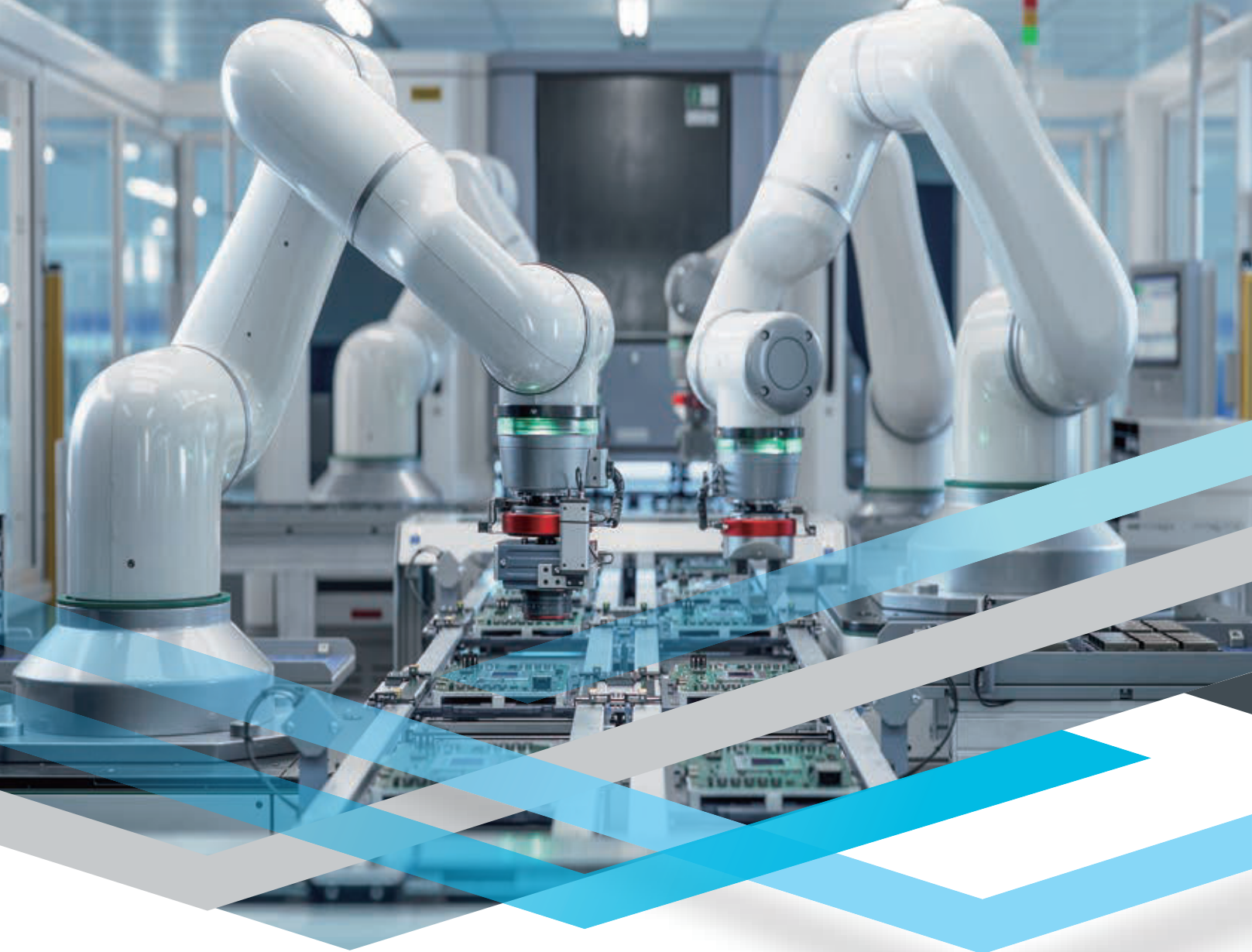




Vol.06

INTELLIGENT SYSTEMS



iBASE
www.ibase.com.tw

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Embedded Systems

Advanced Ruggedized System

NEW

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Advanced Compact System

NEW

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NEW

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Advanced Expandable System

NEW

AES100	Advanced Expandable System with 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors Supports 3x M.2(B/E/M-key), 2x Mini PCI-E (full-size)	44
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NEW

AMS320	Expandable Fanless & Compact System with 11th Gen Intel® Core™ i7/i5/i3 Processors Supports 2x M.2(B/E-key), 1x PCI-E, USB 3.0 & 2.0	47
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AMS312	Expandable Fanless & Compact System with 10th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 2x M.2(B/E-key), 1x PCI-E (x8) & 1x PCI-E (x4)	48
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AMS310	Expandable Fanless & Compact System with 10th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 3x M.2(B/E/M-key), 1x PCI-E (x8) & 1x PCI-E (x4)	49
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AMS300	Expandable Fanless & Compact System with 7th/6th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 1x Mini PCI-E (full-size)	53
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NEW

AMI242	Expandable Fanless System with 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP) Supports 3x M.2(B/E/M-key), 1x PCI-E (x16)	55
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AMI231	Expandable Fanless & Compact System with 9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 1x PCI-E/PCI & 2x HDD/SSD Trays	59
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AMI230	Expandable Fanless & Compact System with 9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 4x Intel® Gigabit LAN, 8x USB 3.0, 3x M.2	60
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AMI222	Expandable Fanless & Compact System with 7th/6th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 2x PCI-E/PCI & 2x HDD/SSD Tray & 2x Fieldbus	61
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AMI220	Expandable Fanless & Compact System with 7th/6th Gen Intel® Core™ i7/i5/i3 Desktop Processors Supports 1x HDD/SSD Trays	64
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CMB106	High Performance Expandable Industrial Computer Powered by 9th/8th/7th/6th Gen Intel® Core DT processors	66
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About IBASE

 HQ Taipei, Taiwan	 Stock Code TPEX 8050 (Since 2003)	 Chairman C. S. Lin	 Design and Manufacturing of Robust Computing Platforms
 Capital US\$ 66.5M	 Revenue US\$ 161M (2024)	 Employees 1,010 (Group) 770 (IBASE HQ)	

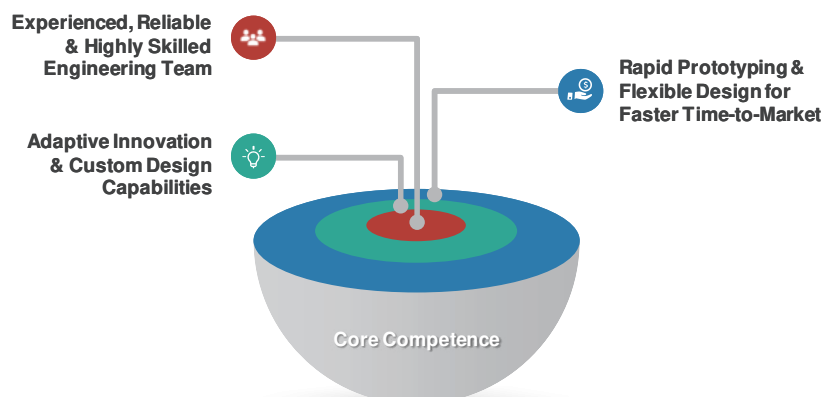
Company Profile

IBASE Technology specializes in the design and manufacture of robust industrial PC, products since its establishment in 2000. IBASE carries out manufacturing and quality control at its own facilities in Taiwan that are certified with ISO 9001, ISO 13485, ISO 14001 and ISO 27001 standards. Current offerings comprise x86 and RISC-based industrial motherboards, embedded systems, Edge AI Computer, panel PCs, network appliances and digital signage players. The company is publicly listed in the Taipei Exchange (TPEX: 8050) and is now a leading global provider of innovative industrial and embedded computing solutions.



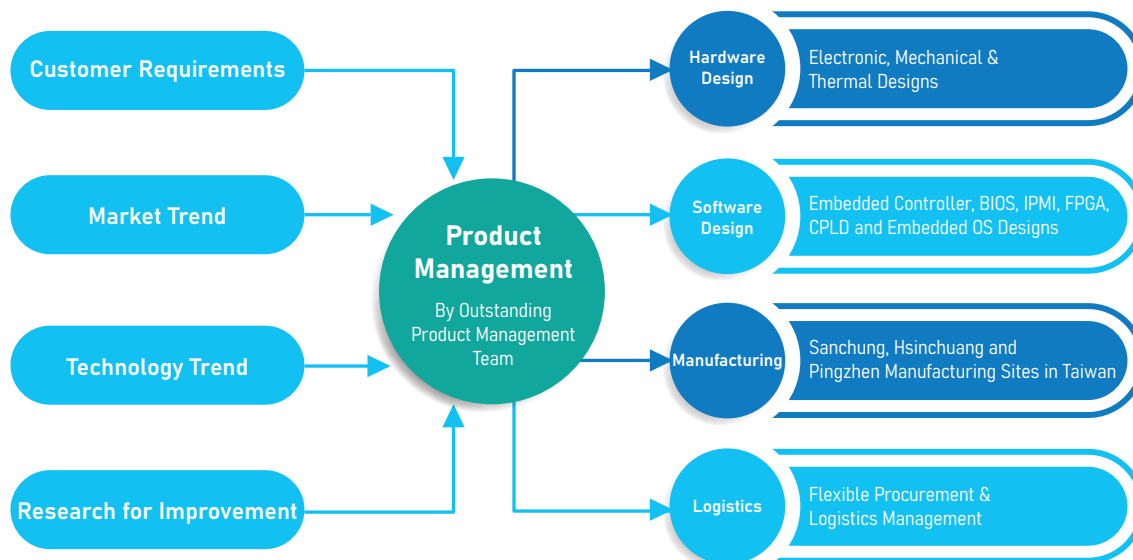
Core Competence – R&D Design Capabilities

IBASE excels in delivering advanced R&D design capabilities driven by an experienced, reliable, and highly skilled engineering team. Our expertise lies in adaptive innovation and custom design solutions tailored to diverse industry needs. By leveraging rapid prototyping and flexible design processes, we enable our customers to accelerate time-to-market and gain a competitive advantage in today's rapidly evolving technology landscape. From concept to completion, IBASE prioritizes precision, efficiency, and reliability in every project, making us a trusted partner for businesses seeking advanced industrial computing solutions.



Design & Manufacturing Services

Set up to become a global leading provider of embedded board and system solutions, IBASE manufacturers and supplies cutting-edge products built on the latest technologies to match market demands. Our R&D and product management teams have the expertise to design and develop products that are innovative and meet customers' requirements and design specifications. We attach great importance to research and development, investing heavily in manpower and resources to continuously provide high-quality innovative products. IBASE is also committed to compliance with environmental policies by working to prevent pollution with the non-use of banned or restricted substances in our production process and products, helping our customers respond to their environmental challenges.



IBASE Manufacturing Sites

IBASE Manufacturing Sites in Taiwan



18,481 m² / 5,591 Ping

Pingzhen

- Board Production
- System Assembly
- Validation



6,070 m² / 1,840 Ping

Xinzhuang

- System Assembly
- Validation



3,124 m² / 945 Ping

Sanchong

- Board Production
- Validation

Total Size

297,891 Square-feet
(27,675 m² / 8,376 Ping)

Capacity

- SMT Line x 7
- DIP Assembly Line x 4
- System Assembly Line x 10
- Cleanroom x 2
- Burn-in Room x 20

PCBA

80K/month

In-house Production + Outsourcing

System Assembly

50K/month

In-house Production + Outsourcing

Certifications



Our ESG Commitments

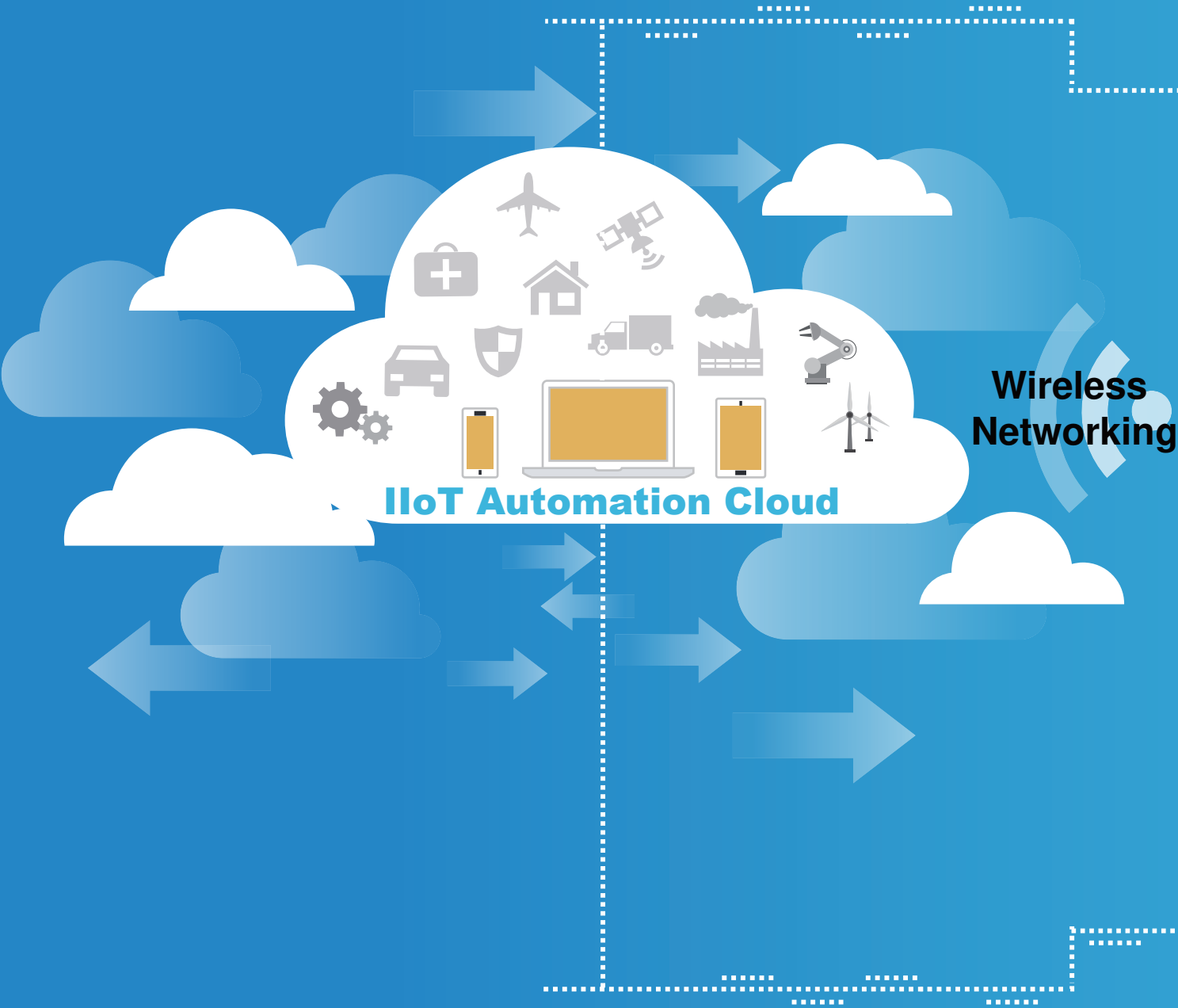


Sustainable Development Goals (SDGs)

Aspects	SDGs Advocated by United Nations ★		
Social	1 NO POVERTY 	4 QUALITY EDUCATION 	5 GENDER EQUALITY
Governance	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES
Environmental	7 AFFORDABLE AND CLEAN ENERGY 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	13 CLIMATE ACTION

IBASE IIoT Solutions

IoT Cloud Level



Communication Level



**IoT Gateway
Edge Computer**
AGS Series



**Data
Extraction
Conversion**

**Field
Protocols
Connection**

Automation Equipment Level

Robotic-Arm Control



AMI240 Series



ARS Series



Robotics Solutions

Factory Automation



MAF801 Series



ACS Series



ASB200 Series



Automation I/O



Profibus

Profinet

Machine Automation



AES Series



AMI240 Series
(CNC Controller)



AMI242 Series
(EtherCAT Master Controller)



CMI211 Series
(Bender Machine)



CMI300 Series
(Machine Controller)

Smart Factory

IBASE intelligent computing platforms are utilized in modular-structured smart factories, where systems remotely monitor and control physical processes through the Internet of Things (IoT), enabling real-time communication between systems and humans across the operational chain. Smart factories are designed with interconnected machines, devices, sensors, and users to collect data and information at every stage of the manufacturing process, including robotic control, vision inspection, assembly lines, and unmanned logistics stations—applications where IBASE intelligent systems excel.



Robotic Control



AES100

P. 44



AMI240

P. 56-57



Vision Inspection



Assembly Line



ACS200-210

P. 42



ASB210-962

P. 70



Unmanned Logistics

Intelligent Transportation Gateway

IBASE intelligent transportation systems can be deployed at various points in transport networks for transport and traffic management, with applications including traffic monitoring, automatic fare collection, automatic gateways, and smart parking gateways. Designed as IoT and Machine-to-Machine (M2M) gateways, IBASE transportation solutions deliver exceptional computing performance and feature extended operating temperatures, wide-range power input, and hardware monitoring for CPU temperature and voltages. These systems are built to handle data processing and analysis requirements from multiple stations and sensors, ensuring improved reliability even in harsh environments.



Traffic Monitoring



AMI242
P. 55



AMS322
P. 46



Automatic Fare Collection



Automatic Gateway Controller



AGS104T
P. 36



ACS050-100
P. 43



Intelligent Parking Gateway

Automation Control

IBASE intelligent embedded systems include compact and integrated platforms that offer fast time-to-market solutions with reliable, rugged designs and operation in harsh environmental conditions, supporting a temperature range of -40°C to 70°C. These systems feature high scalability, rich I/O connectivity, and embedded longevity, making them ideal for industrial applications such as automation, control, and transportation.



CP100

P. 69



ARS200

P. 41



Surveillance/Video Analytics

Intelligent surveillance and video analytics systems are deployed in applications such as motion detection, flame and smoke detection, shape recognition, face recognition, tamper detection, and video tracking. These platforms deliver high computing and graphics performance, along with advanced networking capabilities and seamless I/O speeds for image capture, data transfer, and video transmission.



AMS320

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CMI300-997

P. 82-83

Comparison Table

Edge AI Platforms



Models		EC3000	EC3100	EC3500
System	Processor	6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	Orin NX 16GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 Orin NX 8GB, Nano 8/4 GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3	AGX Orin 64GB: 12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3 AGX Orin 32GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
	PCH	N/A	N/A	N/A
	Memory	Orin NX 8GB: 128-bit LPDDR5 102.4 GB/s Orin Nano 4GB: 64-bit LPDDR5 34 GB/s	Orin NX 16GB: 16GB 128-bit LPDDR5 102.4GB/s Orin NX 8GB: 8GB 128-bit LPDDR5 102.4GB/s Orin Nano 8GB: 8GB 128-bit LPDDR5 68 GB/s Orin Nano 4GB: 4GB 64-bit LPDDR5 34 GB/s	AGX Orin 64GB: 64GB 256-bit LPDDR5 204.8GB/s AGX Orin 32GB: 32GB 256-bit LPDDR5 204.8GB/s
	Max. Memory	fixed	fixed	fixed
	Graphics	Orin NX 8GB: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores Orin Nano 4GB: 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores	Orin NX 16/8GB, Nano 8GB: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores Orin Nano 4GB: 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores	AGX Orin 64GB: 2048-core NVIDIA Ampere architecture GPU with 64 Tensor Cores AGX Orin 32GB: 1792-core NVIDIA Ampere c GPU with 56 Tensor Cores
I/O Interface	Display	Orin NX: HDMI 2.1 Orin Nano: HDMI 1.4	Orin NX: HDMI 2.1 Orin Nano: HDMI 1.4	HDMI 2.1
	Ethernet	1x GbE	1x GbE 1x GbE for OOB (out-of-band) management	1x GbE 1x 10GbE
	Serial Port	1x DB9 connector for RS-232/485 and CanBus 1x DB15 connector for RS-232/422/485 and DIO x8	1x RS232 COM port DB9 connector 1x CANBus DB9 connector	N/A
	USB	2x USB 3.2 Gen2 Type-A 2x USB 2.0 Type-A 1x Micro USB connector supports Recovery Mode and OTG	2 x USB 3.2 Gen2 Type-A 2 x USB 2.0 Type-A 1 x USB Type-C connector supports Recovery Mode and OTG	2x USB 3.2 Gen1 Type-A, 1x USB 2.0 Type-C (OTG only), 1x USB 3.2 Type-C Gen2
	Audio	N/A	1x 3.5mm phone jack for Line-out 1x 3.5mm phone jack for Mic-in	N/A
	Digital I/O	1x DB15 connector for RS-232/422/485 and DIO x 8	4x DI + 4 x DO (pin1 with isolation output 5V @ 0.5A)	N/A
Storage Interface	SATA HDD	N/A	N/A	N/A
	mSATA/M.2	1x M.2 2230	1x M.2 2280	1x M.2 2280 1x eMMC
Expansion Slots	PCI Express	N/A	N/A	N/A
	Mini PCI-E/M.2	1x M.2 3042/3052 B-key (4G/5G/M.2 2242 B+M Key storage) 1x M.2 2230 E-key (WiFi/BT/Storage)	1x M.2 3052 B-key (4G/5G) 1x M.2 2230 E-key (WiFi/BT) 1x M.2 3042 B-key (OOB 4G) 1x M.2 2280 M-key NVMe	1x M.2 3042/3052 B-key (4G/5G) 1x M.2 2230 E-key (WiFi/BT) 1x M.2 2280 M-key NVMe
Power	Power input	12V~24V DC-in	9V~36V DC-in	9V~36V DC-in
	Power Connector	2-pin terminal block	Lockable power connector	4-pin terminal block
	Power Protection	N/A	N/A	N/A
Mechanical	Dimensions	130mm x 102mm x 47.5mm	220mm x 174mm x 80mm	150mm x 120mm x 70mm
	Weight	0.8Kg	3Kg	1.35Kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Black and Red	Black and Red	Black and Red
	Mounting	Wall mount, DIN rail	Wall mount	Wall mount
Environmental	Operating Temperature	-15°C~55°C (-5°F~131°F)(Target)	-20°C~70°C (-40°F~158°F)(Target)	0°C ~ 50 °C (32°F~122°F)
	Storage Temperature	-40°C~85°C (-40°F~185°F)	-40°C~80°C (-40°F~176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE/FCC Class (Target B)	CE/FCC Class (Target B)	CE, FCC & LVD
	Others	N/A	N/A	1x MicroSD slot
	Page No.	p. 30	p. 29	p. 28

Remarks: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user's manual & datasheet download, visit www.ibase.com.tw.

