellaneous	Lan	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)
	USB	1 (USB3.0); 3 (USB2.0)	4 (USB3.0)	4 (USB3.0)	4 (USB3.0)	4 (USB3.0)
	Audio Jack	1 (Line-Out)	1 (line out)	2 (Line-Out, Mic-in)	2 (Line-Out, Mic-in)	2 (Line-Out, Mic-in)
	GPIO	8 bit	8 bit	8 bit	8 bit	8 bits (Optional)
	Antenna (optional)	up to 2	up to 2	up to 2	up to 2	up to 2
Mounting	LED Indicators	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)
	Switch	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)
	Circular Cutouts	-	-	-	-	1(Reserved for internal cable)
Power Requirements	Power Voltage	12V DC-in	12V DC-in	12V DC-in	12V DC-in	12V DC-in
	Power Input Type (Inlet)	2.50 DC jack	2.50 DC jack	2.50 DC jack	2.50 DC jack	DC jack (2.50 with locked design)
	Consumption	10.17W (idle with Intel Celeron J1900)	21.5W (N4200, Max load)	14.4W (idle with Intel ULT i5 Processor) 13.4W (idle with Intel ULT i3 Processor)	21.5W (i5-6300U, Max load)	89.36W (idle with Intel i7-6700 Processor)
Environment	Operating Temperature	Fan-base: 0 ~ 50 °C (32 ~ 122 °F) Fanless: 0 ~ 40 °C (32 ~ 104 °F)	Fanless: 0~45 °C	Fan-base: 0 ~ 50 °C (32 ~ 122 °F) Fanless: 0 ~ 45 °C (32 ~ 104 °F)	0 ~ 45 °C (32 ~ 113 °F)	HDD: 0 ~ 45 °C (32 ~ 113 °F) SSD: 0 ~ 50 °C (32 ~ 122 °F)
	Non-operating Temperature	-40 ~ 85 °C (-40 ~ 185 °F)	-40 ~ 85 °C (-40 ~ 185 °F)	-40 ~ 85 °C (-40 ~ 185 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	-40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	10~95% @ 40°C, non-condensing	10~95% @ 40°C, non-condensing	10~95% @ 40°C, non-condensing	10~95% @ 40°C, non-condensing	10~95% @ 40°C, non-condensing
	Vibration (5 ~ 500Hz)	1 Grms (HDD x 1); 3 Grms (SSD x 1)	3 Grms (SSD x 1)	1 Grms (HDD x 1); 3 Grms (SSD x 1)	3 Grms (SSD x 1)	1 Grms (HDD x 1); 3 Grms (SSD x 1)
	Shock	-	-	-	-	-
Certification		CE, FCC, CCC	CE, FCC	CE, FCC	CE, FCC	CE/FCC/CCC
Physical Characteristics	Dimensions (W x H x D)	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")	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")	250 x 44.2 x 225 mm (9.84" x 1.74" x 8.85")
	Weight	3.1kg	3.1kg	3.1kg	3.1kg	3.68kg