Comparison Table

Edge AI Platforms



Models		MAF801	SI-624-AI	ES1001	ES1002
System	Processor	14th/13th Gen Intel® Core™ i7/i5/i3 Processors TDP 35/65W	Intel® 12th/13th Gen Intel® RPL-S Core™ processors	AMD Ryzen™ Embedded 7000 Processors	AMD EPYC™ 8004 Series
	PCH	Intel® R680E	N/A	B650	N/A
	Memory	2x DDR5-5600 SO-DIMM	4x DDR4-3200 U-DIMM, Max. 128GB	Dual Channel DDR5 5200	6x DDR5 4800, RDIMM 6 slots, Max. up to 576GB Supports ECC 3600/4000/4400/4800 MHz, 16 GB, 32 GB, 64 GB, 96GB
	Max. Memory	64GB	128GB	Max.128GB Supports ECC	N/A
	Graphics	Intel® UHD Graphics 770	NVIDIA MXM A2000	N/A	N/A
I/O Interface	Display	1x HDMI 2.0 1x DVI-I	4x DP	1x HDMI 2.1, 1x DP 2.0, 1x DVI-D port	N/A
	Ethernet	1x Intel® I226LM GbE 2x Intel® I226V GbE	2x Intel® I210T GbE LAN	2x Intel® I226-V 2.5 Gigabit LAN	2x 10GbE, Intel® X710-AT2
	Serial Port	2x RS-232/422/485 2x RS-232	2x RS232	1x Dual DB9 stack connector for COM #1 (RS232) COM #2 (RS232/422/485) (jumper-less selection)	1x External serial port (RS232) [Refer to Genoa (RJ-45 console port)]
	USB	6x USB 3.0,	2x USB 3.1 2x USB 3.2	6x USB 3.2 Gen2 Ports, 2x USB 2.0 via USB Type A connector	6 x USB 3.2 Gen2 Ports, 2x USB 2.0 via USB Type A connector
	Audio	1x Speaker out	1x Audio connector for Line-in/out/ MIC	1x Triplet type jack 3x1 for HD audio port [Line-in / Line-out / Mic-in] Realtek ALC888S for 5.1 channel	1x Triplet type jack 3x1 for HD audio port [Line-in / Line-out / Mic-in] Realtek ALC888S for 5.1 channel
Storage Interface	Digital I/O	NA	4-in & 4-out	Digital IO 4in/4out	N/A
	SATA HDD	2x SATA 3.0	1x Power / HDD LED	4x SATA 6Gb/s SUPPORT	4x SATA(6Gb/s)
	mSATA/M.2	1x M.2 2080 M-key	2x M.2 NVMe SSD	N/A	NVMe: 1x 22110/2280 (PCI-E Gen5) NVMe: 2x MCIO x4
Expansion Slots	PCI Express	TF1: N/A TF3: 2x PCI-Express x16 slot	N/A	1x PCI-E x16 supports (Gen5) 1x PCI-E x4 supports (Gen5) 1x PCI-E x4 supports (Gen4) 2x PCI-E x1 supports (Gen4) 2x PCI	5x PCI-E x16 slots PCI-E x16 SLOT2 (Gen4 x16 link, from CPU) PCI-E x16 SLOT3 (Gen4 x16 link, from CPU) PCI-E x16 SLOT5 (Gen5 x16 link, from CPU), CXL support PCI-E x16 SLOT6 (Gen5 x16 link, from CPU) , CXL support PCI-E x16 SLOT7 (Gen5 x16 link, from CPU), CXL support
	Mini PCI-E/M.2	2x M.2 2280 B+M -key	1x M.2 E-key(2230) 1x M.2 B-key(3052) 2x M.2 M- Key (2280/supports NVMe)	N/A	N/A
Power	Power input	24V DC-input	+19V DC-input	1x ATX standard 24-pin type & 4-pins type (+12V only)	1x ATX standard 24-pins type & 4-pins type (+12V only)
	Power Connector	4-pin terminal block	4-pin terminal block	1x ATX standard 24-pin	1x 24-pin SSI power connector 3x 8-pin SSI 12V power connector
	Power Protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	N/A	N/A
Mechanical	Dimensions	MAF801-TF1: 284mm (W) x 362mm (D) x 80mm (H) MAF801-TF3: 284mm (W) x 362mm (D) x 178mm (H)	329.2mm (W) x 210mm (D) x 73.1mm (H)	427mm (W) x 407.6mm (D) x 177mm (H)	483mm (W) x 510mm (H) x 177mm (D)
	Weight	MAF801-TF1: TBD MAF801-TF3: TBD	3.8kg	TBD	TBD
	Construction	Aluminum & Steel	SGCC	Aluminum & steel	Aluminum & steel
	Chassis Color	Black	Black and white	Black	Black
	Mounting	N/A	Stand system bracket	N/A	N/A
Environmental	Operating Temperature	-10°C to 50°C (14°F to 122°F)	0°C~45°C (32°F~113°F)	0°C~60°C (32°F~140°F)	-10°C to 60°C (14°F~140°F) *with airflow -10°C to 50°C (14°F to 122°F) without airflow
	Storage Temperature	-20°C to 80°C (-4°F to 176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)	-20°C to 80°C (-4°F to 176°F)
	Certification	CE/FCC Class B	CE/FCC/LVD/UL/CCC	CE/LVD/FCC Class B	TBD
	Others	N/A	N/A	N/A	N/A
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Comparison Table

Edge Computing Platforms



AGS100	AGS100T	AGS101T
Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 & Pentium® N4200/ Celeron® N3350 Processors	Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 & Pentium® N4200/ Celeron® N3350 Processors	Intel® Atom® x6212RE/ x6414RE Processors
N/A	N/A	N/A
1x DDR3L-1866 SO-DIMM	1x DDR3L-1866 SO-DIMM	1x DDR4-3200 SO-DIMM
8GB	8GB	16GB
Intel® HD Graphics 505	Intel® HD Graphics 505	Intel® Gen11 UHD Graphics
1x DisplayPort	1x DisplayPort	1x HDMI
1x DVI-I	1x DVI-I	1x DVI-I
For E-series CPU: Intel® I210IT GbE LAN For N-series CPU: Intel® I211AT GbE LAN	For E-series CPU: Intel® I210IT GbE LAN For N-series CPU: Intel® I211AT GbE LAN	3x Intel® I225IT 2.5G GbE LAN
2x RS232/RS422/485	2x RS232/RS422/485	2x RS232/RS422/485 2x RS232
4x USB 3.0	4x USB 3.0	2x USB 3.1 2x USB 2.0
1x Speaker-out	1x Speaker-out	1x Speaker-out & Mic-in
N/A	N/A	4-in & 4-out
N/A	N/A	1x 2.5" slot
1x mSATA	1x mSATA	1x mSATA
1x 3042 M.2 B-key socket	1x 3042 M.2 B-key socket	
1x 2230 M.2 E-key socket	1x 2230 M.2 E-key socket	
N/A	N/A	N/A
1x Mini PCI-E slot	1x Mini PCI-E slot	2x Mini PCI-E slot 1x M.2 B-key
9V~36V DC-input	9V~36V DC-input	9V~36V DC-input
3-pin terminal block	3-pin terminal block	3-pin terminal block
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
160mm (W) x 110mm (D) x 44mm (H)	160mm (W) x 110mm (D) x 44mm (H)	190mm (W) x 110mm (D) x 52mm (H)
1kg	1kg	1.05kg
Aluminum & steel	Aluminum & steel	Aluminum & steel
Silver & Gray	Silver & Gray	Silver & Gray
Desktop & wall mount	Desktop & wall mount	Desktop & wall mount
DIN-rail mount	DIN-rail mount	DIN-rail mount
For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F)	For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F)	-20°C~70°C (-4°F~158°F)
-40°C~85°C (-40°F~185°F)	-40°C~85°C (-40°F~185°F)	-40°C~85°C (-40°F~185°F)
CE/FCC/LVD/CCC/UL	CE/FCC/LVD/UL	CE/FCC/LVD(pre-scan)
N/A	TPM 2.0	TPM 2.0
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Comparison Table

Edge Computing Platforms



Models		AGS102	AGS102T	AGS103T	AGS104T
System	Processor	Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 & Pentium® N4200/ Celeron® N3350 Processors	Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 & Pentium® N4200/ Celeron® N3350 Processors	Intel® Atom® x6RE/ x6414RE Processors	Intel® Atom® x7433RE/ x7211RE Processors
	PCH	N/A	N/A	N/A	N/A
	Memory	1x DDR3L-1866 SO-DIMM	1x DDR3L-1866 SO-DIMM	1x DDR4-3200 SO-DIMM	1x DDR5-4800 SO-DIMM
	Max. Memory	8GB	8GB	16GB	16GB
	Graphics	Intel® HD Graphics 505	Intel® HD Graphics 505	Intel® Gen11 UHD Graphics	Intel® Atom™ SoC integrated Gen 12 UHD graphics
I/O Interface	Display	1x DisplayPort 1x DVI-I	1x DisplayPort 1x DVI-I	1x HDMI 1x DVI-I	1x HDMI 1x DisplayPort 1x USB Type-C
	Ethernet	For E-series CPU: Intel® I210IT GbE LAN For N-series CPU: Intel® I211AT GbE LAN	For E-series CPU: Intel® I210IT GbE LAN For N-series CPU: Intel® I211AT GbE LAN	3x Intel® I225IT 2.5G GbE LAN	2x Intel® I226IT 2.5G LAN
	Serial Port	2x RS232/RS422/485 2x RS232	4x RS232/RS422/485	2x RS232/RS422/485 2x RS232	4x RS232/RS422/485
	USB	4x USB 3.0 1x USB 2.0	4x USB 3.0 1x USB 2.0	2x USB 3.1 2x USB 2.0	3x USB 3.2 ports 1x USB 3.2(Type-C) 1x USB 2.0 port
	Audio	1x Speaker-out	1x Speaker-out	1x Speaker-out & Mic-in	1x Line-out/ Mic-in
	Digital I/O	4-in & 4-out	4-in & 4-out	4-in & 4-out	4-in & 4-out
Storage Interface	SATA HDD	N/A	N/A	1x 2.5" slot (for AGS103TS)	N/A
	mSATA/M.2	1x mSATA 1x 3042 M.2 B-key socket 1x 2230 M.2 E-key socket	1x mSATA 1x 3042 M.2 B-key socket 1x 2230 M.2 E-key socket	1x mSATA	1x mSATA
Expansion Slots	PCI Express	N/A	N/A	N/A	N/A
	Mini PCI-E/M.2	1x Mini PCI-E slot	1x Mini PCI-E slot	2x Mini PCI-E slot 1x M.2 B-key	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket
Power	Power input	9V~36V DC-input	9V~36V DC-input	9V~36V DC-input	9V~36V DC-input
	Power Connector	3-pin terminal block	3-pin terminal block	3-pin terminal block	3-pin terminal block
	Power Protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
Mechanical	Dimensions	160mm (W) x 110mm (D) x 44mm (H)	160mm (W) x 110mm (D) x 44mm (H)	190mm (W) x 110mm (D) x 52mm (H)	160mm(W) x 110mm(D) x 44mm(H)
	Weight	1Kg	1Kg	1.2Kg	1.0Kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Silver & Gray	Silver & Gray	Silver & Gray	Silver & Gray
Environmental	Mounting	Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount
	Operating Temperature	For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F)	For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F)	-20°C~70°C (-4°F~158°F)	-40°C~70°C (-40°F~158°F)
	Storage Temperature	-40°C~85°C (-40°F~185°F)	-40°C~85°C (-40°F~185°F)	-40°C~85°C (-40°F~185°F)	-50°C ~ 80°C (-58°F~176°F)
	Certification	CE/FCC/LVD/CCC/UL	CE/FCC/LVD/UL	CE/FCC/LVD(pre-scan)	CE/FCC/LVD
	Others	N/A	TPM 2.0	TPM 2.0	TPM 2.0
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Comparison Table

Embedded Systems



AGS105	ARS200	ACS050-100	ACS200-210
Intel® Atom® x7433RE/ x7211RE Processors	14/13th Intel® Core™-i U-series Processor	Intel® Atom® x6425E Processors (Quad-Core @ 3.0GHz)	Intel® Atom® x7000E Series/ N-series N97 & Core™ i3-N505 Processor
N/A	N/A	N/A	N/A
1x DDR5-4800 SO-DIMM	1x DDR5-5600 SO-DIMM	1x DDR4-3200 SO-DIMM	1x DDR5 SO-DIMM
16GB	32GB	32GB	16GB
Intel® Atom™ SoC integrated Gen 12 UHD graphics	Intel® New Iris Xe Gfx	Intel® UHD Graphics	Intel® UHD Graphics
1x HDMI 1x DisplayPort 1x USB Type-C	2x HDMI 2.0	1x Display Port	1x HDMI Port 1x USB Type-C
3x Intel® I226IT 2.5G LAN	2x Intel® I226IT 2.5G LAN	2x Intel® I225IT 2.5G GbE LAN	2x Intel® I216-V 2.5GbE LAN
4x RS232/RS422/485	2x RS-232/422/485 2x RS-232	2x RS232	1x RS232/RS422/485 1x RS232 Optional 4x RS232 (pin9 0,5V,12V)
2x USB 3.2 ports 1x USB 3.2(Type-C) 1x USB 2.0 port	2x USB 3.2	4x USB 3.2	2x USB 3.2 4x USB 2.0 1x USB Type-C
1x Line-out/ Mic-in	NA	N/A	1x Speaker-out & Mic-in
4-in & 4-out	NA	4-in & 4-out	4-in & 4-out
N/A	NA	N/A	N/A
1x mSATA 1x M.2 B-key SATA	1x M.2 2280 M-key	1x mSATA	1x 2280 M.2 M-key socket (mSATA/PCI-Ex1)
N/A	NA	N/A	N/A
1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket 1x Mini PCI-E full-size socket	1x M.2 2230 E-key 1x M.2 3042/52 B-key	2x Mini PCI-E slot	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket with nano SIM slot
9V~36V DC-input	12V~24V DC-input	12V DC-input	9V~36V DC-input
3-pin terminal block	4-pin M12	DC-in	2-pin terminal block
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	N/A	N/A
160mm(W) x 110mm(D) x 44mm(H)	319.0 mm(W) x 230.0 mm(D) x 94 mm(H)	110mm (W) x 110mm (D) x 50mm (H)	242.2mm (W) x 110mm (D) x 54.15mm (H)
1.0Kg	4.2Kg	TBD	1.65Kg
Aluminum & steel	Aluminum & Steel	Aluminum & steel	Aluminum & steel
Silver & Gray	Silver & Black	Silver & Gray	Silver & Gray
Desktop & wall mount DIN-rail mount	Desktop & wall mount	Desktop & VESA mount 75x75, 100x100mm Optional DIN-rail mount KIT	Desktop & wall mount VESA mount 75x75, 100x100mm
-40°C~-70°C (-40°F~158°F)	-20 ~ 70 °C (14 ~ 158 °F)	-25°C~60°C (-13°F~140°F) with airflow	For X7835RE CPU: -30°C~60°C (-22°F~140°F) For N-series CPU: -20°C~45°C (-4°F~113°F)
-40°C~85°C (-40°F~185°F)	-20°C ~ 80°C (-4°F to 176°F)	-40°C~85°C (-40°F~185°F)	-40°C~80°C(-40°F~176°F)
CE/FCC/LVD	CE / FCC Class B	CE/FCC/LVD(pre-scan)	CE/FCC/LVD(pre-scan)
N/A	Comply IP65	2x CANbus H/W TPM 2.0	H/W TPM 2.0
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Comparison Table

Embedded Systems



Models		AES100	AMS210	AMS300/AMS300-1
System	Processor	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)	7th/6th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)
	PCH	Intel® R680E PCH	Intel® Q370 PCH	Intel® Q170 PCH
	Memory	2x DDR5-5600/4800 SO-DIMM	2x 4GB DDR4-2666/2400 SO-DIMM	2x DDR4-2133 SO-DIMM
	Max. Memory	64GB	32GB	32GB
	Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics 530
I/O Interface	Display	1x HDMI 1x Displayport 1x VGA	3x DisplayPort	1x DisplayPort 1x DVI-I
	Ethernet	1x Intel® I226-LM 2.5G LAN 2x Intel® I226-IT 2.5G LAN	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I210IT Gigabit LAN 1x Intel® I210IT Gigabit LAN	AMS300: 1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN AMS300-1: 1x Intel® I219LM Gigabit LAN PHY 2x Intel® I211-AT or 2x Intel® I210-AT Gigabit LAN
	Serial Port	2x RS232/RS422/485 2x RS232 2x RS232/RS422/485 (optional)	1x RS232/RS422/485 3x RS232 (optional)	AMS300: 1x RS232/RS422/485 1x RS232 AMS300-1: N/A
	USB	2x USB 3.2 Gen.2 4x USB 3.2 Gen.1	4x USB 3.1 4x USB 2.0	4x USB 3.0 2x USB 2.0
	Audio	1x Line-out, 1x MIC-in	1x Line-out	1x Line-out
	Digital I/O	8-in & 8-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)
Storage Interface	SATA HDD	2x 2.5" SSD	2x 2.5" HDD or SSD	2x 2.5" HDD or SSD
	mSATA/M.2	1x 2280 M.2 M-key socket (PCI-E x 4)	1x mSATA via mPCI-E	1x mSATA
Expansion Slots	PCI Express	1x PCI-E(x16) Gen.4 slot 2x PCI-E(x4) Gen.4 slots	2x PCI-E (x16) (by ABP-IP701/ABP-IP702/ABP-IP703)	N/A
	Mini PCI-E/ M.2	2x Mini PCI-E slots 1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket 1x 2280 M.2 M-key socket	1x Mini PCI-E slot	1x Mini PCI-E slot
Power	Power input	8V~48V DC-input	24V (±10%) DC-input	24V (±10%) DC-input
	Power Connector	4-pin terminal block	3-pin DC-in terminal block	3-pin terminal block
	Power Protection	OVP, UVP, Reverse voltage protection	Reverse voltage	OVP, UVP, Reverse voltage protection
Mechanical	Dimensions	213.8mm (W) x 363.6mm (D) x 215mm (H)	297.4mm (W) x 266.2mm (D) x 78.5mm (H)	275mm (W) x 140mm (D) x 70mm (H)
	Weight	TBD	3.7 Kg	2.7Kg
	Construction	Aluminum & steel	SGCC	Aluminum & steel
	Chassis Color	Silver & Gray	Silver	Silver & Gray
	Mounting	Wall mounting	Desktop or wall mount	Desktop & wall mount DIN-rail mount
Environmental	Operating Temperature	-20°C to 60°C (-4°F~140°F) *with airflow	0°C to 55°C (32°F~131°F)	-10°C to 60°C (14°F~140°F) *With airflow -10°C to 50°C (14°F to 122°F) *without airflow
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE/FCC/LVD	CE/FCC/LVD (Prescan only)	CE/FCC/LVD

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Comparison Table

Embedded Systems



AMS301	AMS302	AMS310	AMS312
7th/6th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)	7th/6th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)	10th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)	10th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)
Intel® Q170 PCH	Intel® Q170 PCH	Intel® H420E PCH	Intel® Q470E PCH
2x DDR4-2133 SO-DIMM	2x DDR4-2133 SO-DIMM	2x DDR4-2933 SO-DIMM	2x DDR4-2933 SO-DIMM
32GB	32GB	64GB	64GB
Intel® HD Graphics 530	Intel® HD Graphics 530	10th Gen Intel® DT processor integrated HD Gfx	10th Gen Intel® DT processor integrated HD Gfx
1x DisplayPort 1x DVI-I	1x DisplayPort 1x DVI-I	2x DisplayPort 1x HDMI	2x DisplayPort 1x HDMI
1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN	1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN	2x Intel® I225V 2.5G LAN	2x Intel® I225V 2.5G LAN
1x RS232/RS422/485 1x RS232 2x RS232 (optional)	1x RS232/RS422/485 1x RS232 2x RS232 (optional)	1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 1x RS232
4x USB 3.0 2x USB 2.0	4x USB 3.0 2x USB 2.0	4x USB 3.0 2x USB 2.0	4x USB 3.0 2x USB 2.0
1x Line-out	1x Line-out	1x Line-out	1x Line-out
4-in & 4-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)
2x 2.5" HDD or SSD	2x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
1x mSATA	1x mSATA	1x M.2 M-key 2280 SATA SSD	1x M.2 M-key 2280 SATA SSD
N/A	1x PCI-E (x8) + 1x PCI-E (x4)	1x PCI-E (x8) + 1x PCI-E (x4)	1x PCI-E (x8) + 1x PCI-E (x4)
4x Mini PCI-E slot	1x Mini PCI-E slot	1x M.2 E-key 1x M.2 B-key	1x M.2 E-key 1x M.2 B-key
24V (±10%) DC-input	24V (±10%) DC-input	24V (±10%) DC-input	24V (±10%) DC-input
3-pin terminal block	3-pin terminal block	3-pin terminal block	3-pin terminal block
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
275mm (W) x 140mm (D) x 117mm (H)	275mm (W) x 140mm (D) x 117mm (H)	275mm (W) x 150mm (D) x 117mm (H)	275mm (W) x 150mm (D) x 117mm (H)
3.3Kg	3.3Kg	3.3Kg	3.5Kg
Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Silver & Gray	Silver & Gray	Silver & Gray	Silver & Gray
Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
-10°C to 60°C (14°F~140°F) *With airflow -10°C to 50°C (14°F to 122°F) *without airflow -20°C~80°C (-4°F~176°F)	-10°C to 60°C (14°F~140°F) *With airflow -10°C to 50°C (14°F to 122°F) *without airflow -20°C~80°C (-4°F~176°F)	-10°C to 60°C (14°F~140°F) *With airflow -10°C to 50°C (14°F to 122°F) *without airflow -20°C~80°C (-4°F~176°F)	-10°C to 60°C (14°F~140°F) *with airflow -10°C to 50°C (14°F to 122°F) without airflow -20°C~80°C (-4°F~176°F)
CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD

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Comparison Table

Embedded Systems



Models		AMS320	AMS322	AMI220
System	Processor	11th Gen Intel® Core™ i7/i5/i3 Processors	11th Gen Intel® Core™ i7/i5/i3 Processors	7th/6th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)
	PCH	N/A	N/A	Intel® Q170 PCH Intel® H110 PCH
	Memory	2x DDR4 3200 SO-DIMM, Max. 64GB	2x DDR4 3200 SO-DIMM, Max. 64GB	2x 4GB DDR4-2400 SO-DIMM
	Max. Memory	64GB	64GB	32GB
	Graphics	Intel® Iris® Xe Graphics	Intel® Iris® Xe Graphics	Intel® HD Graphics 530
I/O Interface	Display	2x DisplayPort	2x DisplayPort	1x DVI-D, 1x VGA 2x DisplayPort
	Ethernet	3x Intel® I226V 2.5G LAN	3x Intel® I226V 2.5G LAN	1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN
	Serial Port	1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 3x RS232
	USB	3x USB 3.1 3x USB 2.0	3x USB 3.1 3x USB 2.0	4x USB 3.0 4x USB 2.0
	Audio	1x Line-out	1x Line-out	1x Line-out, 1x MIC-in
	Digital I/O	4-in & 4-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)
Storage Interface	SATA HDD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
	mSATA/M.2	2 x M.2 (E-key & B-key)	N/A	2x mSATA (AMI220AF) 1x mSATA (AMI220EF)
Expansion Slots	PCI Express	N/A	2x PCI-E (x4)	N/A
	Mini PCI-E/M.2	1x M.2 2042 E-key (USB 2.0 & PCI-E) 1x M.2 3052 B-key (USB 2.0 & 3.0)	1x M.2 2042 E-key (USB 2.0 & PCI-E) 1x M.2 3052 B-key (USB 2.0 & 3.0)	2x Mini PCI-E slot
Power	Power input	24V (±10%) DC-input	24V (±10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input
	Power Connector	3-pin terminal block	3-pin terminal block	3-pin terminal block DC-jack (optional)
	Power Protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
Mechanical	Dimensions	275mm (W) x 140mm (D) x 70mm (H)	275mm (W) x 140mm (D) x 117mm (H)	210mm (W) x 265mm (D) x 71.4mm (H)
	Weight	3.5Kg	3.5Kg	3.6 Kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Silver & Gray	Silver & Gray	Silver & Gray
	Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)	Desktop & wall mount
Environmental	Operating Temperature	-10°C to 60°C (14°F~140°F) *with airflow -10°C to 50°C (14°F to 122°F) without airflow	-10°C to 60°C (14°F~140°F) *with airflow -10°C to 50°C (14°F to 122°F) without airflow	-10°C~50°C (14°F~122°F)
	Storage Temperature	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD/CCC

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Comparison Table

Embedded Systems



AMI221	AMI222	AMI230	AMI231
7th/6th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP) Intel® Q170 PCH TDP Intel® H110 PCH TDP	7th/6th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP) Intel® Q170 PCH TDP Intel® H110 PCH TDP	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP) Intel® Q370 PCH	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP) Intel® Q370 PCH
2x 4GB DDR4-2400 SO-DIMM	2x 4GB DDR4-2400 SO-DIMM	2x DDR4-2666/2400 SO-DIMM	2x 8GB DDR4-2666/2400 SO-DIMM
32GB	32GB	32GB	32GB
Intel® HD Graphics 530	Intel® HD Graphics 530	Intel® HD Graphics	Intel® HD Graphics
1x DVI-D, 1x VGA 2x DisplayPort	1x DVI-D, 1x VGA 2x DisplayPort	1x HDMI+ DisplayPort 1x DVI-D	1x HDMI+ DisplayPort 1x DVI-D
1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN	1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I211AT Gigabit LAN 1x Intel® I211AT Gigabit LAN *2 supports PoE+*	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I211AT Gigabit LAN 1x Intel® I211AT Gigabit LAN *2 supports PoE+*
1x RS232/RS422/485 5x RS232	1x RS232/RS422/485 5x RS232	1x RS232/RS422/485 3x RS232	1x RS232/RS422/485 3x RS232
4x USB 3.0 6x USB 2.0	4x USB 3.0 6x USB 2.0	8x USB 3.1	8x USB 3.1
1x Line-out, 1x MIC-in	1x Line-out, 1x MIC-in	1x Line-out, 1x MIC-in	1x Line-out, 1x MIC-in
4-in & 4-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)
2x 2.5" HDD or SSD	2x 2.5" HDD or SSD	1x 2.5" HDD or SSD	2x 2.5" HDD or SSD
2x mSATA (AMI221AF) 1x mSATA (AMI221EF)	2x mSATA (AMI222AF) 1x mSATA (AMI222EF)	1x M.2 (M-key)	1x M.2 (M-key)
1x PCI-E (x16) + 1x PCI	1x PCI-E (x8) + 1x PCI-E (x1) or 1x PCI-E (x16) + 1x PCI	N/A	1x PCI-E (x16) + 1x PCI
2x Mini PCI-E slot	4x Mini PCI-E slot	3x M.2 (B-key/E-key/M-key)	3x M.2 (B-key/E-key/M-key)
12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input	12V (±10%) or 18V (-10%)~24V (+10%) DC-input	12V (±10%) or 18V (-10%)~24V (+10%) DC-input
3-pin terminal block DC-jack (optional)	3-pin terminal block DC-jack (optional)	5-pin DC-in terminal block	5-pin DC-in terminal block
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
210mm (W) x 265mm (D) x 108.6mm (H)	210mm (W) x 265mm (D) x 128.6mm (H)	210mm (W) x 265mm (D) x 77mm (H)	210mm (W) x 285mm (D) x 109mm (H)
4.3 Kg	4.3 Kg	4 Kg	4.5 Kg
Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Silver & Gray	Silver & Gray	Silver & Gray	Silver & Gray
Desktop & wall mount	Desktop & wall mount	Desktop & wall mount	Desktop or wall mount
-10°C~50°C (14°F~122°F)	-10°C~50°C (14°F~122°F)	-20°C~70°C (-4°F~158°F) (for 35W CPU)	-20°C to 70°C (-4°F~158°F) (for 35W CPU)
-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)
CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD

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Models		AMI232	AMI240	AMI242
System	Processor	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)	13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)
	PCH	Intel® Q370 PCH	Intel® Q670E PCH	Intel® Q670E PCH Intel® R680E PCH
	Memory	2x 8GB DDR4-2666/2400 SO-DIMM	2x DDR5-5600/4800 SO-DIMM	2x DDR5-5600/4800 SO-DIMM
	Max. Memory	32GB	64GB	64GB
	Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics
I/O Interface	Display	1x HDMI+ DisplayPort 1x DVI-D	2x HDMI 2x Displayport	2x HDMI 2x DisplayPort
	Ethernet	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I211AT Gigabit LAN 1x Intel® I211AT Gigabit LAN *2 supports PoE+ *	1x Intel® I226-LM 2.5Gigabit LAN 1x Intel® I226-V 2.5Gigabit LAN 1x Intel® I211IT Gigabit LAN 1x Intel® I211IT Gigabit LAN *2 supports PoE+ *	1x Intel® I226-LM 2.5Gigabit LAN 1x Intel® I226-V 2.5Gigabit LAN 1x Intel® I211IT Gigabit LAN 1x Intel® I211IT Gigabit LAN *2 supports PoE+ *
	Serial Port	1x RS232/RS422/485 3x RS232	2x RS232/RS422/485 2x RS232	2x RS232/RS422/485 4x RS232
	USB	8x USB 3.1	8x USB 3.1	8x USB 3.2 2x USB 2.0
	Audio	1x Line-out, 1x MIC-in	N/A	N/A
	Digital I/O	4-in & 4-out (optional)	4-in & 4-out (optional)	4-in & 4-out (optional)
Storage Interface	SATA HDD	2x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
	mSATA/M.2	1x M.2 (M-key)	1x M.2 (M-key)	1x M.2 (M-key)
Expansion Slots	PCI Express	1x PCI-E (x8) + 1x PCI-E (x1) or 1x PCI-E (x16) + 1x PCI	N/A	1x PCI-E (x16)
	Mini PCI-E/M.2	3x M.2 (B-key/E-key/M-key)	3x M.2 (B-key/E-key/M-key)	3x M.2 (B-key/E-key/M-key)
Power	Power input	12V (±10%) or 18V (-10%)~24V (+10%) DC-input	24V (+10%) DC-input	24V (+10%) DC-input
	Power Connector	5-pin DC-in terminal block	5-pin DC-in terminal block	5-pin DC-in terminal block
	Power Protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
Mechanical	Dimensions	210mm (W) x 285mm (D) x 128.6mm (H)	210mm (W) x 265mm (D) x 77mm (H)	210mm (W) x 285mm (D) x 128.6mm (H)
	Weight	4.9 kg	TBD	TBD
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Silver & Gray	Silver & Gray	Silver & Gray
	Mounting	Desktop or wall mount	Desktop & wall mount	Desktop & wall mount
Environmental	Operating Temperature	-20°C to 70°C (-4°F~158°F) (for 35W CPU)	-20°C~70°C (-4°F~158°F) (for 35W CPU)	-20°C~70°C (-4°F~158°F) (for 35W CPU)
	Storage Temperature	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD



CMB100	CMB106	CMB108
7th/6th Gen Intel® Core™ DT processors (TDP 65W)	7th/6th Gen Intel® Core™ DT processors (TDP 65W)	13th Gen Intel® Core™ DT processors (TDP 65W)
Intel® C236	Intel® C236	Intel® Q670E
2x DDR4 UIMM	4x DDR4 UIMM	2x DDR5-4800/5600 U-DIMM
32GB	64GB	64GB
Intel® Core I integrated Graphics	Intel® Core I integrated Graphics	Intel® Core I integrated Graphics
2x HDMI	2x HDMI	1x HDMI 2x DisplayPort
Intel® I219LM Gigabit LAN Intel® I211AT PCI-E Gigabit LAN	Intel® I219LM Gigabit LAN Intel® I211AT PCI-E Gigabit LAN	Intel® I226LM 2.5 Gigabit LAN Intel® I226V 2.5 Gigabit LAN
2x RS232/422/485, 2x RS232	2x RS232/422/485, 2x RS232	2x RS232/422/485, 2x RS232
6x USB 3.0 ports, 4x USB 2.0 (expandable)	6x USB 3.0 ports, 4x USB 2.0 (expandable)	4x USB 3.2 (Gen2) 2x USB3.1 (Gen1)
Line-In/LINE-Out/MIC-out	Line-In/LINE-Out/MIC-out	Line-In/LINE-Out/MIC-out
4-in/4-out	4-in/4-out	4-in/4-out
4x 2.5" SATA (supports RAID 0/1) +Mini PCI-E	4x 2.5" SATA (supports RAID 0/1) +Mini PCI-E	4x 2.5" SATA (supports RAID 0/1)
mSATA 1x M.2 slot [Thru PCI-E (x1) x4](NVMe)	mSATA 1x M.2 slot [Thru PCI-E (x1) x4](NVMe)	M.2 (M-key)
1x PCI-E(x16), 1x PCI-E(x8), 1x PCI-E(x4)	1x PCI-E(x16), 1x PCI-E(x8), 1x PCI-E(x4)	1x PCI-E(16X) 2x PCI-E(x4)
1x MiniPCI-E 1x M.2 (M-key)	1x MiniPCI-E 1x M.2 (M-key)	4x M.2 (B-key/ E-key/ M-key/M-key)
AC-IN 100V~240V	AC-IN 100V~240V	AC-IN 100V~240V
ATX power	ATX power	ATX power
N/A	N/A	N/A
362.4mm(W) x 350.0mm(D) x 156.0mm(H)	325mm(W) x 350mm(D) x 156mm(H)	325mm(W) x 350mm(D) x 156mm(H)
Depends on the configuration of power supply and motherboard related components	Depends on the configuration of power supply and motherboard related components	Depends on the configuration of power supply and motherboard related components
SECC	SECC	SECC
Black	Black	Black
Desktop & wall mount	Desktop & wall mount	Desktop & wall mount
0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing	0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing	0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing
-20°C~80°C (-4°F~176°F), @60°C, non-condensing	-20°C~80°C (-4°F~176°F), @60°C, non-condensing	-20°C~80°C (-4°F~176°F), @60°C, non-condensing
CE FCC Class A / LVD	CE FCC Class A / LVD	CE FCC Class A / LVD

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Comparison Table

Embedded Systems



Models		CP100	CP101	ASB200-915
System	Processor	AMD Ryzen™ Embedded R2000 series APU on board	AMD Ryzen™ Embedded 8000 series APU on board	6th Gen Intel® Core™ U-series Processor
	PCH	NA	NA	N/A
	Memory	Onboard DDR4 memory	Dual Channel SO-DIMM, DDR5 5600	2x DDR3L-1600 SO-DIMM
	Max. Memory	Max. 8GB	Max. 128GB	16GB
	Graphics	NA	NA	Intel® HD Graphics 520
I/O Interface	Display	2x HDMI (2.0b), 1x 24-bit dual channel LVDS	2x HDMI (2.0b), 1x 24-bit dual channel LVDS	1x DisplayPort
	Ethernet	2x Intel® I226IT Gigabit LAN	2x Intel® I226-V 2.5 Gigabit LAN	1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN
	Serial Port	COM1 / COM2 : RS-232/422/485 (Default: RS-232, adjustable in BIOS) COM3 / COM4 : RS232	COM 1 & 2 : RS-232/422/485 can be set by BIOS setting COM 3 & 4 : RS232	1x RS232/RS422/485 3x RS232
	USB	3x USB 2.0 (pin header) ; 2x USB 3.2 Gen2 (10Gbps)	2x USB 3.2 Gen2 (10Gbps) [Type-A] 4x USB 2.0 (2 for Type-A, 2 for Pin Header)	1x USB 3.1 Type-C 4x USB 3.0 2x USB 2.0
	Audio	Built-in audio w/ Realtek audio codec ALC888S-VD2-GR	Realtek audio codec ALC888S-VD2-GR	1x Line-out, 1x Line-in, 1x MIC-in
	Digital I/O	Digital I/O(4-in/ 4-out)	Digital I/O(4-in/ 4-out)	4-in & 4-out
Storage Interface	SATA HDD	1x SATA III	NA	1x 2.5" HDD or SSD
	mSATA/M.2	1x M-key, type: 2280, 1x E-key, type: 2230	4x M-key, type: 2280, 2x E-key, type: 2230, 1x B-key, type: 3052	1x mSATA
Expansion Slots	PCI Express	NA	1x PCI-E M.2 Gen4 x2, E-key 2230 Wi-Fi/BT 1x PCI-E M.2 Gen4 x1, B-key 3052 5G/4G(LTE) WWAN	N/A
	Mini PCI-E/M.2	NA	NA	1x Mini PCI-E slot
Power	Power input	1x DC in connector	1x DC in +12V ~ +24V (+10% tolerance) input	12V (-10%) ~ 24V (+10%) DC-input
	Power Connector	DC in connector	TBD	3-pin terminal block DC-jack (optional)
	Power Protection	TBD	TBD	N/A
Mechanical	Dimensions	94 mm (W) x 133 mm (D) x 51.4 mm (H)	TBD	180mm(W) x 150mm(D) x 66mm(H)
	Weight	TBD	TBD	1.8 kg
	Construction	Aluminum & steel	TBD	Aluminum & steel
	Chassis Color	Gray	TBD	Black
	Mounting	Desktop & wall mount	TBD	Desktop & wall mount Optional VESA mount kit
Environmental	Operating Temperature	0°C~45°C (32°F~113°F)	0°C~60°C (32°F~140°F)	-10°C~50°C (14°F~122°F)
	Storage Temperature	-10°C ~ 80°C (14°F to 176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE / LVD / FCC Class B	CE / LVD / FCC Class B	CE/FCC/LVD

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ASB200-916	ASB200-919	ASB200-953
7th Gen Intel® Core™ U-series Processor	8th Gen Intel® Core™ U-Series Processor	11th Gen Intel® Core™ U-Series Processor
N/A	N/A	N/A
2x DDR3L-1600 SO-DIMM	2x 8GB DDR4-2666 SO-DIMM	2x DDR4-3200 SO-DIMM
32GB	32GB	64GB
Intel® HD Graphics 620	Intel® UHD Graphics 610	i7 & i5: Intel® Iris® X® i3 & Celeron: Intel® UHD Graphics
1x DisplayPort, 1x HDMI	2x DisplayPort (1 by Type-C)	2x DisplayPort
1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN	1x Intel® I219LM Gigabit LAN PHY for IB919AF Series (Intel® I219V Gigabit LAN PHY for IB919EF Series) 1x Intel® I211AT PCI-E Gigabit LAN	i7 & i5: Intel® I219LM Gigabit LAN PHY i3 & Celeron: Intel® I219V Gigabit LAN PHY Intel® I211AT PCI-E Gigabit LAN (as 2nd LAN)
1x RS232/RS422/485 3x RS232*	1x RS232/422/485	1x RS232/422/485
4x USB 3.0 2x USB 2.0	4x USB3.1	3x USB 3.1 1x USB 2.0
1x Line-out, 1x Line-in, 1x MIC-in	N/A	N/A (optional)
4-in & 4-out	4-in & 4-out	4-in & 4-out
1x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
1x mSATA	N/A	1x M.2 2280 PCI-E SSD
N/A	N/A	N/A
1x Mini PCI-E slot	2x M.2 (M-key/E-key)	2x M.2 (B-key/E-key)
12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input
3-pin terminal block DC-jack (optional)	3-pin terminal block DC-jack (optional)	3-pin terminal block DC-jack (optional)
N/A	N/A	N/A
180mm(W) x 150mm(D) x 66mm(H)	180mm(W) x 150mm(D) x 66mm(H)	180mm(W) x 150mm(D) x 71mm(H)
1.8 kg	1.5kg	1.7 kg
Aluminum & steel	Aluminum & steel	Aluminum & steel
Black	Black	Black
Desktop & wall mount Optional VESA mount kit	Desktop or wall mount Optional VESA mount kit	Desktop or wall mount Optional VESA mount kit
-10°C~50°C (14°F~122°F)	0°C~45°C (32°F~113°F) *with airflow 0.9m/s	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
-20°C~80°C (-4°F~176°F)	-20°C ~80°C(-4°F~176°F)	-20°C ~80°C(-4°F~176°F)
CE/FCC/LVD	CE/LVD/FCC	CE/LVD/FCC

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Comparison Table

Embedded Systems



Models		ASB200-838	ASB200-962	ASB210-953
System	Processor	Intel® Atom® N Series	Intel® Core™ Ultra 100U Series mobile Processors	11th Gen Intel® Core™ U-Series Processor
	PCH	N/A	N/A	N/A
	Memory	1x DDR5-4800 SO-DIMM	2x DDR5-5600 SO-DIMM	2x DDR4-3200 SO-DIMM
	Max. Memory	16GB	64GB	64GB
	Graphics	Intel® UHD Graphics	N/A	i7 & i5: Intel® Iris® X® i3 & Celeron: Intel® UHD Graphics
I/O Interface	Display	1x DisplayPort	1x DisplayPort 1x HDMI	2x DisplayPort
	Ethernet	2x Intel® I226-V 2.5G LAN	2x 2.5G LAN	i7 & i5: Intel® I219LM Gigabit LAN PHY i3 & Celeron: Intel® I219V Gigabit LAN PHY Intel® I211AT PCI-E Gigabit LAN (as 2nd LAN)
	Serial Port	1x RS232/RS422/485 3x RS232	1x RS232/422/485	1x RS232/422/485
	USB	2x USB3.1 1x USB 3.0	3x USB 3.2 1x USB 2.0	3x USB 3.1 1x USB 2.0
	Audio	1x Line-out, 1x Line-out, 1x MIC-in	N/A	N/A (optional)
	Digital I/O	4-in & 4-out	4-in & 4-out	4-in & 4-out
Storage Interface	SATA HDD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
	mSATA/M.2	1x M.2 B-key PCI-E	1x M.2 (M-key)	1x M.2 2280 PCI-E SSD
Expansion Slots	PCI Express	N/A	N/A	N/A
	Mini PCI-E/M.2	2x M.2 (B-key/E-key)	3x M.2 sockets (B-key/ E-key and M-key)	2x M.2 (B-key/E-key)
Power	Power input	12V (-10%) ~ 24V (+10%) DC-input	24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input
	Power Connector	3-pin terminal block DC-jack (optional)	3-pin terminal block	3-pin terminal block DC-jack (optional)
	Power Protection	N/A	N/A	N/A
Mechanical	Dimensions	180mm(W) x 150mm(D) x 71mm(H)	180mm(W) x 150mm(D) x 66mm(H)	180mm(W) x 150mm(D) x 71mm(H)
	Weight	TBD	1.5kg	1.8 kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Black	Black	Black
	Mounting	Desktop or wall mount Optional VESA mount kit	Desktop or wall mount Optional VESA mount kit	Desktop or wall mount Optional VESA mount kit
Environmental	Operating Temperature	0°C~45°C (32°F~113°F) *with airflow 0.9m/s	0°C~55°C (32°F~131°F) *with airflow 0.9m/s	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
	Storage Temperature	-20°C ~80°C(-4°F~176°F)	-20°C ~80°C(-4°F~176°F)	-20°C ~80°C(-4°F~176°F)
	Certification	CE/FCC/LVD	CE/LVD/FCC Class B	CE/LVD/FCC

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Comparison Table

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ASB210-962	CMI300-988	CMI300-997	CMI300-1001
Intel® Core™ Ultra 100H Series mobile Processors	AMD Ryzen V1000 on board	13th/12th Intel® core™ desktop SoC processors (45W or 15W TDP)	14th/13th/12th Gen Intel® Core I / DT processors (45W or 15W TDP)
N/A	NA	N/A	Q670E
2x DDR5-5600 SO-DIMM	2x 4GB DDR4 SO-DIMM	2x DDR5-5600/4800 SO-DIMM	2x DDR5-5600 SO-DIMM
64GB	Max. 32GB	64GB	64GB
N/A	NA	N/A	integrated Xe graphics
1x DisplayPort 1x HDMI	1x HDMI+DisplayPort	2x DisplayPort 1x HDMI	1x DisplayPort 1x HDMI
2x 2.5G LAN	2x RJ-45 Gigabit Ethernet port	2x 2.5G LAN	2x 2.5G LAN 2x 10G LAN
1x RS232/422/485	2x RS232/422/485 for COM#1~#2 2x RS232 for COM#3~#4	2x RS232/422/485 port for COM	2x RS232/422/485 port for COM
3x USB 3.2 1x USB 2.0	4x USB 3.1 ports	6x USB 3.2 ports	4x USB 3.2 ports
N/A	[Line-in / Line-out / Mic-in]	3-port Audio Jack	N/A
4-in & 4-out	NA	N/A	N/A
1x 2.5" HDD or SSD	NA	N/A	N/A
1x M.2 (M-key)	1x M.2 (M Key;2280)	2x M.2 (M-key)	2x M.2 (E-key/M-key)
N/A	1x Mini PCI-E socket	N/A	PCI-E (16x) x1 [G5]
3x M.2 sockets (B-key/ E-key and M-key)	NA	4x M.2 sockets (B-key/ E-key and M-key)	2x M.2 (E-key/M-key)
24V (+10%) DC-input	84W power adaptor	12V~24V DC-in	24V DC-in
3-pin terminal block	NA	power button with LED indicator	power button with LED indicator
N/A	NA	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
180mm (W) x 150mm (D) x 72mm (H)	200mm (W) x 200mm (D) x 62mm (H)	200mm(W) x 200mm(D) x 62mm(H)	200mm(W) x 200mm(D) x 62mm(H)
1.6kg	1.8kg	1.9 kg	1.9 kg
Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Black	Black	Black	Black
Desktop or wall mount Optional VESA mount kit	Desktop or wall mount bracket Optional VESA mount kit	Desktop or wall mount bracket Optional VESA mount kit	Desktop & wall mount bracket Optional VESA mount kit
0°C~55°C (32°F~131°F) *with airflow 0.9m/s	0°C~45°C (32°F~113°F)	0 °C ~ +45 °C (32°F~113°F)	0 °C ~ +45 °C (32°F~113°F)
-20°C ~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)	-20°C~+80°C (-4°F~176°F)	-20°C~+80°C (-4°F~176°F)
CE/LVD/FCC Class B	CE/FCC Class A	CE/LVD/FCC Class B	CE/LVD/FCC Class B
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Features

- 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 / 12-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3
- 1792-core NVIDIA Ampere GPU with 56 Tensor Cores / 2048-core NVIDIA Ampere GPU with 64 Tensor Cores
- 1x M.2 3042/3052 B-key 4G/5G function
- 1x M.2 2230 E-key WiFi/BT/GPS function
- 1x M.2 2280 M-key NVMe storage
- 1x 16-Lane MIPI Expansion Connector
- Wide-power Input Range 9V~36V DC
- Supports Ubuntu 20.04 OS

Specifications

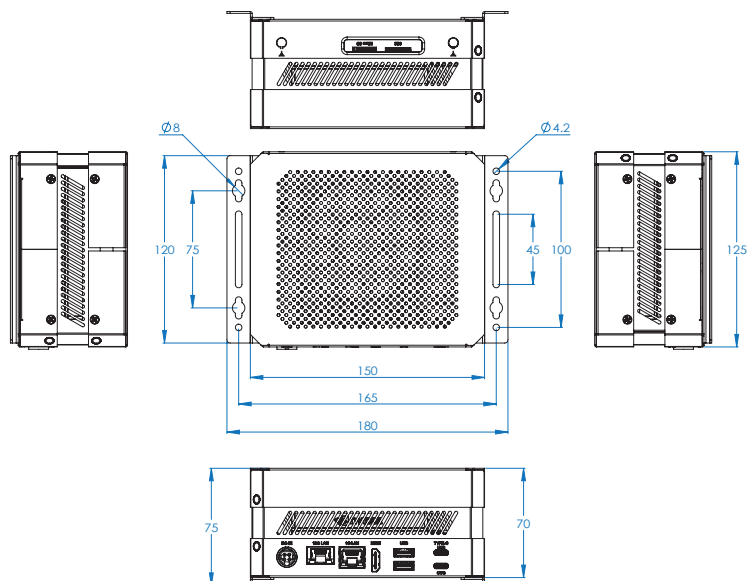
System Mainboard	NVIDIA® Jetson AGX ORIN 64GB or 32GB SOM + carrier board
CPU Type	EC3500-64: 12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3 EC3500-32: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
System Speed	2.2 GHz
Memory	EC3500-64: 64GB 256-bit LPDDR5 204.8GB/s EC3500-32: 32GB 256-bit LPDDR5 204.8GB/s
Front Panel External I/O	DC-in +9V to +36V (+/-5%) / Lockable power connector 1x 10Gb Ethernet 1x Gigabit Ethernet 1x HDMI Type-A 2x USB Type-C (1x supports OTG) 2x USB 3.2 Type-A 1x power button
Rear Panel External I/O	2x Antenna jacks 1x SIM socket 1x MicroSD slot 1x Recovery button 1x Reset button
Expansion Slots	1x M.2 3042/3052 B-key supports 4G/5G module 1x M.2 2230 E-key supports WiFi/BT module
Storage	1x M.2 2280 M-key NVMe (default 256GB) 64GB eMMC 1x Micro SD
Construction	Aluminum & steel
Chassis Color	Black & Red
Mounting Type	Wall mount
Dimensions	150mm (W) x 120mm (D) x 70mm (H)
Weight	1.35kg
Operating Temperature	0°C~50°C (32°F~122°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	Operating: 1 grms / 3~500Hz / random operation

Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE/FCC Class B

Ordering Information

EC3500-64	NVIDIA Jetson AGX ORIN 64GB, 1x HDMI, 1x GbE, 1x 10GbE, 4x USB, M.2 B/E/M Key, 9V to 36V DC input, 0°C ~ + 50°C operating temperature, 256GB SSD, with power adaptor, with RTC battery
EC3500-32	NVIDIA Jetson AGX ORIN 32GB, 1x HDMI, 1x GbE, 1x 10GbE, 4x USB, M.2 B/E/M Key, 9V to 36V DC input, 0°C ~ + 50°C operating temperature, 256GB SSD with power adaptor, with RTC battery

Dimensions and Drawing





Specifications

System Mainboard	NVIDIA® Jetson ORIN NX 16GB or 8GB/ORIN Nano 8GB or 4GB SOM + carrier board
CPU Type	EC3100-NX-16: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 EC3100-NX-8: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 EC3100-NANO-8 / EC3100-NANO-4: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3100-NX-16 / EC3100-NX-8: 2GHz EC3100-NANO-8 / EC3100-NANO-4: 1.5GHz
Memory	EC3100-NX-16: 16GB 128-bit LPDDR5, 102.4GB/s EC3100-NX-8: 8GB 128-bit LPDDR5, 102.4GB/s EC3100-NANO-8: 8GB 128-bit LPDDR5, 68 GB/s EC3100-NANO-4: 4GB 64-bit LPDDR5, 34 GB/s
Front Panel External I/O	2x Gigabit Ethernet (10/100/1000), RJ45 with LED 1x HDMI Type-A 1x 3.5mm phone jack for Line-out 1x 3.5mm phone jack for Mic 2x USB 3.2 Gen2 Type-A 2x USB 2.0 Type-A 4x SMD type LED: Power/WAN/2 software configurable 1x power button 1x Recovery button 1x Reset button 1x optional IDA-8104 module enabled 4-port PoE
Rear Panel External I/O	1x USB Type-C connector supports Recovery Mode and OTG 1x RS232 COM port DB9 connector 1x CANBus DB9 connector 4x DI + 4 x DO (pin1 with isolation output 5V @ 0.5A) 1x 3-pin power input 1x 2-pin Power on/off connector 1x SIM socket for 4G/5G 1x SIM socket for OOB 4G 3x Antenna jacks
Expansion Slots	1x M.2 3052 B-key for 4G/5G module 1x M.2 2230 E-key for WiFi/BT module 1x M.2 3042 B-key for OOB 4G module
Storage	1x M.2 2280 M-key NVMe (default 128GB)
Construction	Aluminum & steel
Chassis Color	Black & Red
Mounting Type	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	220mm x 174mm x 80mm
Weight	3kg
Operating Temperature	-20°C~70°C (-40°F~158°F)(Target)
Storage Temperature	-40°C~80°C (-40°F~176°F)

Features

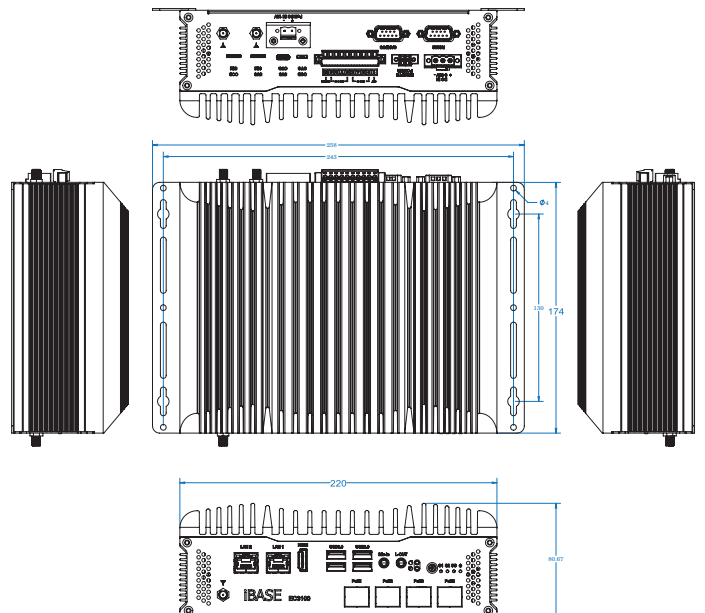
- 8-core NVIDIA Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3/6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
- 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores / 512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
- 1x M.2 3052 B-key 4G/5G function
- 1x M.2 3042 B-key OOB 4G function
- 1x M.2 2230 E-key WiFi/BT/GPS function
- 1x M.2 2280 M-key NVMe storage
- 1x Summit connector for PoE Board; 1x Summit connector for CSI
- Wide-power input range +9V to +36VDC
- Supports Ubuntu 22.04 OS

Relative Humidity	10%~90% (non-condensing)
Vibration	Operating: 1 grms / 3~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE/FCC Class B

Ordering Information

EC3100-NX-16	NVIDIA Jetson Orin NX 16GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery
EC3100-NX-8	NVIDIA Jetson Orin NX 8GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery
EC3000-NANO-8	NVIDIA Jetson Orin Nano 8GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery
EC3000-NANO-4	NVIDIA Jetson Orin Nano 4GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-key, 9V to 36V DC input, -20°C ~ +70°C operating temperature, with power adaptor, with RTC battery

Dimensions and Drawing





Features

- 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
- 1024-core NVIDIA Ampere architecture GPU with 32 Tensor cores / 512-core NVIDIA Ampere architecture GPU with 16 Tensor cores
- 1x M.2 3042/3052 B-key 4G/5G/M.2 2242 B+M-key storage function
- 1x M.2 2230 E-key WiFi/BT/Storage function
- 2x COM/DIO/CANBus, 4x USB, 1x GB LAN, 1x HDMI
- Wide power input range +12V to +24V DC
- Supports Ubuntu 22.04 perating system