**NEW****Preliminary****EPC-B Series**

Model Name		EPC-T3285	EPC-T3217	EPC-B2203	EPC-B2281	EPC-B2205	EPC-B2275
Barebone system	Description	Fan-base barebone, w/o HDD, memory	Fanless barebone, w/ adapter, w/o SSD, memory	Fan-base barebone, w/ 150W PSU, w/o HDD, memory	Fan-base barebone, w/ 180W PSU, w/o HDD, memory	Fan-base barebone, w/ 150W PSU, w/o HDD, memory	Fan-base barebone, w/ 150W PSU, w/o HDD, memory
Processor System	Compatible Motherboard	AIMB-285G2-00A1E	AIMB-217D-S6A1E	AIMB-203G2-00A1E	AIMB-242QG2-H7A1E	AIMB-205G2-00A1E	AIMB-275G2-00A1E
	Thermal Solution	2x chassis fan (4cm/23.8CFM)	Fanless (0.7 m³/s air flow)	2xchassis fan (7cm/28CFM)	2xchassis fan (7cm/28CFM)	2xchassis fan (7cm/28CFM)	2xchassis fan (7cm/28CFM)
	CPU	Intel® 6th/7th Gen Core™ i processor (LGA1151)	Supports Intel Pentium, Celeron Quad Core & Dual Core processor	Intel® 4th Gen Core™ i processor (LGA1150)	Support Intel Core i7/i5/i3/Pentium / Celeron desktop processor (LGA) with Intel H61 chipset	Intel® 7th Gen Core™ i processor /Pentium / Celeron (LGA1151) with Intel H110 chipset	Intel® 7th & 6th Gen Core™ i processor (LGA1151)
	BIOS	AMI EFI 128 Mbit SPI	AMI 128 Mbit SPI	AMI EFI 64 Mbit SPI	AMI EFI 32 Mbit SPI	AMI EFI 128 Mbit SPI	AMI EFI 128 Mbit, SPI
Memory	Socket	2 x 260 PIN DDR4 SO-DIMM	2 x 204-pin SO-DIMM (Non-ECC)	2 x 204-pin DDR3 SO-DIMM (Non-ECC)	2 x 204-pin DDR3 SO-DIMM	2 x 260-pin DDR4 SO-DIMM	2 x 260-pin DDR4 SO-DIMM (Non-ECC)
	Technology	Dual Channel DDR4 2133 MHz SDRAM	Dual channel DDR3L 1866 MHz SDRAM	Dual Channel DDR3/DDR3L @1.5V 1333/1600 MHz SDRAM	Dual Channel DDR3 1066/1333/1600 MHz SDRAM	2400/2133 MHz non ECC SDRAM (Only supports DDR4 2133 MHz SDRAM for SKL-S CPU)	Dual Channel DDR4 2133 MHz SDRAM
	Max. Capacity	32GB (up to 16GB per SO-DIMM)	8 GB/8 GB per SO-DIMM	16 GB/up to 8 GB per SO-DIMM	8 GB/4 GB per SO-DIMM	Up to 32GB (16GB per SO-DIMM)	32 GB/up to 16 GB per SO-DIMM
Graphics	Chipset Integrated	Intel® HD Graphics, Supports OpenGL 5.x, DirectX12, OpenCL 2.X	Intel Gen 9 Graphics Engines and media encode/decode engine	Integrated Gfx Gen. 7.5, Supports DirectX11.1, OpenGL 4.0 and OpenCL 1.2	Intel HD P3000/ 4000 graphics engine supports up to DirectX 11, Shader Model 4.1 and OpenGL 3.0	Integrated Intel® HD Graphics 530	Intel® HD Graphics, Supports OpenGL 5.x, DirectX12, OpenCL 2.X
Storage	2.5" HDD Bay	2 (supports 2 x 2.5" HDD/SSD, or 1 3.5" HDD)	2 (supports 2 x 2.5" HDD/SSD, or 1 slim ODD, or 1 3.5" HDD)	2 (supports 2 x 2.5" HDD/SSD, or 1 slim ODD & 1 x 2.5" HDD/SSD)	2 (supports 2 x 2.5" HDD/SSD, or 1 slim ODD & 1 x 2.5" HDD/SSD)	2 (supports 2 x 2.5" HDD/SSD, or 1 slim ODD & 1 x 2.5" HDD/SSD)	2 (supports 2 x 2.5" HDD/SSD, or 1 slim ODD & 1 x 2.5" HDD/SSD)
	mSATA Slot	1 (share w/ full size Mini-Pcie slot)	1 (F/S with SIM card holder)	1 (Full-size, Half size)	(share w/ full size Mini-Pcie slot)	(share w/ full size Mini-Pcie slot)	1 (Full-size, Half size)
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: Realtek RTL8111G LAN2: Realtek RTL8111G	LAN1: Realtek 8111G LAN2: Realtek 8111G	LAN1: Realtek 8111E LAN2: Realtek 8111E	LAN1: RTL8111E LAN2: RTL8111E	LAN1: Realtek RTL8111G LAN2: Realtek RTL8111G	LAN1: Intel I219LM LAN2: Intel I211AT
	Connector	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)	2 (RJ-45)
Audio	Codec	Realtek ALC892, High Definition Audio (HD)	Realtek ALC892, High Definition Audio (HD)	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+1 (Full-size, Half-size) 1 PCIe slot (Full height)	1 (Full-size)	2 (1 x F/S; 1 x H/S) DP++: 0	1 (Full-size)	1 (Full-size)	1+1 (Full-size, Half-size)