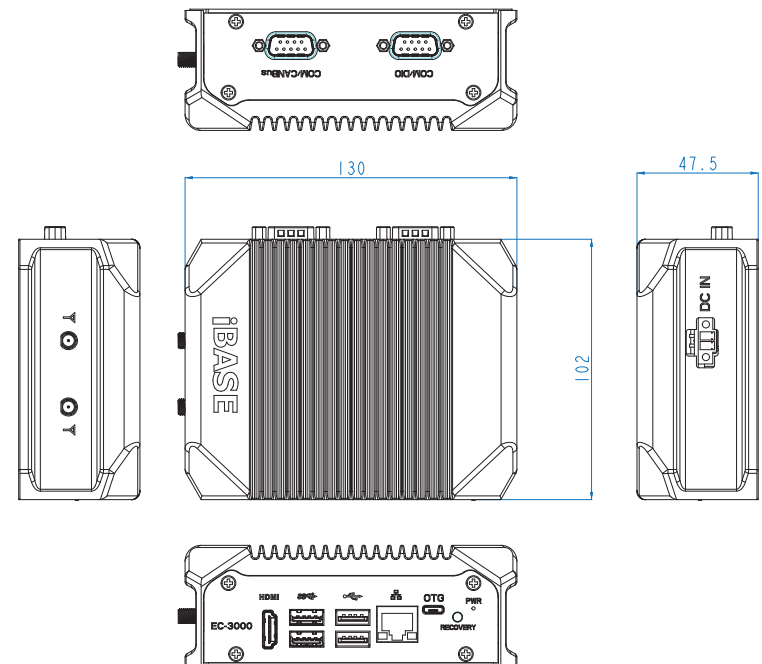
Specifications

System Mainboard	NVIDIA® Jetson ORIN NX 8GB/ORIN Nano 4GB SOM + carrier board
CPU Type	EC3000-NX-8: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 EC3000-NANO-4: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3000-NX-8: 2.0 GHz EC3000-NANO-4: 1.5 GHz
Memory	EC3000-NX-8: 8GB 128-bit LPDDR5, 102.4GB/s EC3000-NANO-4: 4GB 64-bit LPDDR5, 34 GB/s
Front Panel External I/O	1x Gigabit Ethernet (10/100/1000), RJ45 with LED 1x HDMI Type-A 2x USB 3.2 Gen2 Type-A 2x USB 2.0 Type-A 1x Micro USB connector supports Recovery Mode and OTG 1x Power LED 1x Recovery button 2x Antenna
Rear Panel External I/O	1x DB9 connector for RS-232/485 and CanBus 1x DB15 connector for RS-232/422/485 and 8x DIO 2x Antenna 1x 12V-24V DC input with 2-pin terminal block
Expansion Slots	1x M.2 3042/3052 B-key (4G/5G/M.2 2242 B+M Key storage)
Storage	1x M.2 2242 B+M Key NVMe (default 128GB)
Construction	Aluminum & steel
Chassis Color	Black & Red
Mounting Type	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	130mm (W) x 102mm (D) x 47.5mm (H) 5.11"(W) x 4"(D) x 1.87"(H)
Weight	0.8kg
Operating Temperature	-15°C~55°C (-5°F~131°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Relative Humidity	5%~95% (non-condensing)
Vibration	Operating: 1 grms / 3~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE/FCC Class B

Ordering Information

EC3000-NX-8	NVIDIA Jetson Orin NX 8GB, 1 x HDMI, 1 x GbE, 5x USB, M.2 B+M/E Key, 12V to 24V DC input, -15°C ~ + 55°C operating temperature, with power adaptor, with RTC battery
EC3000-NANO-4	NVIDIA Jetson Orin Nano 4GB, 1 x HDMI, 1 x GbE, 5x USB, M.2 B+M/E Key, 12V to 24V DC input, -15°C ~ + 55°C operating temperature, with power adaptor, with RTC battery

Dimensions and Drawing



AI Accelerator Compatible Computer

14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/Celeron® &
NVIDIA PCI-E Graphics GPU cards



MAF801-TF3



MAF801-TF1

Features

- Supports 14th/13th/12th Gen Intel® Core™ i7/i5/i3 Processors, TDP 35/65W
- 2x DDR5 SO-DIMM, Dual Channel
- 3x GbE ports, 6x USB 3.2
- 1x M.2 2280 M-key and 2x SATA 3.0
- Expansion slots supports PCI-E high-performance graphics card
- Operating temperature range from -10C to 50C

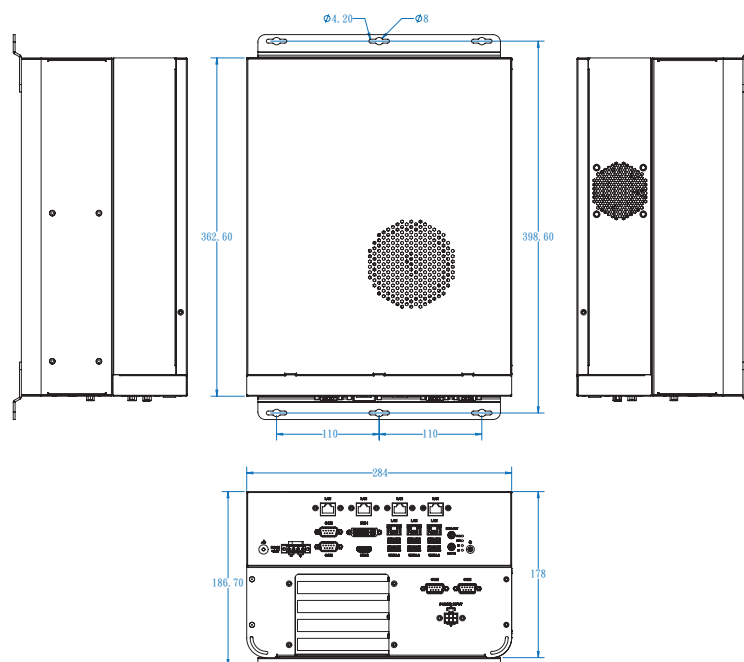
Specifications

System Mainboard	MBA801 with Intel® R680E PCH
CPU Type	14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/ Celeron® desktop processors (35W/65W TDP)
System Speed	Up to 6GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB
Front Panel External I/O	1x HDMI, 1x DVI-I 6x USB 3.2 3x RJ45 for Gigabit LAN 2x RS-232/422/485 COM ports 2x RS-232 COM ports 1x Audio connector for Line out Power / HDD LED, power button 1x DC-In power connector for system power
Rear Panel External I/O	N/A
Expansion Slots	2x PCI-Express (x16) 2x M.2 2280 B-key + M-key
Storage	2x 2.5" HDD/SSD (external-access) 1x M.2 2080 M-key (SATA & PCI-E)
Construction	Aluminum & Steel
Chassis Color	Silver & Navy Blue
Mounting Type	N/A
Dimensions	MAF801-TF1: 284mm (W) x 362mm (D) x 80mm (H) MAF801-TF3: 284mm (W) x 362mm (D) x 178mm (H)
Weight	MAF801-TF1: TBD MAF801-TF3: TBD
Operating Temperature	-10°C to 50°C (14°F to 122°F)
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / FCC Class B (TBD)

Ordering Information

MAF801-TF1	Box PC Controller w/o power adaptor
MAF801-TF3	Box PC Controller, 1x PCI-E ext. card, w/o power adaptor
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type, Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing





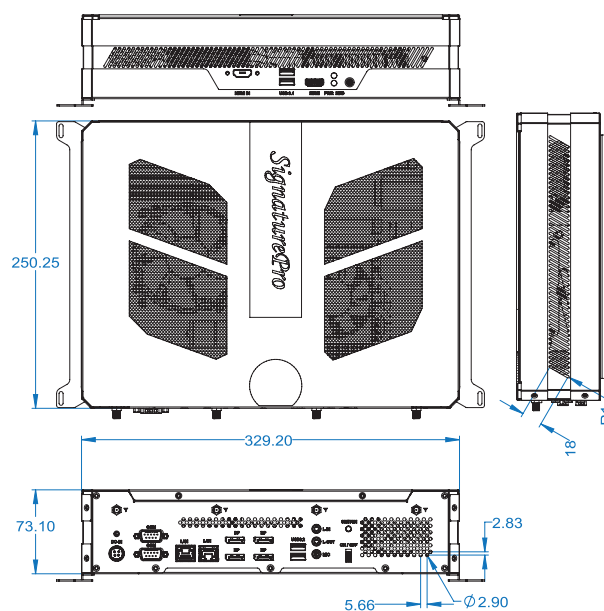
Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 13th/12th Gen Intel® Core™ i7/i5/i3 / Pentium® / Celeron® QC/ DC processors
- 4x DDR4-3200 U-DIMM, Max. 128GB, ECC compatible
- NVIDIA Ampere Architecture MXM GPU cards (Type A/B, up to 115W)
- 1x HDMI 1.4 for console, 4x DisplayPort
- 1x M.2 E-key (2230) for WiFi, Bluetooth or capture card options
- 1x M.2 B-key (3052) for 5G options
- 2x M.2 NVMe SSD drive bay
- Supports OOB function via I210 LAN port (option)
- Supports TPM 2.0
- Compact and rugged design

Ordering Information

SI-624-AI	Industrial AI computer with MBD624 with 13th/12th Gen Intel® Core™ processors, 1x NVIDIA MXM GPU card, M.2 128GB, 4x DDR4-3200 U-DIMM, Max. 128GB and 330W power adapter
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Dimensions and Drawing



Specifications

System Mainboard	MBD624
CPU Type	13th/12th Gen Intel® Core™ processors
System Speed	Up to Max. 5.0/3.8GHz
Memory	4x DDR4-3200 U-DIMM, Max. 128GB, ECC compatible
Front Panel External I/O	2x Gigabit LAN 1x HDMI 1.4 for console 1x HDMI-in for capture card (optional) 2x USB 3.2 1x Power / HDD LED 1x power button
Rear Panel External I/O	4x DisplayPort 2x USB 3.2 2x RJ45 for Gigabit LAN 2x RS-232 Serial port 1x Audio connector for Line-in/out/Mic 1x Power jack connector
Expansion Slots	1x M.2 (M-key, type:2280, supports NVMe with PCI-E(x4) Gen.4 signal only) 1x M.2 (E-key, type: 2230, 2x PCI-E(x1), USB 2.0; supports CNVi) 1x M.2 (B-key, type:3052, supports 5G/4G/LTE) 1x UIM/SIM card slot
Storage	1x M.2 M-key (2280)
Construction	SGCC
Chassis Color	Black and white
Mounting Type	Standard system bracket
Dimensions	329.2mm(W) x 210mm(D) x 73.1mm(H) 129.6"(W) x 82.6"(D) x 28.7"(H)
Weight	3.8kg
Operating Temperature	0°C ~ 45°C (32°F ~ 113°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	5%~90% @45°C (non-condensing)
Vibration	SSD: 5 grms / 5~500Hz / random operation
Shock	0°C ~ 45°C (32°F ~ 113°F) -20°C ~ 80°C (-4°F ~ 176°F) 5%~90% @45°C (non-condensing) SSD: 5 grms / 5~500Hz / random operation
Certification	CE/FCC class-B, UL, LVD & CCC



Preliminary



Features

- AMD EPYC™ 8004 Series
- 6x DDR5 4800 up to 768GB with ECC support
- 5x PCI-E x16 slots
- 3x USB 3.2 Gen1: 2x USB 3.2 Gen1 with PDPC support; 1x USB 3.2 Gen1
- 4x SATA 6Gb/s
- 1x PCI-E Gen5 22110/2280, 2x MCIO x4
- 2x Intel® X710-AT2 (Dual 10GbE port)
- 1x VGA (via IPMI option)

Specifications

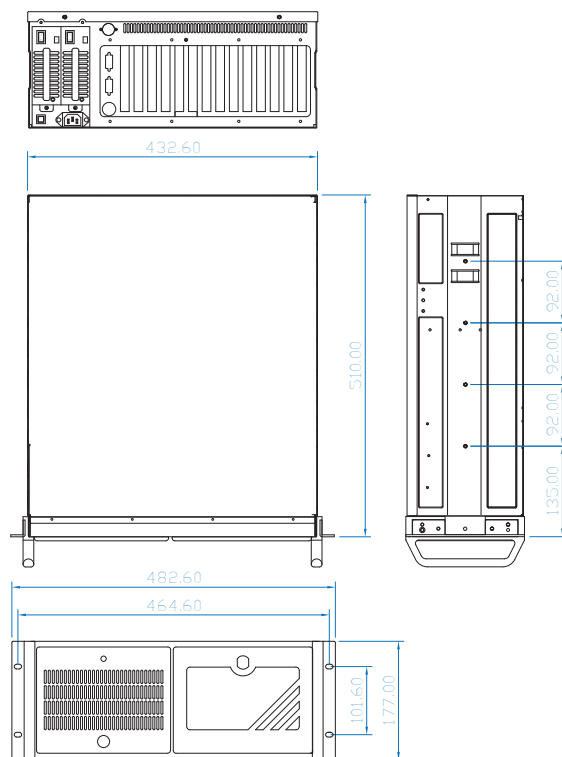
System Mainboard	MBB1002 with AMD EPYC™ 8004 Series CPU
CPU Type	AMD EPYC™ 8004 Series CPU (225W TDP)
System Speed	Up to 3.1GHz
Memory	6x DDR5 4800, RDIMM 6 slots, Max. up to 576GB with ECC 3600/4000/4400/4800 MHz, 16 GB, 32 GB, 64 GB, 96GB
Front Panel External I/O	3x LED (Power, HDD, Status)
Rear Panel External I/O	3x USB 3.2 Gen1: 2x USB 3.2 Gen1 with PDPC support ; 1x USB 3.2 Gen1 4x SATA 6Gb/s 1x PCI-E Gen5 22110/2280, 2x MCIO x4
Expansion Slots	5x PCI-E x16 slots PCI-E x16 SLOT2 (Gen4 x16 link, from CPU) PCI-E x16 SLOT3 (Gen4 x16 link, from CPU) PCI-E x16 SLOT5 (Gen5 x16 link, from CPU), CXL support PCI-E x16 SLOT6 (Gen5 x16 link, from CPU), CXL support PCI-E x16 SLOT7 (Gen5 x16 link, from CPU), CXL support
Storage	4x SATA(6Gb/s) NVMe: 1x 2280 (PCI-E Gen5) NVMe: 2x MCIO x4
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	N/A
Dimensions	483 mm (W) x 510 mm (D) x 177 mm (H) 19" (W) x 20.1" (D) x 7" (H)
Weight	TBD
Operating Temperature	-10°C to 60°C (14°F~140°F) *with airflow -10°C to 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	0%~90% (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	TBD

Ordering Information

ES1002	Chassis with eATX motherboard w/o CPU, memory, storage, supports AMD EPYC™ 8004 Series processors
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Note: The order information will subject to change without notice.

Dimensions and Drawing



Note: The specification will subject to change without notice.



Preliminary



Features

- AMD Ryzen™ Embedded 7000 Processors with B650 chipset
- Dual Channel DDR5 5200, UDIMM 4 slots, Max. 128GB, ECC support
- Triple display: DP/HDMI/DVI-D and Dual GbE LAN
- 1x PCI-E x16 (Gen5) / 1x PCI-E x4 (Gen5) 1x PCI-E x4 (Gen4) / 1x PCI-E x1 (Gen3) / 1x PCI
- 2x M.2 2280 M-key (PCI-E x2 Gen4, supports NVMe) support RAID 0, 1
- TPM 2.0

Specifications

System Mainboard	AMD Ryzen™ Embedded 7000 series ATX Motherboard
CPU Type	AMD Ryzen™ Embedded 7000 Processors
System Speed	Max. 4.7GHz
Memory	Dual Channel DDR5 5200, UDIMM 4 slots, Max. 128GB, ECC support
Front Panel External I/O	2x USB 2.0 via pin header 2x USB 2.0 Type-A vertical connector 4x USB 3.2 Gen 2 2x USB 3.2 Gen 1 with PDPC support
Rear Panel External I/O	1x Dual DB9 stack connector for COM #1 (RS232/422/485) (jumperless selection) COM #2 (RS232) 4x COM via pin header (RS232)
Expansion Slots	1x PCI-E x16 (Gen5) / 1x PCI-E x4 (Gen5) 1x PCI-E x4 (Gen4) / 1x PCI-E x1 (Gen3) 1x PCI
Storage	4 x SATA 6Gb/s 2x M.2 2280 M-key (PCI-E x2 Gen4, supports NVMe)
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	NA
Dimensions	427mm(W) x 407.6mm(D) x 177mm(H) 16.8"(W) x 16"(D) x 6.96"(H)
Weight	TBD
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	20°C~80°C (-4°F~176°F)
Relative Humidity	95% (non-condensing @60°C)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

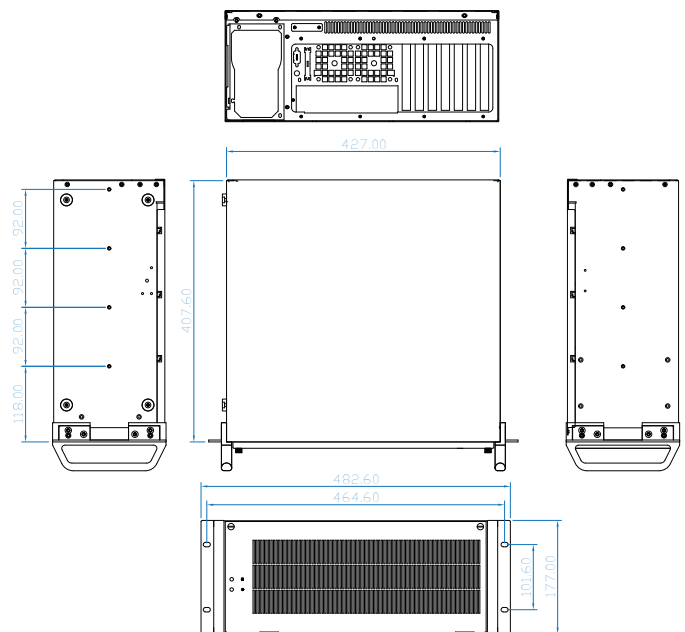
Note: The specification will subject to change without notice.

Ordering Information

ES1001	Chassis with ATX motherboard w/o CPU, memory, storage, supports AMD Ryzen™ Embedded 7000 Series processors
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Note: The order information will subject to change without notice.

Dimensions and Drawing





Features

- Intel® Atom® x7433RE/x7211RE Processors
- Isolated GPIO 4-in/4-out. NPN & PNP (optional)
- Over/Under/Reverse voltage protection
- 3x 2.5G Ethernet ports, HDMI & 2x DisplayPort (DP++)
- 4x COM (RS232/422/485), 2x USB 3.2 ports
- 9V~36V DC wide-range power input
- **Wide-range operating temperature from -40°C to 70°C**
- Supports DIN-rail and wall mounting & TPM 2.0

Specifications

System Mainboard	MBE105
CPU Type	Intel® Atom® x7433RE (4-Core, 1.5GHz/2.7GHz, 2MB cache, 9W TDP) Intel® Atom® x7211RE (2-Core, 1.0GHz/2.9GHz, 2MB cache, 6W TDP)
System Speed	Up to 2.9 GHz
Memory	1x DDR5-4800 SO-DIMM, Max. 16GB
Front Panel External I/O	2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out/ Mic 2x SIM card slots with cover 1x Antenna hole for WLAN module
Rear Panel External I/O	1x DisplayPort + 1x HDMI 2x USB 3.2 ports, 1x USB 2.0 port 3x RJ45 2.5G Ethernet ports 3x LED indicators (GPIO, WLAN, WWAN) 1x power button with Green LED 1x 3-pin DC-in terminal block for 9V~36V 2x Antenna hole for WLAN module 2x RS232/422/485 ports for COM#3/COM#4 1x 4-in & 4-out GPIO with isolation 1x 3-pin terminal block for 9V~36V power input
Expansion Slots	1x Mini PCI-E full-size socket for CAN FD module (PCI-E + USB 2.0 + SATA) 1x M.2 2230 E-key socket for WLAN & BT (PCI-E + USB 2.0 + SMBus) 1x M.2 3042/52 B-key socket for WWAN (4G/5G) (PCI-E + USB3.2 Gen.1 + SATA)
Storage	1x M.2 B-key for SATA SSD 1x Mini PCI-E socket mSATA SSD (optional)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	160mm(W) x 110mm(D) x 44mm(H) 6.3"(W) x 4.33"(D) x 1.73"(H)
Weight	1.2kg
Operating Temperature	-40°C~70°C (-40°F~158°F)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Relative Humidity	5~90% @ 60°C, (non-condensing)

Vibration	Operating: 1.0 grms / 5~500Hz
Shock	Operating: 30G/11 ms Duration Non-operating: 40G/11 ms Duration
Certification	CE (EN 62368 / EN55032 / EN55035) & LVD FCC Class A

Ordering Information

AGS105-7433	Fanless DIN-rail System supporting TPM2.0 w/ Intel® Atom™ Processor x7433RE, 3x 2.5G Ethernet, 4x COM, with industrial-grade 8GB DDR5 memory + 128GB mSATA SSD, w/o power adaptor, w/ wall-mount & DIN-rail mounting brackets (RoHS2)
AGS105-7211	Fanless DIN-rail System supporting TPM2.0 w/ Intel® Atom™ Processor x7211RE, 3x 2.5G Ethernet, 4x COM, with industrial-grade 8GB DDR5 memory + 128GB mSATA SSD, w/o power adaptor, w/ wall-mount & DIN-rail mounting brackets (RoHS2)



Rear I/O

Features

- Fanless system with iBASE MBE104T proprietary board
- Intel® Atom® x7433RE/x7211RE Processors
- HDMI & DisplayPort, USB Type-C (For DP & USB 3.2), GPIO 4-in/4-out
- 1x M.2 B-key 3052, supports 5G/4G/LTE module
- 1x M.2 E-key 2230, supports WiFi/BT, 1x full-size Mini PCI-E for mSATA
- 2x 2.5G LAN port, 3x USB 3.2, 1x USB 2.0, 4x COM (RS232/422/485)
- 9V~36V DC wide-range power input
- Supports over/under/reverse voltage protection
- Wide-range operating temperature from -40°C to 70°C
- Supports DIN-rail mount, wall mount & TPM 2.0

Specifications

System Mainboard	MBE104T
CPU Type	Intel® Atom® x7433RE (4-Core, 1.5GHz/2.7GHz, 2MB cache, 9W TDP) Intel® Atom® x7211RE (2-Core, 1.0GHz/2.9GHz, 2MB cache, 6W TDP)
System Speed	Up to 2.9GHz
Memory	1x DDR5-4800 SO-DIMM, Max. 16GB
Rear Panel External I/O	1x DisplayPort + 1x HDMI 3x USB 3.2 ports, 1x USB 3.2(Type-C), 1x USB 2.0 port 2x RJ45 2.5G Ethernet port 3x LED indicators (HDD, WLAN, WWAN) 1x power button with Green LED 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole 2x RS232/422/485 ports for COM#3/COM#4 1x 4-in & 4-out GPIO with isolation
Left Panel External I/O	2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole 1x Line-out/ Mic-in
Right Panel External I/O	Dual SIM card slots with cover 1x Antenna hole
Expansion Slots	1x Full-size Mini PCI-E socket (SATA) 1x 2230 M.2 E-key socket (USB 2.0 + PCI-E) 1x 3052 M.2 B-key socket (USB 3.2 + PCI-E + SATA)
Storage	1x Mini PCI-E socket mSATA SSD (Optional) 1x M.2 B-key for SATA SSD
Construction	Aluminum + SGCC
Chassis Color	Silver & Gray
Mounting	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	160mm(W) x 110mm(D) x 44mm(H) 6.3"(W) x 4.33"(D) x 1.73"(H)
Weight	1.0kg
Operating Temperature	-40°C~70°C (-40°F~158°F)
Storage Temperature	-40°C~80°C (-40°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating: 2 Grms / 5~500Hz Non-operating: 1Grms / 5~500Hz
Shock	Operating: 30G/11 ms Duration; Non-operating: 40G/11 ms Duration
Certification	CE/ FCC Class B/ LVD
Operating Systems	Win10 and Linux Ubuntu

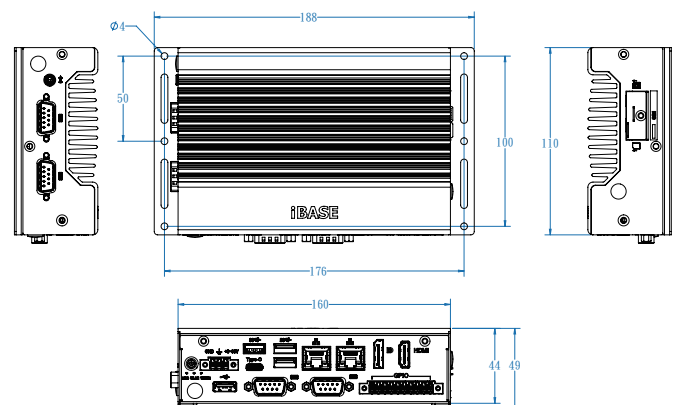
Ordering Information

AGS104T-7433	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom™ Processor x7433RE, 2x 2.5G Ethernet, 4x COM, with industrial-grade 16GB DDR5 memory + 128GB mSATA SSD, w/o power adaptor, w/ wall-mount & din-rail brackets (RoHS2)
AGS104T-7433M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom™ Processor x7433RE, 2x 2.5G Ethernet, 4x COM, w/o memory, storage, power adaptor, w/ wall-mount & din-rail brackets (RoHS2)
AGS104T-7211-8G	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom™ Processor x7211RE, 2x 2.5G Ethernet, 4x COM, with industrial-grade 8GB DDR5 memory + 128GB mSATA SSD, w/o power adaptor, w/ wall-mount & din-rail brackets (RoHS2)
AGS104T-7211M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom™ Processor x7211RE, 2x 2.5G Ethernet, 4x COM, w/o memory, storage, power adaptor, w/ wall-mount & din-rail brackets (RoHS2)

Recommended Processor List

Processor Number	Intel® Atom™ Processors – Intel® ASL (Alder-Lake-N) SoC Platform	
	x7211RE	x7433RE
Base Freq (GHz)	1	1.5
Intel® Turbo Boost Technology 2.0 (GHz)	3.2	3.4
Last Level Cache	6M	6M
Cores/Threads	2/2	4/4
Memory Speed (DDR4)	3200	3200
TDP	6W	9W

Dimensions and Drawing





Rear I/O



Specifications

System Mainboard	IB803T
CPU Type	Intel® Atom® x6414RE (1.5GHz, 1.5MB cache, 9W TDP) Intel® Atom® x6212RE (1.2GHz, 1.5MB cache, 6W TDP)
System Speed	Up to 1.5GHz
Memory	1x DDR4 3200 SO-DIMM. Max. 16GB
Rear Panel External I/O	1x DVI-I + 1x HDMI 2x USB 3.1 ports, 2x USB 2.0 port 3x RJ45 2.5G Ethernet port 4x LED indicators (GPIO, WLAN, WWAN) 1x power button with Green LED 1x 3-pin DC-in terminal block for 9V-36V 2x Antenna hole for WLAN module 2x RS232/422/485 ports for COM#3/COM#4 1x 4-in & 4-out GPIO
Left Panel External I/O	2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out/ Mic-in
Right Panel External I/O	2x SIM card slot 1x Antenna hole for WLAN module
Expansion Slots	1x Full-size Mini PCI-E socket (USB 2.0) 1x Full-size Mini PCI-E socket (USB 2.0 + SATA) 1x M.2 B-key socket (USB 3.0 + PCI-E)
Storage	1x Mini PCI-E slot (mSATA SSD), 1x 2.5" SSD (AGS103TS)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	AGS103T : 190mm(W) x 110mm(D) x 52mm (H) 7.48"(W) x 4.33"(D) x 2.05"(H) AGS103TS : 190mm(W) x 110mm(D) x 73mm (H) 7.48"(W) x 4.33"(D) x 2.87"(H)
Weight	1.2kg
Operating Temperature	-20°C~70°C (-4°F~158°F)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Relative Humidity	5~90% @ 60°C, (non-condensing)
Vibration	Operating: 1 Grms/ 3~500 Hz / random operation (with IEC 60068-2-64)
Shock	Operating: 30G/11 ms Duration Non-operating: 40G/11 ms Duration
Certification	CE / LVD / FCC Class A
Operating Systems	Win10 and Linux Ubuntu