	M.2	-	1 E key for wireless module (Type: 2230)	-	-	1 x M.2 Key B slot (2242)	1 x M.2 Key B slot
Front Panel	SIM slot	1	1	1	-	-	-
	SD slot	-	-	-	-	-	-
	DP++	-	-	-	-	-	-
	DP/HDMI	-	-	-	-	-	-
	VGA	-	-	-	-	-	-
	DVI	-	-	-	-	-	-
	COM	2 (1x RS-232/422/485, 1 x RS-232/422/485 with 5V/12V)	4 (1x RS-232/422/485, 3 x RS-232)	4 (RS232; optional)	4 (Optional)	4 (Optional)	1 (RS232/422/485)
	LAN	-	-	-	-	-	-
	USB	4 (USB2.0)	4 (USB2.0)	4 (USB2.0; optional)	2 (USB2.0; Optional)	2 (USB2.0; Optional)	4 (USB2.0; optional)
	Audio Jack	2 (Line-Out, Mic-In)	2 (Line-Out, Mic-In)	-	-	-	-
Rear Panel	Antenna (optional)	up to 2	up to 2	up to 2	up to 2	up to 2	up to 2
	DP++	1	-	-	-	-	-
	DP/HDMI	1 (HDMI1.4)	1/1	1/0	-	1/0	1/1
	VGA	-	1	1	1	1	1
	DVI	-	-	1	1	1 (DVI-D)	-
	COM	-	-	(RS232, supports 5V/12V)	1 x RS232/422/485	(RS232, supports 5V/12V)	(RS232, supports 5V/12V)
	LAN	2 (RJ-45)	2 (RJ-45)	2(RJ-45)	2 (RJ-45)	2(RJ-45)	2(RJ-45)
Miscellaneous	USB	4 (USB3.0)	4(USB3.0)	4(USB3.0)	6 USB 2.0	4 (USB3.0); 4 (USB2.0)	4(USB3.0)
	Audio Jack	2 (Line-Out, Mic-in)	1 (Line-Out)	3 (Mic in, Line out, Line in)	2 (Line-Out, Mic-in)	3 (line-in, line-out, mic-in)	3 (Mic in, Line out, Line in)
	GPIO	8 bits (Optional)	8 bits (Optional)	8 bits (Optional)	8 bits (Optional)	8 bits (Optional)	8 bits (Optional)
	Antenna (optional)	up to 2	up to 2	up to 2	-	-	-
Power Requirements	LED Indicators	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)	2 (Power LED, HDD LED)
	Switch	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)	1 (Power Switch); 1 (Reset Switch)
	Circular Cutouts	-	-	-	-	-	-
Mounting	Wall mount, Rack mount	Wall mount, Rack mount	Wall mount, Rack mount	Wall mount	Wall mount	Wall mount	Wall mount
	Power Voltage	12V DC-in (Optional 9~36V)	12V DC-in (Optional 9~36V)	Power Voltage: 100V~240V AC input	Power Voltage: 100V~240V AC input	Power Voltage: 100V~240V AC input	Power Voltage: 100V~240V AC input
Environment	Power Input Type (Inlet)	DC jack (2.50)	DC jack (2.50)	Power Code input	Power Code input	Power Code input	Power Code input
	Consumption	TBD	TBD	TBD	TBD	TBD	TBD
	Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)	0 ~ 45 °C (32 ~ 113 °F)	0 ~ 40 °C	0 ~ 40 °C (32 ~ 104 °F)	0 ~ 40 °C (32 ~ 104 °F)	0 ~ 40 °C
	Non-operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	-29 ~ 60 °C	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)	-29 ~ 60 °C
	Humidity	10~95% @ 40 °C, non-condensing	10~95% @ 40 °C, non-condensing	10~95% @ 40°C, non-condensing	10~95% @ 40°C, non-condensing	10~95% @ 40°C, non-condensing	10~95% @ 40 °C, non-condensing
	Vibration (5~500Hz)	1 Grms (2.5° HDD x 1); 0.5 Grms (HDD x 2, 3.5° HDD x 1)	1 Grms (2.5° HDD x 1); 0.5 Grms (HDD x 2, 3.5° HDD x 1)	1 Grms (HDD*1+ODD*1); 0.5 Grms (HDD*2)	1 Grms (HDD*1+ODD*1); 0.5 Grms (HDD*2)	1 Grms (HDD*1+ODD*1); 0.5 Grms (HDD*2)	1 Grms (HDD*1+ODD*1); 0.5 Grms (HDD*2)
	Shock	-	-	-	-	-	-
	Certification	CE, FCC	CE, FCC	CE/FCC/CCC	CE/FCC/CCC	CE, FCC	CE/FCC/CCC
Physical Characteristics	Dimensions (W x H x D)	330 x 44 x 270 mm (13" x 1.73" x 10.62")	330 x 44 x 270 mm (13" x 1.73" x 10.62")	250 x 98 x 255 mm (9.84" x 3.86" x 10.04")	250 x 98 x 255 mm (9.84" x 3.86" x 10.04")	250 x 98 x 255 mm (9.84" x 3.86" x 10.04")	250 x 98 x 255 mm (9.84" x 3.86" x 10.04")
	Weight	5.68kg	5.68kg	3.8kg	3.8kg	3.8kg	3.8kg

**More information**



[AIMB.advantech.com](http://AIMB.advantech.com)



**BIOS OS API**



## Regional Service & Customization Centers

**China** | Kunshan  
86-512-5777-5666

**Taiwan** | Taipei  
886-2-2792-7818

**Netherlands** | Eindhoven  
31-40-267-7000

**Poland** | Warsaw  
00800-2426-8080

**USA** | Milpitas, CA  
1-408-519-3898

## Worldwide Offices

### Greater China

<b>China</b>		<b>Asia</b>		<b>Europe</b>		<b>Americas</b>	
Toll Free	800-810-0345	<b>Japan</b>	Toll Free	0800-500-1055	<b>Germany</b>	Toll Free	00800-2426-8080/81
Beijing	86-10-6298-4346		Tokyo	81-3-6802-1021		Munich	49-89-12599-0
Shanghai	86-21-3632-1616		Osaka	81-6-6267-1887		Düsseldorf	49-2103-97-855-0
Shenzhen	86-755-8212-4222		Nagoya	81-0800-500-1055	<b>France</b>	Paris	33-1-4119-4666
Chengdu	86-28-8545-0198	<b>Korea</b>	Toll Free	080-363-9494		Milano	39-02-9544-961
Hong Kong	852-2720-5118		Seoul	82-2-3663-9494	<b>Benelux &amp; Nordics</b>	Breda	31-76-523-3100
		<b>Singapore</b>	Singapore	65-6442-1000	<b>UK</b>	Newcastle	44-0-191-262-4844
		<b>Malaysia</b>	Kuala Lumpur	60-3-7725-4188		London	44-0-870-493-1433
			Penang	60-4-537-9188	<b>Poland</b>	Warsaw	48-22-31-51-100
		<b>Thailand</b>	Bangkok	66-02-2488306-9	<b>Russia</b>	Moscow	8-800-555-01-50
						St. Petersburg	8-800-555-81-20
		<b>India</b>	Bangalore	91-80-2545-0206	<b>Czech Republic</b>	Ústí nad Orlicí	420-465-521-020
			Pune	91-20-3948-2075	<b>Ireland</b>	Oranmore	353-91-792444
		<b>Indonesia</b>	Jakarta	62-21-751-1939			
		<b>Australia</b>	Toll Free	1300-308-531			
			Melbourne	61-3-9797-0100			

### Middle East and Africa

**Israel** 072-2410527

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