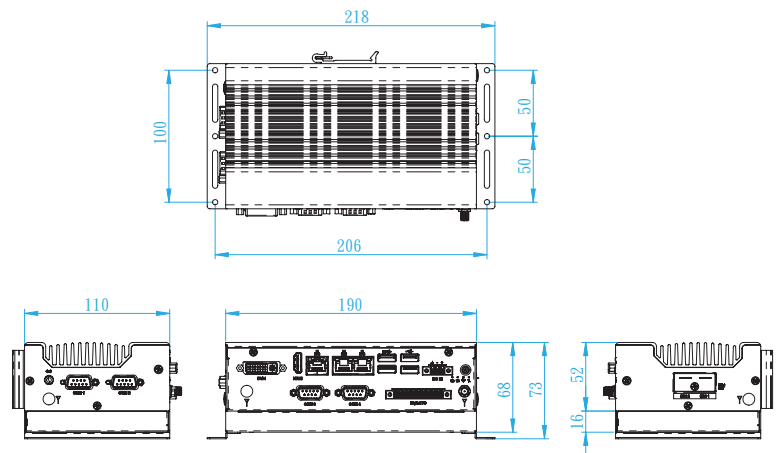
Features

- Intel® Atom® x6414RE/x6212RE Processors (formerly Elkhart Lake)
- GPIO 4-in/4-out & 1x DVI-I & 1x HDMI
- Over/Under/Reverse voltage protection
- **Wide-range operating temperature from -20°C to 70°C**
- 9V~36V DC wide-range power input
- 1x M.2 B-key 3052 supports 5G module
- Optional 1x 2.5" SSD (AGS103TS)
- 3x 2.5G Ethernet ports
- 2x full-size Mini PCI-E
- 4x COM (RS232/422/485), 2x USB 3.1 & 2x USB 2.0
- Supports DIN-rail mount, wall mount & TPM 2.0

Ordering Information

AGS103T-6414RM	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x6414RE, 3x 2.5G Ethernet port, 4x COM, w/o memory, storage, power adaptor
AGS103TS-6414RM	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x6414RE, 3x 2.5G Ethernet port, 4x COM, w/o memory, storage, power adaptor, w/ 2.5" storage slot
AGS103T-6212RM	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x6212RE, 3x 2.5G Ethernet port, 4x COM, w/o memory, storage, power adaptor
AGS103TS-6212RM	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x6212RE, 3x 2.5G Ethernet port, 4x COM, w/o memory, storage, power adaptor, w/ 2.5" storage slot

Dimensions and Drawing





Rear I/O



Features

- Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200 / Celeron® N3350 Series Processors
- GPIO 4-in & 4-out with isolation function
- Over/Under/Reverse voltage protection
- **Wide-range operating temperature from -40°C to 70°C**
- 9V~36V DC wide-range power input
- Supports DIN-rail mount & wall mount
- Supports TPM2.0 (AGS102T Only)
- AGS102T: 4x RS232/422/485 serial ports
AGS102: 2x RS232/422/485 and 2x RS232 serial ports
- Rugged and fanless design

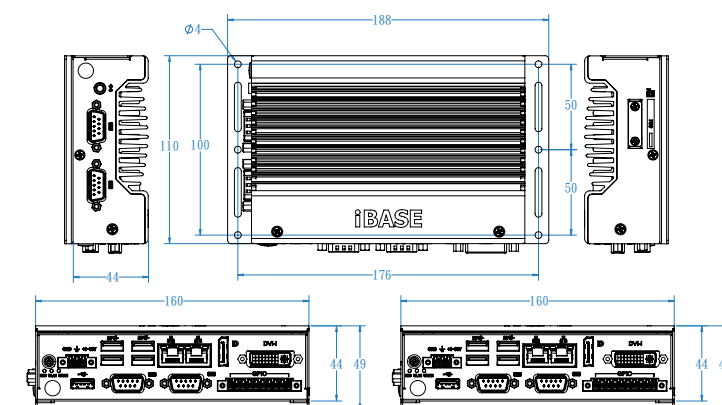
Specifications

System Mainboard	IB801/ IB802T (F-1 Stepping)
CPU Type	Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200/ Celeron® N3350 Series Processors
System Speed	Up to 2.5GHz
Memory	1x 4GB DDR3L-1866 SO-DIMM, Max. 8GB
Rear Panel External I/O	1x DVI-I + 1x DisplayPort connector 4x USB 3.0 ports, 1x USB 2.0 port 2x RJ45 Gigabit Ethernet port 3x LED indicators (HDD, WLAN, WWAN) 1x power button with Green LED (Silver power button with Green LED for AGS102, Black power button with Blue LED for AGS102T) 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole for WLAN module AGS102T: 2x RS232/422/485 ports for COM#3/COM#4 AGS102: 2x RS232 ports for COM#3/COM#4 1x 4-in & 4-out GPIO with isolation
Left Panel External I/O	2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out (AGS102 for 2W mono speaker, AGS102T for stereo output)
Right Panel External I/O	1x SIM card slot
Expansion Slots	1x Full-size Mini PCI-E socket (USB 2.0 + PCI-E + SATA) 1x 2230 M.2 E-key socket for WLAN & BT (USB 2.0 + PCI-E) 1x 3042 M.2 B-key socket for WWAN & SSD (USB 2.0 + SATA)
Storage	1x mSATA socket (Mini-PCI-E) 1x 2242 M.2 B-key socket for SSD
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	160mm (W) x 110mm (D) x 44mm (H) 6.3" (W) x 4.33" (D) x 1.73" (H)
Weight	1kg
Operating Temperature	For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating: 2.0 grms / 5~500Hz / random operation (with IEC 60068-2-64) Non-Operating: 3.0 grms / 5~500Hz / random operation (with IEC 60068-2-64)
Shock	Operating: 30G/11 ms Duration (with MIL-STD-810G) Non-operating: 40G/11 ms Duration (with MIL-STD-810G)
Certification	CE / LVD / FCC Class A

Ordering Information

AGS102-I50/ AGS102T-I50	Fanless DIN-rail System supports TPM2.0 (AGS102T Series only) w/ Intel® Atom® Processor x7-E3950, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-I40/ AGS102T-I40	Fanless DIN-rail System supports TPM2.0 (AGS102T Series only) w/ Intel® Atom® Processor x5-E3940, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-I30/ AGS102T-I30	Fanless DIN-rail System supports TPM2.0 (AGS102T Series only) w/ Intel® Atom® Processor x5-E3930, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-420/ AGS102T-420 (MOQ)	Fanless DIN-rail System supports TPM2.0 (AGS102T Series only) w/ Intel® Pentium® Processor N4200, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS102-335/ AGS102T-335	Fanless DIN-rail System supports TPM2.0 (AGS102T Series only) w/ Intel® Celeron® Processor N3350, 4x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
60W power adaptor (optional)	60W (12V@5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	WiFi/BT antenna kit, 4G/LTE antenna kit, GPS antenna kit

Dimensions and Drawing





Rear I/O

Features

- Intel® Atom® x6212RE/ x6414RE Processors
- 1x DVI-I & 1x HDMI
- Over/Under/Reverse voltage protection
- **Wide-range operating temperature from -20°C to 70°C**
- 9V~36V DC wide-range power input
- 1x M.2 B-key 3052 supports 5G module
- 3x 2.5G Ethernet ports
- 2x RS232/422/485, 2x full-size Mini PCI-E, 2x USB3.1, 2x USB 2.0, 1x 2.5" SSD
- Supports DIN-rail mount, wall mount & TPM 2.0

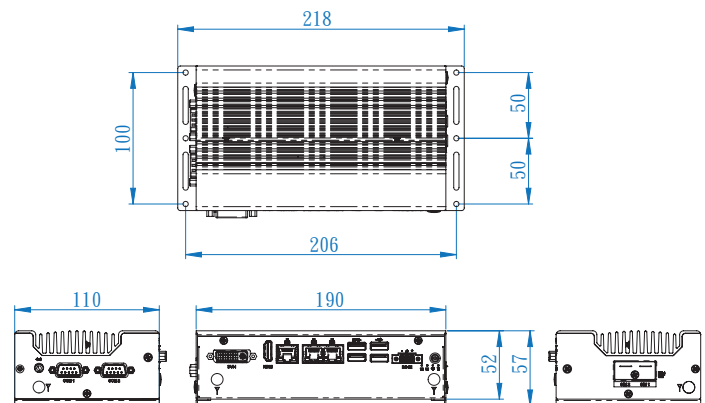
Specifications

System Mainboard	IB803T
CPU Type	Intel® Atom® x6414RE (1.5GHz, 1.5MB cache, 9W TDP) Intel® Atom® x6212RE (1.2GHz, 1.5MB cache, 6W TDP)
System Speed	Up to 1.5GHz
Memory	1x DDR4 SO-DIMM, Max. 16GB
Rear Panel External I/O	1xDVI-I & 1xHDMI 2x USB 3.1 ports, 2x USB 2.0 port 3x RJ45 2.5G Ethernet port 4x LED indicators (HDD, WLAN, WWAN) 1x power button with Green LED 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole for WLAN module
Left Panel External I/O	2x RS232/422/485 ports for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out
Right Panel External I/O	2x SIM card slot 1x Antenna hole for WLAN module
Expansion Slots	1x Full-size Mini PCI-E socket (USB 2.0) 1x Full-size Mini PCI-E socket (USB 2.0 + SATA) 1x M.2 B-key socket (USB 3.0 + PCI-E)
Storage	1x mSATA socket (Mini-PCI-E) 1x 2.5" SSD
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	218mm(W) x 110mm(D) x 52mm (H) w/ wall-mount kit 8.58"(W) x 4.33mm(D) x 2.05mm (H)
Weight	1.05kg
Operating Temperature	-20°C~-70°C (-4°F~158°F)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Relative Humidity	5~90% @ 60°C, (non-condensing)
Vibration	Operating: 1 Grms/ 3~500 Hz / random operation (with IEC 60068-2-64)
Shock	Operating: 30G/11 ms Duration Non-operating: 40G/11 ms Duration
Certification	CE / LVD / FCC Class B

Ordering Information

AGS101T-6414RM	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x6414RE, 3x 2.5G Ethernet port, 2x COM, w/o memory, storage, power adaptor
AGS101T-6212RM	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x6212RE, 3x 2.5G Ethernet port, 2x COM, w/o memory, storage, power adaptor

Dimensions and Drawing





Rear I/O



Specifications

System Mainboard	IB801 / IB802T (F-1 Stepping)
CPU Type	Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200/ Celeron® N3350 Series Processors
System Speed	Up to 2.5GHz
Memory	1x 4GB DDR3L-1866 SO-DIMM, Max. 8GB
Rear Panel External I/O	1x DVI-I + 1x DisplayPort 4x USB 3.0 ports 2x RJ45 Gigabit Ethernet port 3x LED indicators (HDD, WLAN, WWAN) 1x power button with green LED (Silver power button with Green LED for AGS100, Black power button with Blue LED for AGS100T) 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole for WLAN module
Left Panel External I/O	2x RS232/422/485 port for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out (AGS100 for 2W mono speaker, AGS100T for stereo output)
Right Panel External I/O	1x SIM card slot
Expansion Slots	1x Full-size Mini PCI-E socket (USB 2.0 + PCI-E + SATA) 1x 2230 M.2 E-key socket for WLAN & BT (USB 2.0 + PCI-E) 1x 3042 M.2 B-key socket for WWAN & SSD (USB 2.0 + SATA)
Storage	1x mSATA socket (Mini-PCI-E) 1x 2242 M.2 B-key socket for SSD
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mounting (wall mount kit included)
Dimensions	160mm (W) x 110mm (D) x 44mm (H) 6.3" (W) x 4.33" (D) x 1.73" (H)
Weight	1kg
Operating Temperature	For E-series CPU: -40°C~70°C (-40°F~158°F) For N-series CPU: -20°C~60°C (-4°F~140°F)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating: 2.0 grms / 5~500Hz / random operation (with IEC 60068-2-64) Non-Operating: 3.0 grms / 5~500Hz / random operation (with IEC 60068-2-64)
Shock	Operating: 30G/11 ms Duration (with MIL-STD-810G) Non-operating: 40G/11 ms Duration (with MIL-STD-810G)
Certification	CE / LVD / FCC Class B / CCC (AGS100 Only) / UL

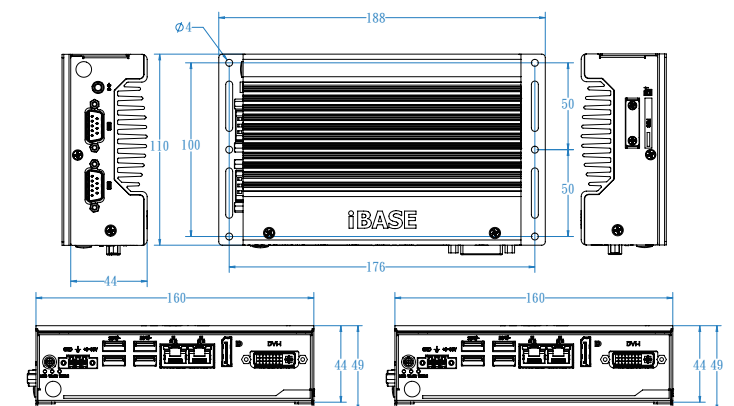
Features

- Intel® Atom® x7-E3950/x5-E3940/x5-E3930 & Pentium® N4200 / Celeron® N3350 Series Processors
- Over/Under/Reverse voltage protection
- Wide-range operating temperature from -40°C to 70°C
- 9V~36V DC wide-range power input
- Supports DIN-rail mount & wall mount
- Supports TPM2.0 (AGS100T Only)
- 2x RS232/422/485 serial ports
- Rugged and fanless design

Ordering Information

AGS100-I50/ AGS100T-I50	Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Atom® Processor x7-E3950, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS100-I40/ AGS100T-I40	Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Atom® Processor x5-E3940, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS100-I30/ AGS100T-I30	Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Atom® Processor x5-E3930, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS100-420/ AGS100T-420 (MOQ)	Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Pentium® Processor N4200, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC industrial-grade mSATA SSD, w/o power adaptor
AGS100-335/ AGS100T-335	Fanless DIN-rail System supports TPM2.0 (AGS100T Series only) w/ Intel® Celeron® Processor N3350, 2x COM, 1x 4GB DDR3L industrial-grade memory, 1x 64GB MLC (industrial-grade) mSATA SSD, w/o power adaptor
60W power adaptor (optional)	60W (12V@5A) power adaptor (bare wire type) Compatible with IEC62368-1/EN62368-1
Optional Accessories	WiFi/BT antenna kit, 4G/LTE antenna kit, GPS antenna kit

Dimensions and Drawing





Features

- +12V~+24V DC wide-range power input
- Fanless system with for IBASE ARS-200 proprietary board
- 14th/13th Gen Intel® Core™ U-series Processor
- Front Panel flexible I/O via M12 connector
- 2x COM, 2x USB, 2x 2.5G LAN, 2x HDMI, 2x DisplayPort
- 1x M.2 B-key 3052, supports 5G/4G/LTE module
- 1x M.2 E-key 2230, supports WiFi/BT
- Over/Under/Reverse voltage protection
- Supports wall mounting & TPM 2.0
- Wide-range operating temperature from -20°C to 70°C
- Waterproof, fanless design with IP65 rating

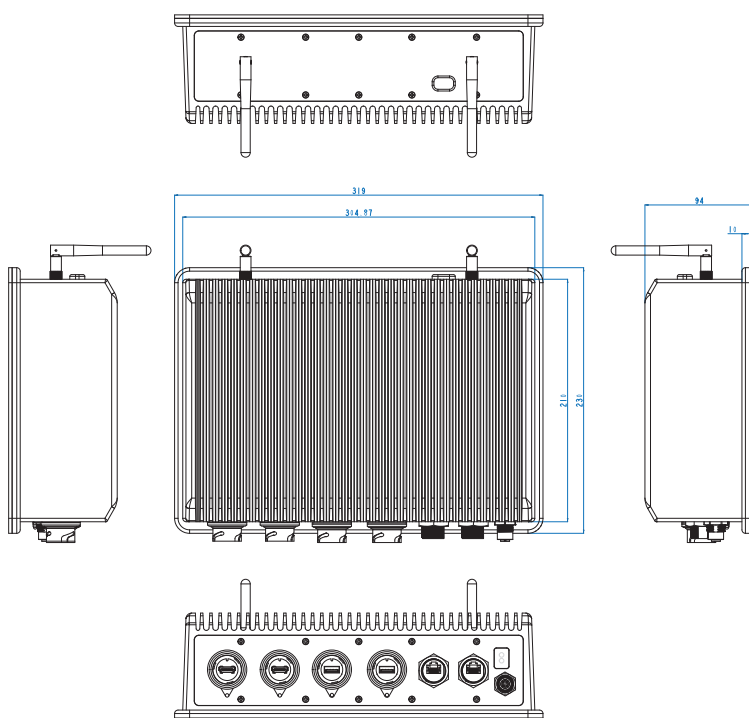
Specifications

System Mainboard	AR-200-MB
CPU Type	14th/13th Gen Intel® Core™ U-series Processor
System Speed	Up to 4.6GHz
Memory	1x DDR5-5600 SO-DIMM, Max. 32GB
Front Panel External I/O	4x Antenna hole for WLAN/4G/5G module
Rear Panel External I/O	2x HDMI (C3 connector) 2x 2.5 Gigabit LAN (M12 connector) 2x RS232 (M12 connector) 2x USB 3.2 (M12 connector) 1x DC-Power (M12 connector) 1x CAN bus 1x DIO 8-in/8-out
Expansion Slots	1x M.2 2042 E-key 1x M.2 3052 B-key 1x NANO SIM slot
Storage	1x M.2 2280 M-key (SATA & PCI-E)
Construction	Aluminum and steel
Chassis Color	Silver and Black
Mounting Type	Desktop or wall mounting (wall mounting kit included) Side mounting
Dimensions	319mm (W) x 230mm (D) x 94mm (H) 12.56" (W) x 9.06" (D) x 3.70" (H)
Weight	4.25kg (approx)
Operating Temperature	-20°C ~ 70°C (14°F~158°F) *with airflow -10°C ~ 60°C (14°F to 140°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B (TBD)

Ordering Information

AR-200	ARS-200-1: 2x HDMI; 2x USB; 1x G-Lan; 1x RS232; 1x DC-IN ARS-200-2: 1x HDMI; 1x USB; 2x G-Lan; 1x RS232; 1x DC-IN ARS-200-3: 1x HDMI; 2x USB; 1x G-Lan; 1x RS232; 1x DC-IN; 1x DIO
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type
Optional Accessories	WiFi / Bluetooth antenna kit LTE / 5G antenna kit

Dimensions and Drawing





Features

- Intel® Atom® x7000E Series / N-series / Core™ 3 Processor N355 Processors (formerly Alder Lake-N / Amston Lake / Twin Lake)
- Rich I/O supports 2x COM, 4x optional power COM
- 4x DI, 4x DO
- USB Type-C with Alternate mode, PD up to 60W
- 2x USB 3.2, 4x USB 2.0
- Supports M.2 (2230) sockets for Wi-Fi / BT and M.2 (3052) 4G/5G communication with Nano SIM slot
- Supports TPM 2.0 hardware security
- 9V~36V DC wide-range power input
- VESA 75x75 and 100x100mm wall mounting

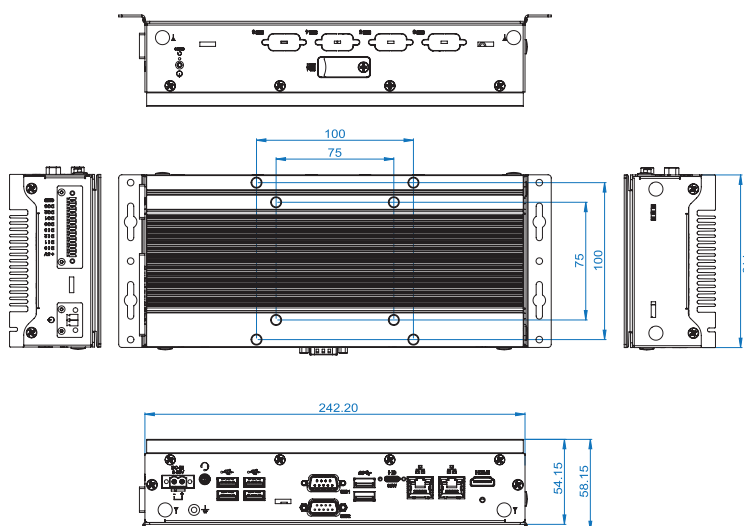
Specifications

System Mainboard	MBP-210-N97/ MBP-210-N305/ MBP-210-7835
CPU Type	Intel® Core™ i3-N305 Processor (8 Cores) Intel® Atom™ N97 Processor (4 Cores) Intel® Atom™ x7835RE Processor (8 Cores)
System Speed	N97 and X7835RE- up to 3.6GHz, i3-N305 up to 3.8GHz
Memory	1x DDR5-4800 SO-DIMM, Max. 16GB
Front Panel External I/O	1x power button 1x Clear CMOS button Optional 4x Power COM #3~#6 Pin9 Jumper select 0, 5V, 12V 1x Digital I/O (4-in/4-out), 5V and GND 1x Nano SIM slot 4x Antenna holes
Rear Panel External I/O	2x USB 3.2 4x USB 2.0 1x HDMI 2x DB9 for COM#1 (RS232/422/485), 2x LAN 1x 2-pin DC-in terminal block for 9V (-5%) ~ 36V (+5%) 2x Antenna holes
Expansion Slots	3x M.2 sockets (B-key/ E-key and M-key)
Storage	1x M.2 M-key (2280)
Construction	Aluminum & steel
Chassis Color	Black/Gray
Mounting Type	VESA 75x75 and 100x100 mm, Optional DIN-Rail kit
Dimensions	242.2mm (W) x 110mm (D) x 54.15mm (H) 9.52" (W) x 4.3" (D) x 2.13" (H)
Weight	1.65kg
Operating Temperature	N97 and N305: -20°C~45°C (-4°F~113°F) x7835RE: -30°C~60°C (-22°F~140°F) *with airflow
Storage Temperature	N97 and N305: -30~60°C (-22°F~140°F) x7835RE: -40~80°C (-40°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ACS200-210-N305	Intel® Core™ i3-N305 Processor, 8GB DDR5 SO-DIMM, 128GB SSD, USB-C PD 60W, w/o power adaptor
ACS200-210-N97	Intel® Atom™ N97 Processor, 8GB DDR5 SO-DIMM, 128GB SSD, USB-C PD 60W, w/o power adaptor
ACS200-210-7835	Intel® Atom™ x7835RE Processor, 8GB DDR5 SO-DIMM, 128GB SSD, USB-C PD 60W, w/o power adaptor
A005PS090W0100710P	AC 100V~240V Adaptor 90W DC 24V/3.75A
A005PS180W0100800P	AC 100V~240V Adaptor 180W DC 24V/7.5A

Dimensions and Drawing





Features

- Intel® Atom® x6000E Series x6425E Processor (formerly Elkhart Lake)
- Fanless Box PC with 2x CAN bus and Hardware TPM 2.0
- 4x DI, 4x DO, 4x USB 3.2
- Supports PCI-E full mini card sockets for Wi-Fi / BT and 4G/5G communication with Nano SIM slot
- Supports TPM2.0 hardware security
- Wide-range operating temperature from -25°C to 60°C

Specifications

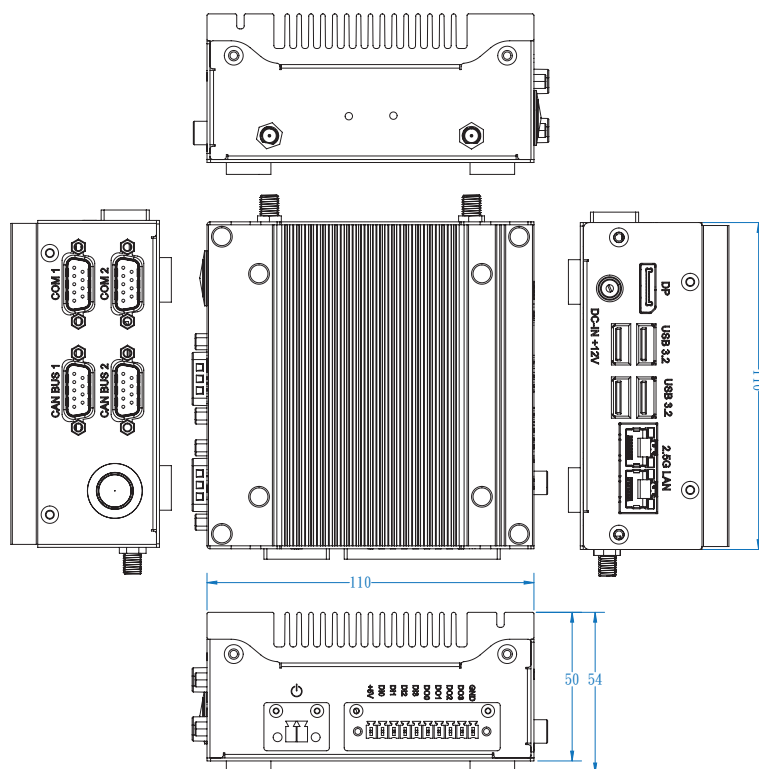
System Mainboard	IBASE proprietary board
CPU Type	Intel® Atom® x6425E Processor (Quad-Core @ 3.0GHz)
System Speed	X6425E up to 3.0GHz
Memory	1x DDR4-3200 SO-DIMM, Max.32GB
Front Panel External I/O	1x power button 1x COM 1 RS232/422/485 Selectable via BIOS 1x COM2 RS232 2x CAN Bus 1x Digital I/O (4-in/4-out), 5V and GND on right side 2x Antenna holes and DIN-Rail holes on left side
Rear Panel External I/O	4x USB 3.2 1x Display Port 2x Gigabit LAN 1x DC-IN (+12V) with screw lock
Expansion Slots	2x mini PCI-E full size card sockets
Storage	1x mSATA
Construction	Aluminum & steel
Chassis Color	Gray
Mounting Type	VESA 75x75 and 100x100mm
Dimensions	110mm (W) x 110mm (D) x 50mm (H) 4.3" (W) x 4.3" (D) x 1.97" (H)
Weight	TBD
Operating Temperature	-25°C~60°C (-13°F~140°F) *with airflow
Storage Temperature	-40°C ~80°C (-40°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ACS050-100

Intel® Atom® X6425E Processor, 8GB DDR4 SO-DIMM, 128GB SSD, with 50W AC adaptor

Dimensions and Drawing





Features

- 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors
- 3x 2.5G Ethernet port, HDMI & 2x DisplayPort (DP++)
- Built-in 8-in & 8-out isolated Digital IO (optional)
- 2x removable drive bays for SSD with RAID0/1
- 1x accessible M.2 NVMe SSD (optional)
- Over/Under/Reverse voltage protection
- Supports iAMT(16.1) & TPM (2.0)
- 8V~48V DC wide-range power input with ignition control
- Supports a single NVIDIA® GPU card with up to 350W

Specifications

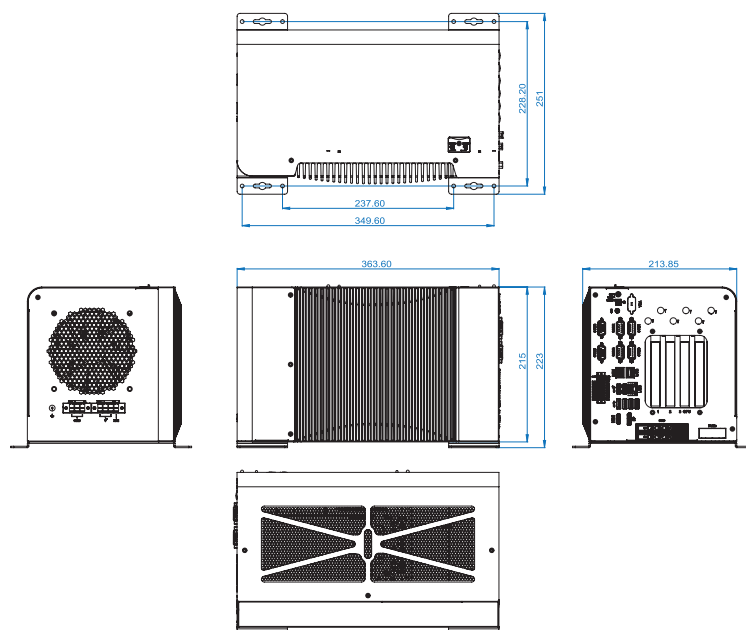
System Mainboard	MBA-100 with Intel® R680E PCH
CPU Type	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors
System Speed	Up to 5.0 GHz
Memory	2x DDR5-4800/5600 SO-DIMM, Max. 64GB
Front Panel External I/O	1x DisplayPort + 1x HDMI + 1x VGA (optional) 3x RJ45 2.5G Ethernet ports 2x USB 3.2 Gen.2, 4x USB 3.2 Gen.1 2x DB9M connectors for COM1 #1 / COM#2 (RS232/422/485) 2x DB9M connectors for COM1 #3 / COM#4 (RS232 only) Isolated 8-in & 8-out digital I/O ports (optional) 1x Line-out & MIC-in 6x antenna holes for WLAN & WWAN module 1x 2-pin terminal block for remote power 1x power button with LED, 3x LED indicators (storage, WLAN, WWAN) 1x PCI-E(x16) Gen.4 slot + 2x PCI-E(x4) Gen.4 slots
Rear Panel External I/O	1x 4-pin terminal block for 8V~48V power input 1x 3-pin terminal block for Ignition control
Expansion Slots	1x M.2 2230 E-key socket for WLAN & BT (PCI-E + USB 2.0 + SMBus). 1x M.2 3042/52 B-key socket for WWAN (4G/5G) (PCI-E + USB3.2 Gen.1) 1x M.2 2280 M-key socket for NVMe SSD (PCI-E x4 [Gen.4]) 2x Mini PCI-E full-size socket for CAN FD module (PCI-E + USB 2.0 + SMBus)
Storage	2x 2.5" HDD/SSD (front-accessible) 1x front-accessible M.2 2280 M-key tray for NVMe SSD (PCI-E x4 [Gen.4]) [optional]
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mounting
Dimensions	213.8mm (W) x 363.6mm (D) x 215mm (H) 8.4" (W) x 14.3" (D) x 8.46" (H)
Weight	TBD
Operating Temperature	-20°C ~ 60°C (-4°F~140°F) *with airflow
Storage Temperature	-40°C ~ 70°C (-40°F to 158°F)

Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating/Non-operating (SSD): 2,26 Grms (5~500 Hz) / MIL-STD-810G
Shock	Operating: Sawtooth: 20G, 11msec (Z-axis) / MIL-STD-810H Non-operating: Sawtooth: 40G, 11 msec (Z-axis) / MIL-STD-810H
Certification	CE (EN 62368 / EN55032 / EN55035) & LVD FCC Class A

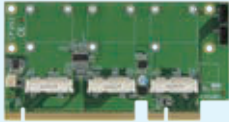
Ordering Information

AES100M	Expandable Edge AIoT System with MBA-100 (R680E PCH), w/o CPU/ memory/storage/ Power adaptor; supports vPro & iAMT 16.1, desktop/wall mounting brackets (RoHS2)
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Dimensions and Drawing



AMS300 Series Riser Card List

Card Model		Compatible System	Expansion Slot
IP301		AMS301 	3x Mini PCI-E
IP302		AMS302 	4x PCI-E & 8x PCI-E [Gen.3]
		AMS312 	4x PCI-E & 8x PCI-E [Gen.3/Gen.4]
		AMS322 	4x PCI-E & 4x PCI-E [Gen.3/Gen.4]
IP303		AMS302 	1x PCI & 4x PCI-E [Gen.3]



Specifications

System Mainboard	MBE320 with Intel® CPU onboard
CPU Type	11th Gen Intel® Core™ i7/i5/i3 Processors
System Speed	Up to 4.4GHz
Memory	2x DDR4 SO-DIMM, Max. 64GB
Front Panel External I/O	2x Antenna hole for WLAN/4G/5G module
Rear Panel External I/O	1x 2-pin DC-in terminal block for 24V (±10%) 1x 2-pin terminal block for remote power button 1x Power Button 3x RJ45 2.5G Ethernet port 2x DisplayPort connector 3x USB 3.1 ports 3x USB 2.0 ports 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 1x Audio jack for Line-out 1x Red LED for HDD/SSD, 1x Green LED for Power 1x Blue LED & 1x White LED programmable
Expansion Slots	1x M.2 2042 E-key (USB 2.0 & PCI-E) 1x M.2 3052 B-key (USB 2.0 & 3.0) 2x PCI-E (x4) slot
Storage	1x 2.5" HDD/SSD (external-accessible)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 140mm (D) x 117mm (H) 10.83" (W) x 5.51" (D) x 4.61" (H)
Weight	3.5kg
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

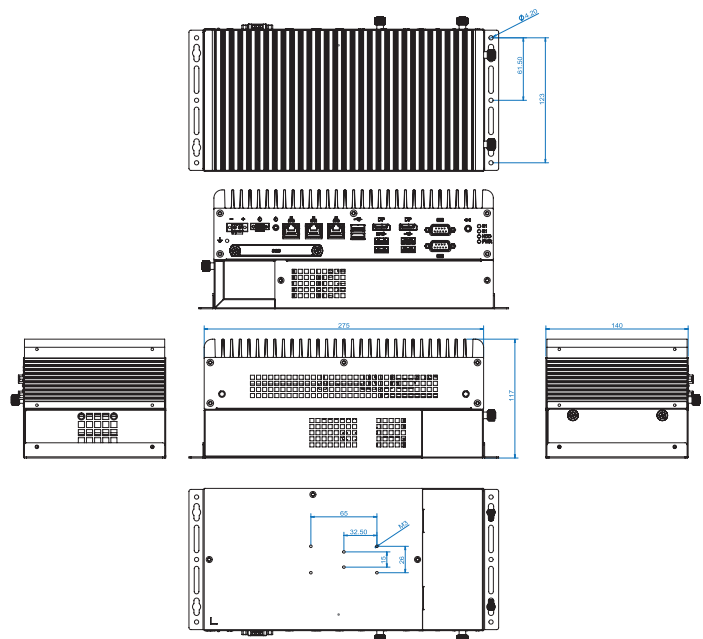
Features

- Compact fanless system with for IBASE MBE320 proprietary board
- 11th Gen Intel® Core™ i7/i5/i3 Processors
- Front removable drive bay for HDD/SSD
- 2x PCI-E (x4) expansion slot
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- TPM 2.0

Ordering Information

AMS322-i7M	Fanless System with MBE320-i7, w/ Intel® Core™ i7-1185G7E Processor, 2x COM, 1x IP302 Riser card for 2x PCI-E (x4) expansion slots, without memory /storage /power adaptor
AMS322-i5M	Fanless System with MBE320-i5, w/ Intel® Core™ i5-1145G7E Processor, 2x COM, 1x IP302 Riser card for 2x PCI-E (x4) expansion slots, without memory /storage /power adaptor
AMS322-i3M	Fanless System with MBE320-i3, w/ Intel® Core™ i3-1115G4E Processor, 2x COM, 1x IP302 Riser card for 2x PCI-E (x4) expansion slots, without memory /storage /power adaptor
Optional Accessories	180W (24V @7.5A) power adaptor, bare wire type, IEC62368-1/EN62368-1 compatible WiFi/BT antenna kit 5G/4G/LTE antenna kit GPS antenna kit DIN rail bracket

Dimensions and Drawing





Specifications

System Mainboard	MBE320 with Intel® CPU onboard
CPU Type	11th Gen Intel® Core™ i7/i5/i3 Processors
System Speed	Up to 4.4GHz
Memory	2x DDR4 SO-DIMM, Max. 64GB
Front Panel External I/O	2x Antenna hole for WLAN/4G/5G module
Rear Panel External I/O	1x 2-pin DC-in terminal block for 24V (±10%) 1x 2-pin terminal block for remote power button 1x Power Button 3x RJ45 2.5G Ethernet port 2x DisplayPort connector 3x USB 3.1 ports 3x USB 2.0 ports 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 1x Audio jack for Line-out 1x Red LED for HDD/SSD, 1x Green LED for Power, 1x Blue LED & 1x White LED programmable
Expansion Slots	1x M.2 2230 E-key (USB 2.0 & PCI-E) 1x M.2 3052 B-key (USB 2.0 & 3.0)
Storage	1x 2.5" HDD/SSD (external-accessible)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 140mm (D) x 70mm (H) 10.83" (W) x 5.51" (D) x 2.76" (H)
Weight	2.75kg
Operating Temperature	-10°C ~ 60°C (14°F~140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

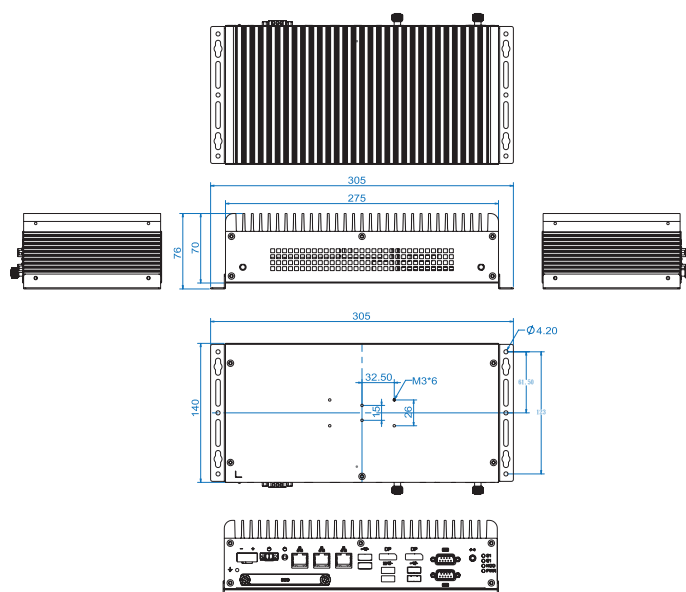
Features

- Compact fanless system with for IBASE MBE320 proprietary board
- 11th Gen Intel® Core™ i7/i5/i3 Processors
- Front removable drive bay for HDD/SSD
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- TPM 2.0

Ordering Information

AMS320-i7M	Fanless System with MBE320-i7, w/ Intel® Core™ i7-1185G7E Processor, 2x COM, without memory/ storage /power adaptor
AMS320-i5M	Fanless System with MBE320-i5, w/ Intel® Core™ i5-1145G7E Processor, 2x COM, without memory/ storage /power adaptor
AMS320-i3M	Fanless System with MBE320-i3, w/ Intel® Core™ i3-1115G4E Processor, 2x COM, without memory/ storage /power adaptor
Optional Accessories	180W (24V @7.5A) power adaptor, bare wire type, IEC62368-1/EN62368-1 compatible WiFi/BT antenna kit 5G/4G/LTE antenna kit GPS antenna kit DIN rail bracket

Dimensions and Drawing





Features

- Compact fanless system with for IBASE MB310 customized board
- 10th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- Front removable drive bay for HDD/SSD
- 1x PCI-E (x8) + 1x PCI-E (x4) expansion slot
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- TPM 2.0

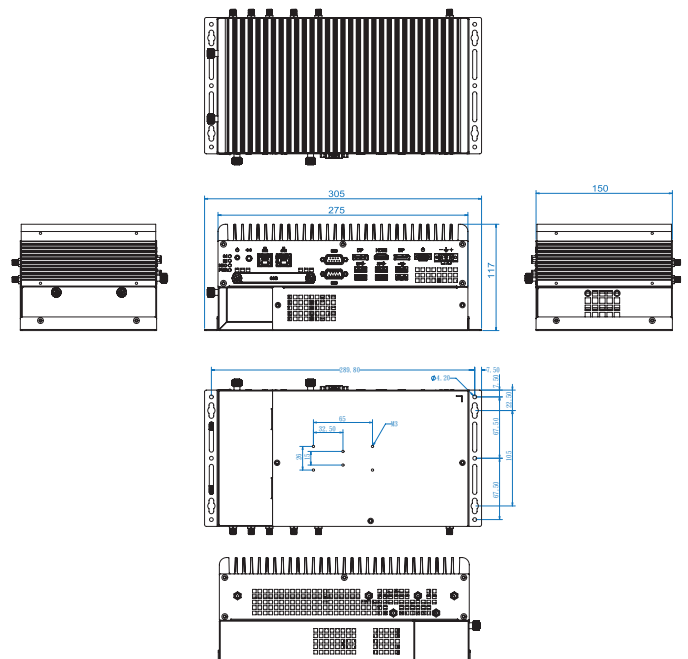
Specifications

System Mainboard	MB310 with Intel® Q470E PCH
CPU Type	10th Gen Intel® Core™ i7/i5/i3 desktop Processors (35W TDP)
System Speed	Up to 4.5GHz
Memory	2x DDR4-2933/2666 SO-DIMM, Max. 64GB
Front Panel External I/O	6x Antenna hole for WLAN/4G/5G module
Rear Panel External I/O	1x HDMI connector 2x DisplayPort connector 1x Audio jack for Line-out 4x USB 3.0 ports 2x USB 2.0 ports (1x software programmable) 1x Red HDD LED, 1x green power LED, 2x Error LED by programming 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 2x RJ45 2.5G Ethernet port 1x 3-pin DC-in terminal block for 24V (±10%) 1x 2-pin terminal block connector for remote access 1x power button
Expansion Slots	1x M.2 2230 E-key (USB 2.0 & PCI-E) 1x M.2 3052 B-key (USB 2.0 & 3.0) 1x PCI-E (x8) slot 1x PCI-E (x4) slot
Storage	1x 2.5" HDD/SSD (external-accessible) 1x M.2 2280 M-key (SATA & PCI-E(4x))
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 150mm (D) x 117mm (H) 10.83" (W) x 5.91" (D) x 4.61" (H)
Weight	3.5kg
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B (TBD)

Ordering Information

AMS312M	Fanless System with MB310, w/o CPU/ memory/ storage/ Power adaptor vPro & iAMT 11.0, desktop or wall mounting brackets (RoHS2), 1x PCI-E (x8) + 1x PCI-E (x4) expansion slots, w/o power adaptor
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	WiFi/BT antenna kit LTE/5G antenna kit GPS antenna kit

Dimensions and Drawing





Rear I/O

Features

- Compact fanless system with for IBASE MB310 customized board
- 10th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- Front removable drive bay for HDD/SSD
- 2x COM, 6x USB, 2x 2.5G LAN, 1x HDMI, 2x DisplayPort
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- TPM 2.0

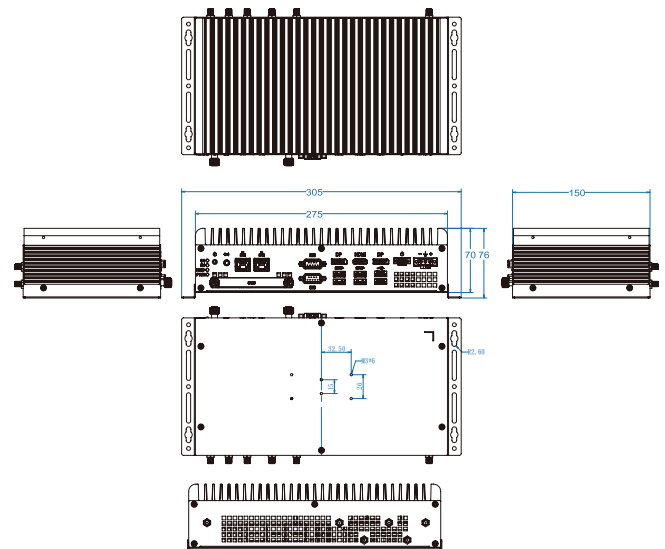
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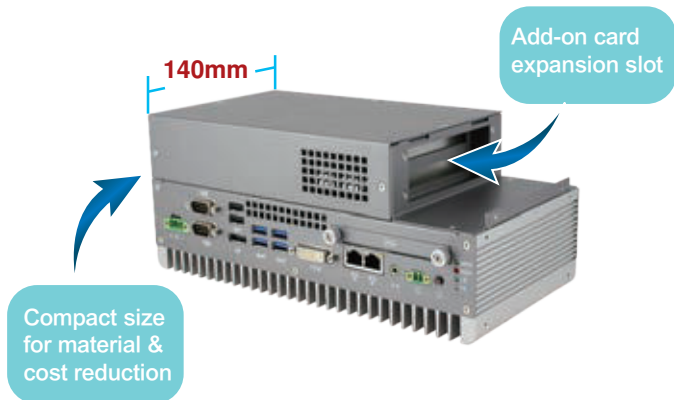
System Mainboard	MB310 with Intel® Q470E PCH
CPU Type	10th Gen Intel® Core™ i7/i5/i3 desktop Processors (35W TDP)
System Speed	Up to 4.5GHz
Memory	2x DDR4-2933/2666 SO-DIMM, Max. 64GB
Front Panel External I/O	6x Antenna hole for WLAN/4G/5G module
Rear Panel External I/O	1x HDMI connector 2x DisplayPort connector 1x Audio jack for Line-out 4x USB 3.0, 2x USB 2.0 ports (1x software programmable) 1x Red HDD LED, 1x green power LED, 2x Error LED by programming 1x 2-pins terminal block connector for remote access 1x power button 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 2x RJ45 2.5G Ethernet port 1x 3-pin DC-in terminal block for 24V (±10%)
Expansion Slots	1x M.2 2242 E-key (USB 2.0 & PCI-E) 1x M.2 3052 B-key (USB 3.0 & USB 2.0)
Storage	1x 2.5" HDD/SSD (external-accessible) 1x M.2 2280 M-key (SATA & PCI-E(4x))
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 150mm (D) x 70mm (H) 10.83" (W) x 5.91" (D) x 2.76" (H)
Weight	2.75kg
Operating Temperature	-10°C ~ 60°C (14°F~140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

Ordering Information

AMS310M	Fanless System with MB310, w/o CPU/ memory/ storage/ Power adaptor with vPro & iAMT 11.0, desktop or wall mounting brackets (RoHS2), w/o power adaptor
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	WiFi / Bluetooth antenna kit LTE / 5G antenna kit GPS antenna kit

Dimensions and Drawing

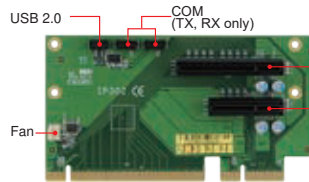




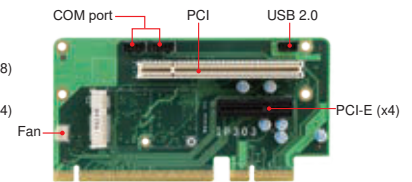
Features

- Compact fanless system with for IBASE MB300 customized board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- 2MB MRAM module (optional)
- Front removable drive bay for HDD/SSD (supports RAID 0/1)
- 1x PCI-E (x8) + 1x PCI-E (x4) expansion slot
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- iSMART, iAMT (11.6)

IP302



IP303



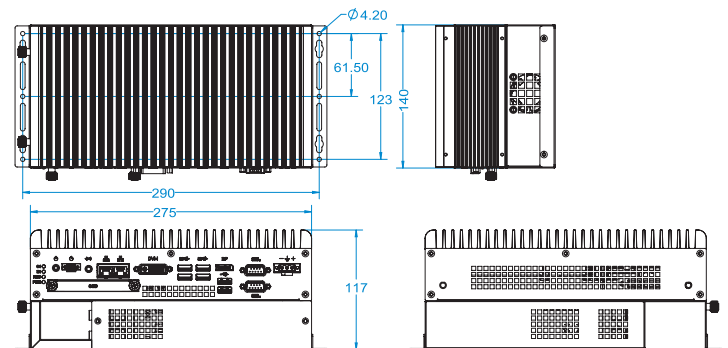
Specifications

System Mainboard	MB300 with Intel® Q170 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x DDR4-2133 SO-DIMM, Max. 32GB
Front Panel External I/O	2x Antenna hole for WLAN module
Rear Panel External I/O	1x DVI-I + 1x DisplayPort connector 1x Audio jack for Line-out 4x USB 3.0 ports, 2x USB 2.0 ports 1x Red HDD LED, 1x green power LED 2x Error LED by programming 1x power button 1x 2-pin terminal block for external power button 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 2x RJ45 Gigabit Ethernet port 1x 3-pin DC-in terminal block for 24V (±10%)
Expansion Slots	1x Mini PCI-E sockets (full-size) 1x PCI-E (x8) slot 1x PCI-E (x4) slot
Storage	2x 2.5" HDD/SSD (1x internal & 1x external-accessible) + 1x mSATA socket
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 140mm (D) x 117mm (H) 10.83" (W) x 5.51" (D) x 4.61" (H)
Weight	3.3kg
Operating Temperature	-10°C ~ 60°C (14°F~140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

Ordering Information

AMS302	Fanless System with MB300, w/ Intel® Core™ i7/i5/i3 desktop Processor, 2x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, 1x PCI-E (x8) + 1x PCI-E (x4) expansion slots, w/o power adaptor
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
2nd storage ACC Kit (optional)	Storage ACC Kit including screws and cable (SC2AMS300-A10100R)
Optional Accessories	WiFi/BT antenna kit 4G/LTE antenna kit (Must have M2MU2-S) GPS antenna kit (Must have M2MU2-S)

Dimensions and Drawing

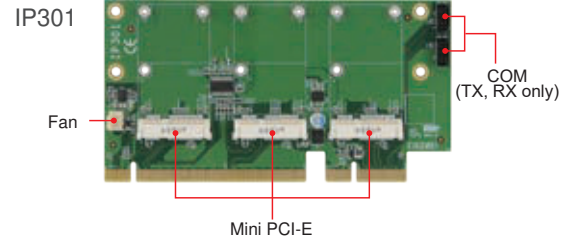




Field Bus Adaptor via Mini PCI-E

Features

- Compact fanless system with IBASE MB300 customized board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- 2MB MRAM module (optional)
- Front removable drive bay for HDD/SSD (supports RAID 0/1)
- Supports different types of Fieldbus through expansion slot
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- iSMART, iAMT (11.6)



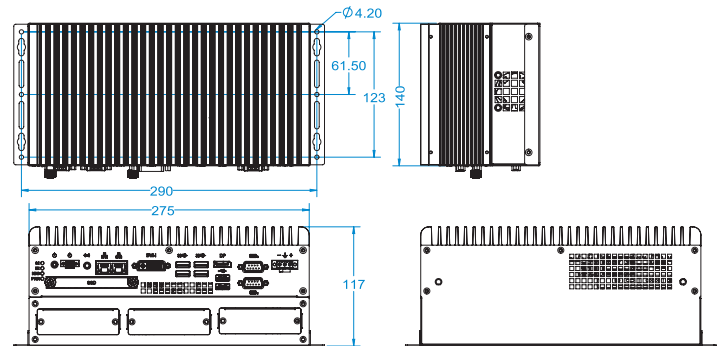
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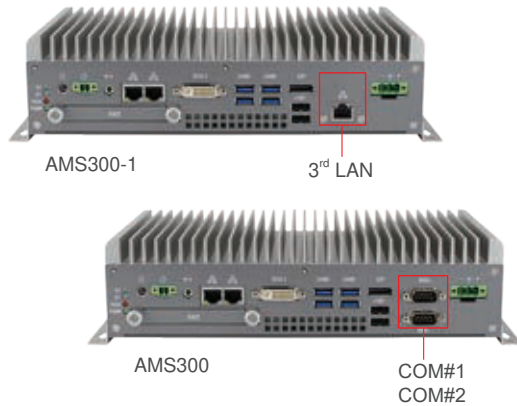
System Mainboard	MB300 with Intel® Q170 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x DDR4-2133 SO-DIMM, Max. 32GB
Front Panel External I/O	2x Antenna hole for WLAN module
Rear Panel External I/O	1x DVI-I + 1x DisplayPort 1x Audio jack for Line-out 4x USB 3.0 ports, 2x USB 2.0 ports 1x Red HDD LED, 1x green power LED 2x Error LED by programming 1x power button 1x 2-pin terminal block for external power button 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 2x RJ45 Gigabit Ethernet port 1x 3-pin DC-in terminal block for 24V (±10%) 3x Fieldbus module bracket
Expansion Slots	4x Mini PCI-E sockets (full-size)
Storage	2x 2.5" HDD/SSD (1x internal & 1x external-accessible) + 1x mSATA socket
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 140mm (D) x 117mm (H) 10.83" (W) x 5.51" (D) x 4.61" (H)
Weight	3.3kg
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

Ordering Information

AMS301	Fanless System with MB300, w/ Intel® Core™ i7/i5/i3 desktop Processor, 2x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, 3x Mini PCI-E, w/o power adaptor
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
2nd storage ACC Kit (optional)	Storage ACC Kit including screws and cable (SC2AMS300-A10100R)
Optional Accessories	WiFi/BT antenna kit 4G/LTE antenna kit (Must have M2MU2-S) GPS antenna kit (Must have M2MU2-S)

Dimensions and Drawing





Features

- Compact fanless system with IBASE MB300-1 customized board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- 2MB MRAM module (optional)
- Front removable drive bay for HDD/SSD (supports RAID 0/1)
- Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6)

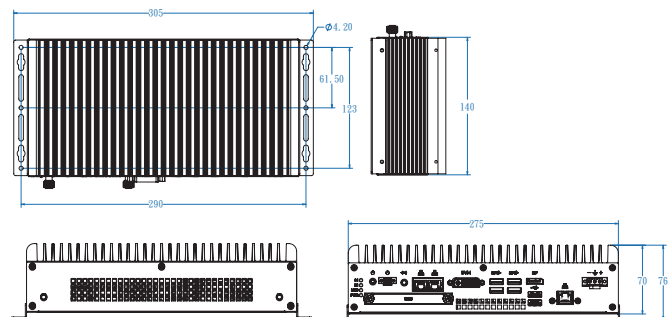
Specifications

System Mainboard	MB300-1 with Intel® Q170 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x DDR4-2133 SO-DIMM, Max. 32GB
Front Panel External I/O	2x Antenna hole for WLAN module
Rear Panel External I/O	1x DVI-I + 1x DisplayPort connector 1x Audio jack for Line-out 4x USB 3.0 ports, 2x USB 2.0 ports 1x Red HDD LED, 1x green power LED 2x Error LED by programming 1x power button 1x 2-pin terminal block for external power button 3x RJ45 Gigabit Ethernet port 1x 3-pin DC-in terminal block for 24V (±10%)
Expansion Slots	1x Mini PCI-E socket (full-size)
Storage	2x 2.5" HDD/SSD (1x internal & 1x external-accessible) + 1x mSATA socket
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 140mm (D) x 70mm (H) 10.83" (W) x 5.51" (D) x 2.76" (H)
Weight	2.7kg
Operating Temperature	-10°C ~ 60°C (14°F~140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating: 3 grms / 5~500Hz / random operation (storage is mSATA)
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B (Prescan only)

Ordering Information

AMS300-1	Fanless System with MB300-1, w/ Intel® Core™ i7/i5/i3 desktop Processor, 3x RJ45, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
2nd storage ACC Kit (optional)	Storage ACC Kit including screws and cable (SC2AMS300-A10100R)
Optional Accessories	WiFi/BT antenna kit 4G/LTE antenna kit (Must have M2MU2-S) GPS antenna kit (Must have M2MU2-S)

Dimensions and Drawing





Rear I/O



Features

- Compact fanless system with IBASE MB300 customized board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- 2MB MRAM module (optional)
- Front removable drive bay for HDD/SSD (supports RAID 0/1)
- Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6)



Side Mounting



DIN-rail Mounting

Specifications

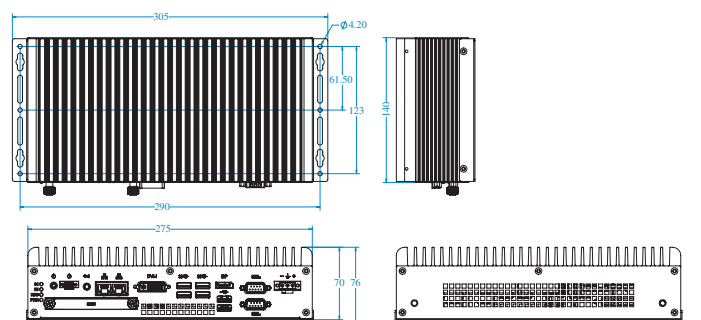
System Mainboard	MB300 with Intel® Q170 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x DDR4-2133 SO-DIMM, Max. 32GB
Front Panel External I/O	2x Antenna hole for WLAN module
Rear Panel External I/O	1x DVI-I + 1x DisplayPort connector 1x Audio jack for Line-out 4x USB 3.0 ports, 2x USB 2.0 ports 1x Red HDD LED, 1x green power LED 2x Error LED by programming 1x power button 1x 2-pin terminal block for external power button 1x RS232/422/485 port for COM#1 1x RS232 port for COM#2 2x RJ45 Gigabit Ethernet port 1x 3-pin DC-in terminal block for 24V (± 10%)
Expansion Slots	1x Mini PCI-E socket (full-size)
Storage	2x 2.5" HDD/SSD (1x internal & 1x external-accessible) + 1x mSATA socket
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mounting (wall mount kit included) Side mounting DIN-rail mounting (optional)
Dimensions	275mm (W) x 140mm (D) x 70mm (H) 10.83" (W) x 5.51" (D) x 2.76" (H)
Weight	2.7kg
Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F) *with airflow -10°C ~ 50°C (14°F to 122°F) without airflow

Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating: 3 grms / 5~500Hz / random operation (storage is mSATA)
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B

Ordering Information

AMS300	Fanless System with MB300, w/ Intel® Core™ i7/i5/i3 desktop Processor, 2x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor
180W power adaptor (optional)	180W (24V @ 7.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
2nd storage ACC Kit (optional)	Storage ACC Kit including screws and cable (SC2AMS300-A10100R)
Optional Accessories	WiFi/BT antenna kit 4G/LTE antenna kit (Must have M2MU2-S) GPS antenna kit (Must have M2MU2-S)

Dimensions and Drawing





Features

- 9th/8th Gen Intel® Core™ Processor (35W TDP)
- 2x DDR4 SO-DIMM, Max. 32GB
- 4x Gigabit LAN
- 512k SRAM on board
- 2x expansion slots
- 3x DisplayPort outputs
- 2.5" drive bays (supports RAID 0/1)

Specifications

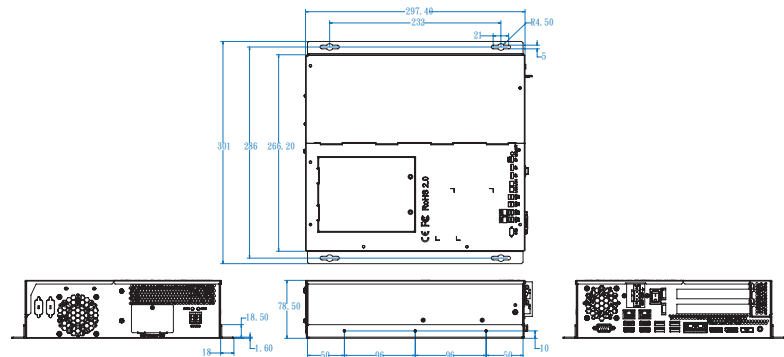
System Mainboard	Customized board
CPU Type	9th/8th Gen Intel® Core™ Processor
System Speed	Up to 4.0GHz
Memory	2x 4GB DDR4-2666/2400 SO-DIMM
Front Panel External I/O	2x RS232 (Optional COM port cable)
Rear Panel External I/O	1x RS232/RS422/RS485 1x RS232 (optional COM port cable kit) 1x Power On/Off switch 3x DisplayPort (1x DP via pin-header) 4x USB 2.0 4x RJ45 (Gigabit Ethernet) 4x USB 3.1 1x Line-out 1x DC input (3-pin Phoenix connector with lock)
Expansion Slots	ABP-IP701: 1x PCI-E(x16) + 1x PCI-E(x4) ABP-IP702: 1x PCI + 1x PCI-E(x16) ABP-IP703: 2x PCI
Storage	2x 2.5" SATA HDD or SSD (Optional 2nd drive bay bracket)
Construction	SGCC
Chassis Color	Silver
Mounting	Desktop or wall mount
Dimensions	297.4mm (W) x 266.2mm(D) x 78.5mm (H) 11.71" (W) x 10.48" (D) x 3.09" (H)
Weight	5.9kg
Operating Temperature	0°C~55°C (32°F~131°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	10~95%, non-condensing@60 degree C
Vibration	Operating: 3Grms / 5~500Hz

Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE/FCC Class B/ LVD (Prescan only)

Ordering Information

AMS210	Box PC Controller with Intel® Core™ i7-9700TE Processor CPU with 8GB DDR4 SO-DIMM, 2.5" 500GB SATA HDD/SSD and 1x PCI + 1x PCI-E(x16) expansion slots
AMS210M	Box PC Controller MB211 w/o CPU / memory/ HDD / riser card / power adaptor, desktop stand & mounting brackets (RoHS2)
270W Power Adaptor Kit (optional)	270W (24V@11.25A) power kit compatible with IEC62368-1/EN62368-1

Dimensions and Drawing





Features

- Fanless system with IBASE MBE240 proprietary board
- 14th/13th Gen Intel® Core™ desktop processors
- Supports DDR5-5600 memory, up to 64GB Max. (ECC is optional)
- 2x Intel® 2.5G LAN, 2x Intel® GbE (Support 802.3 at PoE+), 3x M.2 sockets (M-key/B-key/E-key)
- Supports PCI Express Generation 5 for 1x PCI-E(16x) expansion slot
- Supports Over/Under/Reverse voltage protection
- Dual SIM slots support WWAN redundancy, iAMT (16.1), TPM (2.0)
- 2x 2.5" Storage (supports RAID 0/1)

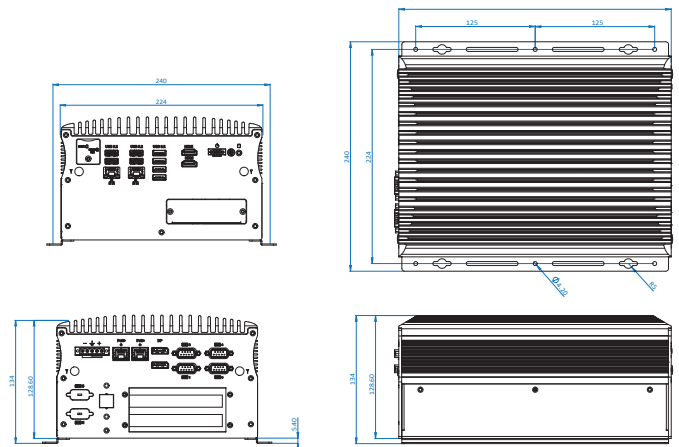
Specifications

System Mainboard	MBE240AF with Intel Q670E PCH (Non-ECC memory) MBE240AF-R with Intel® R680E PCH (supports ECC memory)
CPU Type	14th/13th Intel® Core™ i9/i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 5.0GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB
Front Panel External I/O	2x RS232/422/485 ports for COM#1~COM#2 2x RS232 ports for COM#3~COM#4 2x RS232 ports for COM#5~COM#6 (from IP218) 2x DisplayPort 2x RJ-45 GbE ports (supports 802.3at PoE+) 1x 5-pin DC-in terminal block type for +24V 2x Antenna holes 2x USB 2.0 from IP218 2x expansion slots
Rear Panel External I/O	2x HDMI 8x USB 3.2 ports 2x Antenna holes 2x RJ-45 2.5G ports 1x Red HDD/SSD LED 1x power button with green LED indicator 1x 2-pin terminal block for On/Off 2x SIM card slots
Expansion Slots	1x PCI-E (16x) expansion slot for Gen.5 device 1x M.2 B-key 3052 (LTE/5G/4G) 1x M.2 E-key 2230 (WIFI/BT) 1x M.2 M-key 2280 (NVMe / SATA SSD)
Storage	2x 2.5" storage
Construction	Aluminum @ Gray
Chassis Color	Silver & Gray
Mounting	Desktop & wall mount
Dimensions	210mm(W) x 285mm(D) x 129mm(H)
Weight	4.9 kg
Operating Temperature	-20 °C ~ 70 °C (-4°F~158°F) [with 35W CPU and DDR5 memory]
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3.0 Grms / 5~500Hz
Shock	Operating: 20G/11 ms Duration
Certification	CE *follow EN55032* FCC Class A / LVD

Ordering Information

AMI242AFM	(AMI) Aluminum Chassis with MBE240 (Q670E PCH), fanless design w/o CPU/memory/SSD/power adaptor, supports iAMT (16.1), mounting brackets, 1x expansion slot (IP218 riser card) (RoHS2)
AMI242AFM-R	(AMI) Aluminum Chassis with MBE240 (R680E PCH), fanless design w/o CPU/ECC memory/SSD/power adaptor, iAMT (16.1), mounting brackets, 1x expansion slot (IP218 riser card) (RoHS2)

Dimensions and Drawing





Rear I/O



Features

- Fanless system with IBASE MBE240 proprietary board
- 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)
- Dual SIM slots support WWAN redundancy (5G/4G/LTE)
- 4x RJ45 Ethernet ports (2x 2.5GbE ports + 2x PoE+ ports support 802.3at)
- 3x M.2 (B-key/E-key/M-key), iAMT (16.1), TPM (2.0)
- Single 24V DC input, supports over/under/reverse voltage protection
- Supports wide-range operating temperature from -20°C to 70°C

Ordering Information

AMI240AFM	Fanless Box System support Intel® Core™ i9/i7/i5/i3 desktop 35W CPU & DDR5 SO-DIMM Non-ECC memory (Max. 64GB) & 1x SATA 2.5" storage device, w/o power adaptor
270W Power Adaptor Kit (optional)	270W (24V@11.25A) power adaptor kit compatible with IEC62368-1/ EN62368-1

Recommended Processor List

Model	TDP	Base Frequency	Turbo Frequency	Cache	Core/Thread
i9-14900T	35W	1.1GHz	5.1GHz	36MB	24/32
i7-14700T	35W	1.3GHz	5.0GHz	33MB	20/28
i5-14500T	35W	1.7GHz	4.8GHz	24MB	14/20
i5-14400T	35W	1.5GHz	4.5GHz	20MB	10/16
i3-14100T	35W	2.7GHz	4.4GHz	12MB	4/8
i9-13900TE	35W	1.0GHz	5.0GHz	32MB	24/32
i7-13700TE	35W	1.1GHz	4.8GHz	30MB	16/24
i5-13500TE	35W	1.1GHz	4.5GHz	24MB	14/20
i3-13100TE	35W	2.4GHz	4.1GHz	12MB	4/8
G7400TE	35W	3.0GHz	N/A	6MB	2/4
G6900TE	35W	2.4GHz	N/A	4MB	2/2

Specifications

System Mainboard	MBE240AF with Intel® Q670E PCH
CPU Type	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors
System Speed	Up to 5.0GHz
Memory	2x DDR5-4800/5600 SO-DIMM, Max. 64GB
Front Panel External I/O	2x HDMI(2.0b) 1x Audio jack for MIC-in / Line-out 4x USB3.2 ports 2x Antenna holes 2x RJ45 2.5GbE ports + Dual USB 3.2 stack ports 1x RED LED for 2.5" storage device 1x power button with Green LED indicator 1x 2-pin terminal block 2x SIM card
Rear Panel External I/O	2x RS232/422/485 port for COM#1~COM#2 2x RS232 ports for COM#3~COM#4 2x DisplayPort (1.2) 2x RJ45 Gigabit Ethernet port (Supports 802.3at,PoE+) 1x 5-pin DC-in terminal block type for 24V 2x Antenna holes
Expansion Slots	1x M.2 (E-key) for WiFi / BT 1x M.2 (B-key) for 5G/4G/LTE (Supports Sierra 5G module)
Storage	1x 2.5 HDD/SSD 1x M.2 (M-key) *Supports NVMe SSD
Construction	Aluminum & steel
Chassis Color	Silver + Gray (Aluminum)
Mounting	Desktop & wall mount
Dimensions	210mm(W) x 285mm(D) x 77mm(H) 8.27" (W) x 11.22" (D) x 3.03" (H)
Weight	4.1 Kg
Operating Temperature	-20°C ~ 70°C (-4°F~158°F) (for 35W CPU)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5% ~ 90%@45°C (non-condensing)
Vibration	Operating : 0.25Grms / 5~500Hz Non-operating : 1Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE *follow EN55032* FCC Class A / LVD

Comparison of AMI Series Systems

Depth



265mm 10.43-inch
AMI220



285mm 11.22-inch
AMI230



285mm 11.22-inch
AMI240

Real I/O



210mm 8.27-inch
AMI220



210mm 8.27-inch
AMI230



210mm 8.27-inch
AMI240

Front I/O



210mm 8.27-inch
AMI220

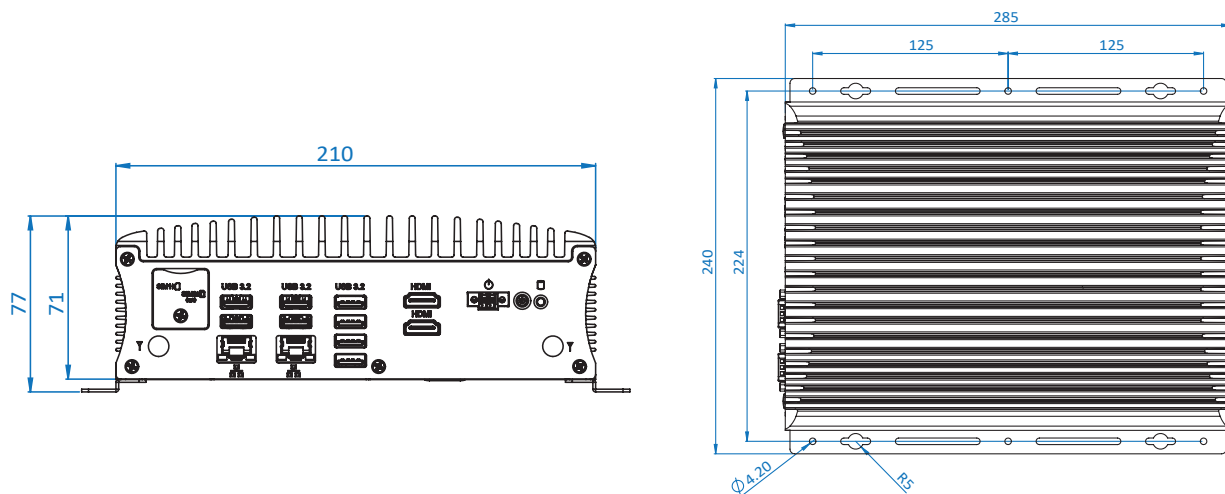


210mm 8.27-inch
AMI230



210mm 8.27-inch
AMI240

AMI240 Dimensions and Drawing





COM#5-6 from IP211
& IP212 & IP217



Features

- Fanless system with IBASE MB230 customized board
- 9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors
- Dual SIM slots supports WWAN redundancy
- 4x RJ45 Gigabit Ethernet port (2x supports 802.3at PoE+)
- 3x M.2 (B-key/E-key/M-key)
- Supports Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), TPM (2.0)
- 2x Flexible PCI-E / PCI expansion slot
- 2x 2.5" storage (supports RAID 0/1)

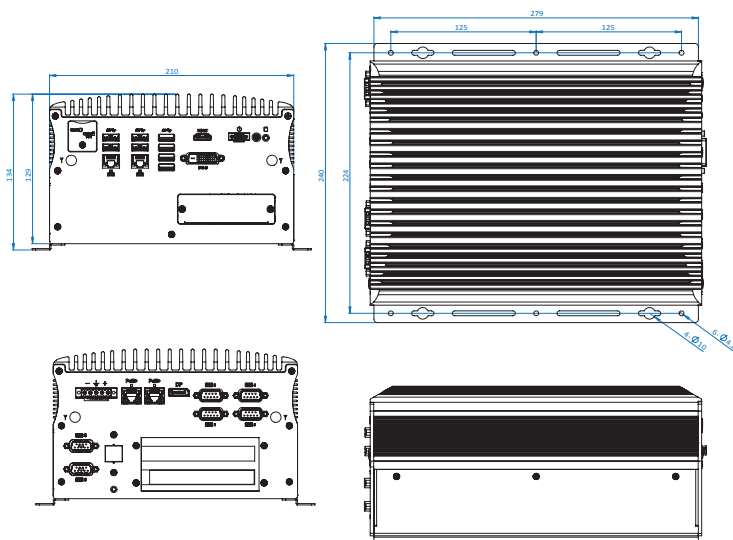
Specifications

System Mainboard	MB230AF with Intel® Q370 PCH
CPU Type	9th/8th Gen Intel® Core™ i7/i5/i3 desktop processors
System Speed	Up to 4.00 GHz
Memory	2x DDR4-2666/2400 SO-DIMM, Max. 32GB
Front Panel External I/O	1x RS232/422/485 port for COM#1~COM#2 3x RS232 ports for COM#3~COM#4 2x RS232 ports for COM#5~6 from optional IP211/IP212 1x DisplayPort (1.2) 2x RJ45 Gigabit Ethernet port (supports 802.3at PoE+) 1x 5-pin DC-in terminal block for 12V (±10%) or 18V (-10%)~24V (+10%) 2x Antenna holes 2x USB 2.0 from optional IP211/IP212/IP213 2x expansion slot
Rear Panel External I/O	1x DVI-D + HDMI(1.4) 4x USB3.1 ports 2x Antenna holes 2x RJ45 Gigabit Ethernet port + Dual USB3.1 stack ports 1x Red HDD LED 1x power button with Green LED indicator 1x 2-pin terminal block 2x SIM card
Expansion Slots	2x Flexible PCI-E / PCI expansion slot 1x M.2 (B-key supports USB 2.0 for 4G/LTE) 1x M.2 (E-key supports PCI-E + USB 2.0 for CNVi) 1x M.2 (M-key supports PCI-E(4x) + SATA for NVMe SSD)
Storage	2x 2.5" HDD/SSD 1x M.2 (M-key supports PCI-E(4x) + SATA for NVMe SSD)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop & wall mount
Dimensions	210mm (W) x 285mm (D) x 129mm (H) 8.27" (W) x 11.22" (D) x 5.08" (H)
Weight	4.9 kg
Operating Temperature	-20°C ~ 70°C (-4°F~158°F) (for 35W CPU)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5~90% @60°C, (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating: 20G / 11ms Non-operating: 40G / 11ms
Certification	CE/ FCC Class A/ LVD

Ordering Information

AMI232AF (Supports Sierra module)	Fanless box System with MB230AF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 6x COM (from IP211/IP212) 4x COM (from IP213), 1x 8GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card
AMI232-217	Fanless box System with MB230AF, w/ Intel® Core™ i5-8500T desktop Processor, 4x COM, 1x 8GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, Riser card (IP217), w/o power adaptor
330W Power Adaptor Kit (optional)	330W (24V@13.75A) power adaptor kit compatible with IEC62368-1/EN62368-1
Optional Accessories	Global 4G antenna kit for Sierra Wireless EM7565 module, M.2 (M-key 2280) Thermal kit

Dimensions and Drawing





COM#5-6 from
IP214 & IP215



Features

- Fanless system with IBASE MB230 customized board
- 9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors
- Dual SIM slots support WWAN redundancy
- 4x RJ45 Gigabit Ethernet port (2x supports 802.3at PoE+)
- 3x M.2 (B-key/E-key/M-key)
- Supports Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), TPM (2.0)
- Flexible expansion slot system
- 2x 2.5" storage (supports RAID 0/1)

Specifications

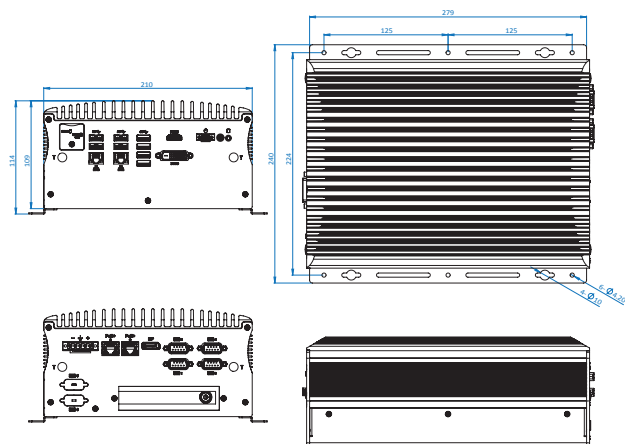
System Mainboard	MB230AF with Intel® Q370 PCH
CPU Type	9th/8th Gen Intel® Core™ i7/i5/i3 desktop processors
System Speed	Up to 4.00 GHz
Memory	2x DDR4-2666/2400 SO-DIMM, Max. 32GB
Front Panel External I/O	1x RS232/422/485 port for COM#1~COM#2 3x RS232 ports for COM#3~COM#4 2x RS232 ports for COM#5~6 from optional IP214/5 1x DisplayPort (1.2) 2x RJ45 Gigabit Ethernet port (Supports 802.3at PoE+) 1x 5-pins DC-in terminal block type for 12V (±10%) or 18V (-10%)~24V (+10%) 2x Antenna holes 1x expansion slot
Rear Panel External I/O	1x DVI-D + HDMI(1.4) 4x USB3.1 ports 2x Antenna holes 2x RJ45 Gigabit Ethernet port + Dual USB3.1 stack ports 1x Red HDD LED 1x power button with Green LED indicator 1x 2-pin terminal block 2x SIM card
Expansion Slots	1x Flexible PCI-E / PCI expansion slot 1x M.2 (B-key supports USB 2.0 for 4G/LTE) 1x M.2 (E-key supports PCI-E + USB 2.0 for CNVi) 1x M.2 (M-key supports PCI-E(4x) + SATA for NVMe SSD)
Storage	2x 2.5" HDD/SSD 1x M.2 (M-key supports PCI-E(4x) + SATA for NVMe SSD)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop & wall mount
Dimensions	210mm (W) x 285mm (D) x 109mm (H) 8.27" (W) x 11.22" (D) x 4.29" (H)
Weight	4.5 kg
Operating Temperature	-20°C ~ 70°C (-4°F~158°F) (for 35W CPU)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5~90% @60°C, (non-condensing)
Vibration	Operating : 3Grms / 5~500Hz

Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE / FCC Class A/ LVD

Ordering Information

AMI231AF (Supports Sierra module)	Fanless box System with MB230AF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 6x COM (from IP214 / IP215), 1x 8GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card
IP214 Riser Card Kit (optional)	IP214 (ZM05IP214---0A1000P) w/ COM cable (2x C501PK1H009302A00P) for AMI221/AMI231
IP215 Riser Card Kit (optional)	IP215 (ZM05IP215---0A1000P) w/ COM cable (2x C501PK1H009302A00P) for AMI221/AMI231
330W Power Adaptor Kit (optional)	330W (24V@13.75A) power adaptor kit Compatible with IEC62368-1/EN62368-1
Optional Accessories	Global 4G antenna kit for Sierra Wireless EM7565 module, M.2 (M-key 2280) Thermal kit

Dimensions and Drawing





Rear I/O



Features

- Fanless system with IBASE MB230 proprietary board
- 9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors
- Dual SIM slots support WWAN redundancy
- 4x RJ45 Gigabit Ethernet port (2x support 802.3at PoE+)
- 3x M.2 (B-key/E-key/M-key)
- Supports Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), TPM (2.0)

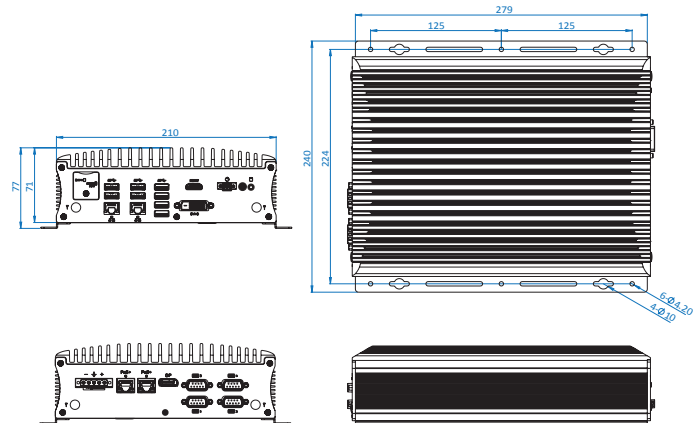
Specifications

System Mainboard	MB230AF with Intel® Q370 PCH
CPU Type	9th/8th Gen Intel® Core™ i7/i5/i3 desktop processors
System Speed	Up to 4.0 GHz
Memory	2x DDR4-2666/2400 SO-DIMM, Max. 32GB
Front Panel External I/O	1x DVI-D + HDMI(1.4) 4x USB 3.1 ports 2x Antenna holes 2x RJ45 Gigabit Ethernet ports + dual USB 3.1 ports 1x Red HDD LED 1x power button with Green LED indicator 1x 2-pin terminal block 2x SIM card
Rear Panel External I/O	2x RS232/422/485 port for COM#1~COM#2 2x RS232 ports for COM#3~COM#4 1x DisplayPort (1.2) 2x RJ45 Gigabit Ethernet port (supports 802.3at PoE+) 1x 5-pins DC-in terminal block type for 12V (±10%) or 18V (-10%)~24V (+10%) 2x Antenna holes
Expansion Slots	1x M.2 (B-key supports USB 2.0 for 4G/LTE) 1x M.2 (E-key supports PCI-E + USB 2.0 for CNV) 1x M.2 (M-key supports PCI-E(4x) + SATA for NVMe SSD)
Storage	1x 2.5" HDD/SSD, M.2 (M-key)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop & wall mount
Dimensions	210mm (W) x 285mm (D) x 77mm (H) 8.27" (W) x 11.22" (D) x 3.03" (H)
Weight	4kg
Operating Temperature	-20°C ~ 70°C (-4°F~158°F) (for 35W CPU)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5~90% @60°C, (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating: 20G / 11ms Non-operating: 40G / 11ms
Certification	CE/ FCC Class A/ LVD

Ordering Information

AMI230AF (Supports Sierra module)	Fanless box System with MB230AF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 4x COM, 1x 8GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor
270W Power Adaptor Kit (optional)	270W (24V@11.25A) power adaptor kit Compatible with IEC62368-1/EN62368-1
Optional Accessories	Global 4G antenna kit for Sierra Wireless EM7565 module, M.2 (M-key 2280) Thermal kit

Dimensions and Drawing





Features

- Fanless system with IBASE MB220 customized board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- Supports three independent display outputs
- Flexible expansion slot system
- Dual SIM slots support WWAN redundancy
- **2x 2.5" HDD/SSD (Supports RAID 0/1)**
- 12V (-10%) ~ 24V (+10%) DC wide-range voltage input
- Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), (TPM 2.0)

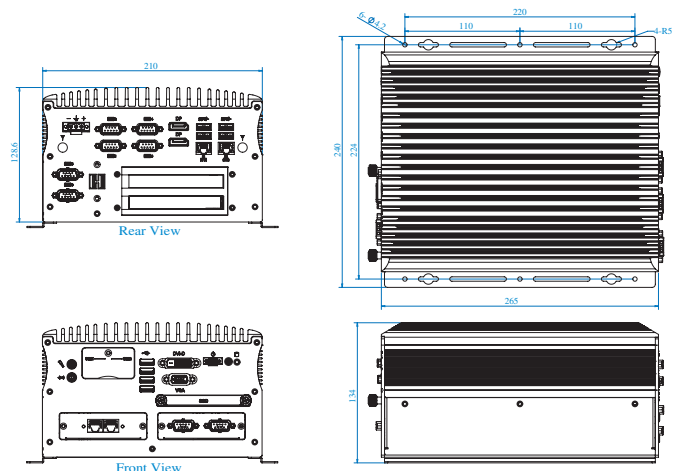
Specifications

System Mainboard	MB220AF-1 with Intel® Q170 PCH MB220EF-1 with Intel® H110 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x 2GB DDR4-2400 SO-DIMM, Max. 32GB
Front Panel External I/O	1x DVI-D + 1x VGA 1x Audio jack for MIC-in / Line-out 4x USB 2.0 ports 1x Red HDD LED 1x power button with green LED indicator 2x SIM card slots 1x 2-pin terminal block for external power button 1x Front removable drive bay for SSD
Rear Panel External I/O	1x RS232/RS422/485 port for COM#1 5x RS232 port for COM#2/COM#3~6 2x DisplayPort connector 1x RJ45 Gigabit Ethernet port + 2x USB 3.0 port 1x RJ45 Gigabit Ethernet port + 2x USB 3.0 port 1x 3-pin DC-in terminal block for 12V (-10%)~24V (+10%) 2x USB 2.0 port (AMI222AF only) 2x Antenna holes 2x Expansion slots
Expansion Slots	2x Mini PCI-E sockets
Storage	2x 2.5" HDD/SSD (1x internal & 1x external-accessible) 2x mSATA (AMI222AF only) & 1x mSATA (AMI222EF only) RAID 0, 1, 5, 10 support (AF version only)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (wall mount kit included)
Dimensions	210mm (W) x 265mm (D) x 128.6mm (H) 8.27" (W) x 10.43" (D) x 5.06" (H)
Weight	4.3kg
Operating Temperature	-10°C ~ 50°C (14°F~122°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20G/ 11ms Non-Operating: 40G/ 11ms (MIL-STD-810G)
Certification	CE / LVD / FCC Class B

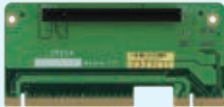
Ordering Information

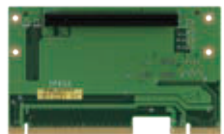
AMI222AF	Fanless box system with MB220AF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 6x COM (from IP211 / IP212), 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card
AMI222EF	Fanless box system with MB220EF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 6x COM (from IP211 / IP212), 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card
IP211 Riser Card Kit (optional)	IP211 (ZM05IP211---0B1000P) w/ COM cable (2x C501PK1H009302A00P) for AMI222/AMI232
IP212 Riser Card Kit (optional)	IP212 (ZM05IP212---0A1000R) w/ COM cable (2x C501PK1H009302A00P) for AMI222/AMI232
IP213 Riser Card Kit (optional)	IP213 (ZM05IP213---0A1000R) w/o COM cable for AMI222/AMI232
150W power adaptor (optional)	150W (12V @ 12.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	GPS antenna kit

Dimensions and Drawing



AMI200 Series Riser Card List

Card Model	Compatible System		Expansion Slot
IP214			16x PCI-E [Gen.3/Gen.4]
		AMI231	
IP215			PCI
		AMI231	

Card Model	Compatible System			Slot #1 (Lower Side)	Slot #2 (Upper Side)
IP211				PCI-E(8x) [Gen.3/Gen.4]	PCI-E(1x) [Gen.3/Gen.4]
		AMI222	AMI242		
IP212				N/A	PCI-E(16x) [Gen.3/Gen.4]
		AMI222	AMI242		
IP213				PCI-E(16x) [Gen.3/Gen.4]	PCI
		AMI222	AMI242		
IP217				PCI-E(8x) [Gen.3/Gen.4]	PCI-E(16x) with (8x) signal [Gen.3/Gen.4]
		AMI232	AMI242		
IP218				N/A	PCI-E(16x) [Gen.5]
		AMI242			



Features

- Fanless system with IBASE MB220 customized board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- Supports three independent display outputs
- Flexible expansion slot system
- Dual SIM slots support WWAN redundancy
- **2x 2.5" HDD/SSD (Supports RAID 0/1)**
- 12V (-10%) ~ 24V (+10%) DC wide-range voltage input
- Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), TPM (2.0)

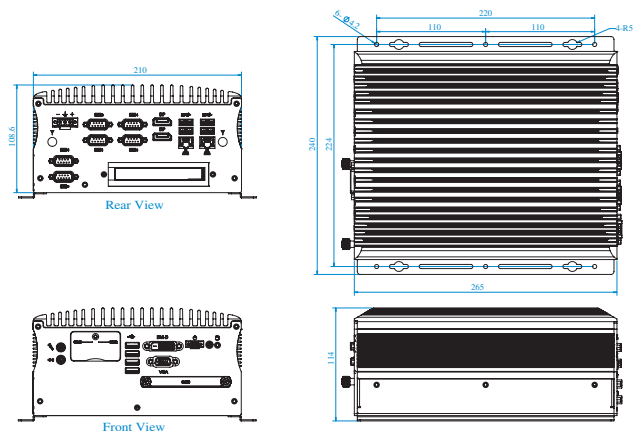
Specifications

System Mainboard	MB220AF-1 with Intel® Q170 PCH MB220EF-1 with Intel® H110 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x 2GB DDR4-2400 SO-DIMM, Max. 32GB
Front Panel External I/O	1x DVI-D + 1x VGA 1x Audio jack for MIC-in / Line-out 4x USB 2.0 ports 1x Red HDD LED 1x power button with green LED indicator 2x SIM card slots 1x 2-pin terminal block for external power button 1x front removable drive bay for SSD
Rear Panel External I/O	1x RS232/RS422/485 port for COM#1 5x RS232 port for COM#2/COM#2~6 2x DisplayPort connector 1x RJ45 Gigabit Ethernet port + 2x USB 3.0 port 1x RJ45 Gigabit Ethernet port + 2x USB 3.0 port 1x 3-pin DC-in terminal block for 12V (-10%) ~ 24V (+10%) 2x Antenna holes 1x Expansion slot
Expansion Slots	1x Mini PCI-E sockets
Storage	2x 2.5" HDD/SSD (1x internal & 1x external-accessible) 2x mSATA (AMI221AF only) & 1x mSATA (AMI221EF only) RAID 0, 1, 5, 10 support (AF version only)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (wall mount kit included)
Dimensions	210mm (W) x 265mm (D) x 108.6mm (H) 8.27" (W) x 10.43" (D) x 4.28" (H)
Weight	4.3kg
Operating Temperature	-10°C to 50°C (14°F~122°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20G/ 11ms Non-Operating: 40G/ 11ms (MIL-STD-810G)
Certification	CE / LVD / FCC Class B

Ordering Information

AMI221AF	Fanless box System with MB220AF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 6x COM (from IP214 / IP215), 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card
AMI221EF	Fanless box System with MB220EF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 6x COM (from IP214 / IP215), 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor, optional riser card
IP214 Riser Card Kit (optional)	IP214 ZM05IP214---0A1000P) w/ COM cable (2x C501PK1H009302A00P) for AMI221/AMI231
IP215 Riser Card Kit (optional)	IP215 (ZM05IP215---0A1000P) w/ COM cable (2x C501PK1H009302A00P) for AMI221/AMI231
150W power adaptor (optional)	150W (12V @12.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	GPS antenna kit

Dimensions and Drawing





Rear I/O

Specifications

System Mainboard	MB220AF-1 with Intel® Q170 PCH MB220EF-1 with Intel® H110 PCH
CPU Type	7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x 2GB DDR4-2400 SO-DIMM, Max. 32GB
Front Panel External I/O	1x DVI-D + 1x VGA 1x Audio jack for MIC-in / Line-out 4x USB 2.0 ports 1x Red HDD LED 1x power button with green LED indicator 2x SIM card slots 1x 2-pin terminal block for external power button
Rear Panel External I/O	1x RS232/RS422/485 port for COM#1 3x RS232 port for COM#2/COM#3/COM#4 2x DisplayPort connector 1x RJ45 Gigabit Ethernet port + 2x USB 3.0 ports 1x RJ45 Gigabit Ethernet port + 2x USB 3.0 ports 1x 3 pin DC-in terminal block for 12V (-10%) ~ 24V (+10%) 2x Antenna holes
Expansion Slots	N/A
Storage	1x 2.5" HDD/SSD 2x mSATA (AMI220AF only) & 1x mSATA (AMI220EF only) RAID 0,1,5,10 support (AF version only)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (wall mount kit included)
Dimensions	210mm (W) x 265mm (D) x 77mm (H) 8.27" (W) x 10.43" (D) x 3.03" (H)
Weight	3.6kg
Operating Temperature	-10°C to 50°C (14°F~122°F)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20G/ 11ms Non-Operating: 40G/ 11ms (MIL-STD-810G)
Certification	CE / LVD /FCC Class B / CCC

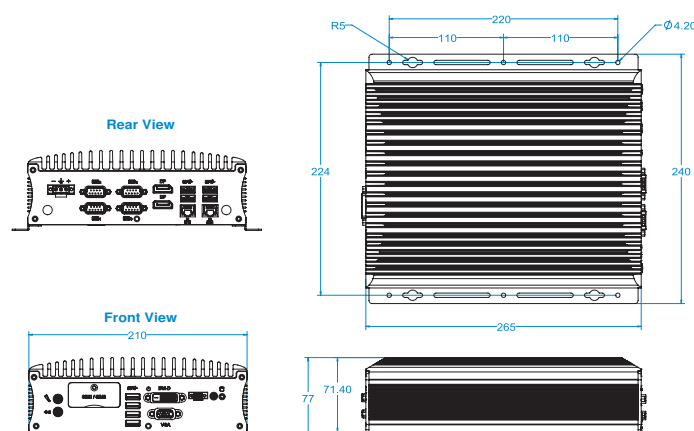
Features

- Fanless system with IBASE MB220 proprietary board
- 7th/6th Gen Intel® Core™ i7/i5/i3 Processors (35W TDP)
- Supports three independent display outputs
- Flexible expansion slot system
- Dual SIM slot supports WWAN redundancy
- 12V (-10%) ~ 24V (+10%) DC wide-range voltage input
- Over/Under/Reverse voltage protection
- iSMART, iAMT (11.6), TPM (2.0)

Ordering Information

AMI220AF	Fanless box system with MB220AF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 4x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor
AMI220EF	Fanless box system with MB220EF, w/ Intel® Core™ i7/i5/i3 desktop Processor, 4x COM, 2x 4GB memory, 1x 2.5" 64GB MLC industrial-grade SSD, w/o power adaptor
150W power adaptor (optional)	150W (12V @12.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	GPS antenna kit

Dimensions and Drawing





Features

- Supports 13th/12th Gen Intel® Core™ DT processors (TDP 65W)
- Supports discrete GPU cards with reserved expansion slots
- Multiple expansion slots :
1x PCI-E(x16) [PCI-E Gen.5], 1x PCI-E(x4) [PCI-E Gen. 4], 1x PCI-E(x4) [PCI-E Gen.3]
- 500W 1U Flex ATX power supply [Default]
- 2-pin remote boot extension design
- Supports multi-display interfaces [HDMI, DisplayPort, DVI-D] and 2.5GbE ports , USB 3.0 ports
- 4 set of 2.5" storage devices (supports RAID 0/1)
- 2x M-key (2280) for NVMe, 1x E-key (2230) for WiFi/BT, support CNVi, 1x B-key (3052) for 5G
- fTPM, DIO, iAMT(16.1), Watchdog timer

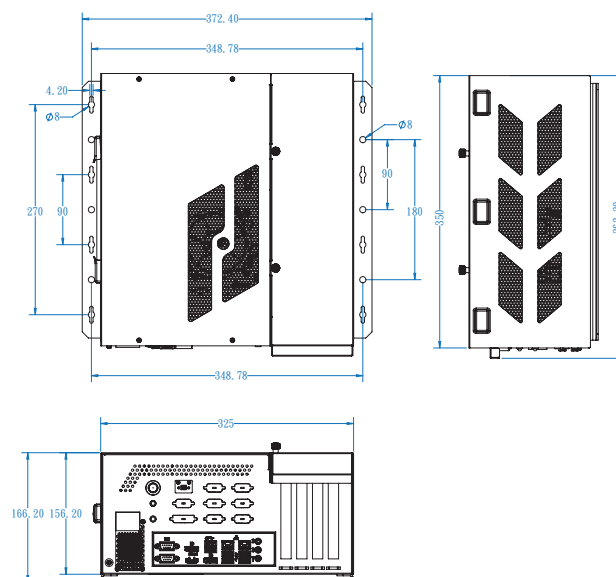
Specifications

System Mainboard	MB998 Series MicroATX motherboards
CPU Type	13th/12th Gen Intel® Core™ DT processors (TDP 65W)
System Speed	Up to 5.60 GHz (W680R supports ECC by CPU SKUs)
Memory	2x DDR5 UDIMM, Max. 64GB
Front Panel External I/O	power button 2-pin remote boot extension design Detachable side cover for GFX Card 4x Slots 2x DisplayPort + HDMI + DVI-D [optional] 6x USB 3.0 ports ; 2x RJ45 for 2.5GbE 2x RS232/422/485, 2x RS232
Rear Panel External I/O	Pluggable cooling-fan
Expansion Slots	1x PCI-E(x16) [Gen.5], 1x PCI-E(x4) [Gen.4], 1x PCI-E(x4) [Gen.3]
Storage	4x 2.5" SATA (supports RAID 0/1) + 2x M.2 M-key (2280) storage
Construction	SECC
Chassis Color	Black
Mounting Type	Desktop & wall mount
Dimensions	362.4mm(W) x 350.0mm(D) x 156.0mm(H)
Weight	Depends on the configuration of power supply and motherboard related components
Operating Temperature	0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing
Storage Temperature	-20°C~80°C (-4°F~176°F), @60°C, non-condensing
Relative Humidity	10~95%, non-condensing @60°C
Vibration	With SSD: 1Grms, IEC 60068-2-64, random, 5Hz~500Hz
Shock	With SSD: Operating 20G, IEC 60068-2-27, half-sine, 11 ms duration With SSD Non-Operating 40G, IEC 60068-2-27, half-sine, 11 ms duration With SSD
Certification	CE / FCC Class A / LVD

Ordering Information

CMB108M	(CMB), Chassis with MicroATX 13th/12th motherboard w/o CPU, memory, storage, supports Intel® i9/i7/i5/i3 / Pentium® / Celeron® processors, up to 5.4GHz
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Dimensions and Drawing





Features

- Supports 9th/8th/7th/6th Gen Intel® Core DT processors (TDP 65W) with specified M/B
- Supports discrete GPU cards via reserved expansion slots
- Multiple expansion slots :1x PCI-E(x16), 1x PCI-E(x8), 1x PCI-E(x4)
- 500W 1U Flex ATX power supply [default]
- 2-pin remote boot extension design
- Supports 2x HDMI and GbE ports, USB 3.0 ports
- Four 2.5" storage bays (supports RAID 0/1)
- MiniPCI-E and M.2 M-key (2280)
- TPM, DIO, iAMT, iSMART [optional]

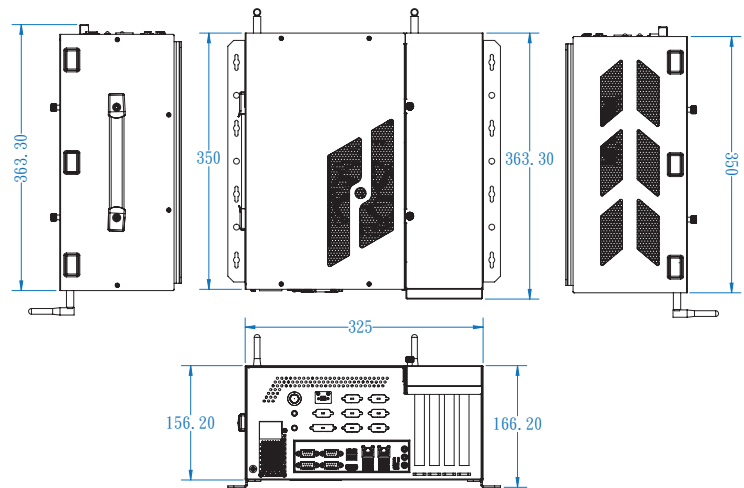
Specifications

System Mainboard	C236 MicroATX motherboards
CPU Type	9th/8th/7th/6th Gen Intel® Core™ DT processors (TDP 65W)
System Speed	Up to 4.2GHz (C236 supports ECC by CPU SKUs)
Memory	4x DDR4 U-DIMM, Max. 64GB
Front Panel External I/O	2-pin remote boot extension design Detachable side cover for GFX Card 4x slots power button 2x HDMI 6x USB 3.0 ports, 4x USB 2.0 (expandable) 2x RJ45 Gigabit Ethernet ports 2x RS232/422/485, 2x RS232
Rear Panel External I/O	Pluggable cooling-fan
Expansion Slots	1x PCI-E(x16), 1x PCI-E(x8), 1x PCI-E(x4) 1x M.2 (M-key 2280)
Storage	4x 2.5" SATA (supports RAID 0/1)+Mini PCI-E 1x M.2 (M-key 2280)
Construction	SECC
Chassis Color	Black
Mounting Type	Desktop & wall mount
Dimensions	325mm(W) x 350mm(D) x 156mm(H) 12.79"(W) x 13.77"(D) x 6.14"(H)
Weight	Depends on the configuration of power supply and motherboard related components
Operating Temperature	0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing
Storage Temperature	-20°C~80°C (-4°F~176°F), @60°C, non-condensing
Relative Humidity	10~95%, non-condensing@60°C
Vibration	Operating:1 Grms, IEC 60068-2-64, random, 5Hz~500Hz With SSD
Shock	Operating 20G, IEC 60068-2-27, half-sine, 11 ms duration With SSD Non-Operating 40G, IEC 60068-2-27, half-sine, 11 ms duration With SSD
Certification	CE / FCC Class A / LVD

Ordering Information

CMB106M	Chassis with MicroATX 9th/8th/7th/6th motherboard w/o CPU, memory, storage, supports Gen Intel® i7/i5/i3 / Pentium® / Celeron® QC/DC processors, up to 4.2GHz
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Dimensions and Drawing





Features

- Supports 7th/6th Gen Intel® Core™ DT processors (TDP 65W) with specified M/B
- expansion slots : 1x PCI-E(x16), 1x PCI-E(x8), 1x PCI-E(x4)
- 500W 1U Flex ATX power supply [default]
- 2-pin remote boot extension design
- Supports 2x HDMI and GbE ports, USB 3.0 ports
- Four removable 2.5" storage bays (supports RAID 0/1)
- MiniPCI-E and M.2 M-key (2280)
- TPM, DIO, iAMT, iSMART [optional]

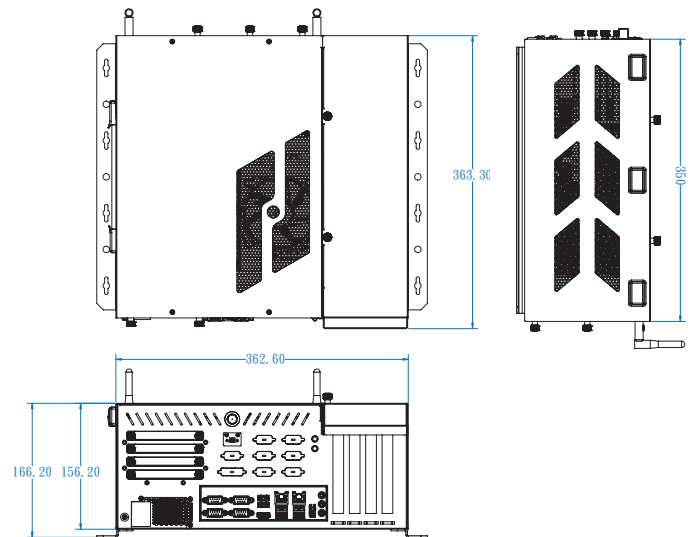
Specifications

System Mainboard	C236 MicroATX motherboards
CPU Type	7th/6th Gen Intel® Core™ DT processors (TDP 65W)
System Speed	Up to 4.2GHz (C236 supports ECC by CPU SKU)
Memory	2x DDR4-2933/2666 U-DIMM, Max. 64GB
Front Panel External I/O	2-pin remote boot extension design Detachable side cover for GFX Card 4x slots power button 2x HDMI 6x USB 3.0 ports, 4x USB 2.0 (expandable) 2x RJ45 Gigabit Ethernet port 2x RS232/422/485, 2x RS232
Rear Panel External I/O	Pluggable cooling-fan
Expansion Slots	1x PCI-E(x16), 1x PCI-E(x8), 1x PCI-E(x4), 1x M.2 (M-key 2280)
Storage	4x 2.5" SATA (supports RAID 0/1)+Mini PCI-E 1x M.2 (M-key 2280)
Construction	SECC
Chassis Color	Black
Mounting Type	Desktop & wall mount
Dimensions	362.4mm(W) x 350.0mm(D) x 156.0mm(H) 14.26"(W) x 13.77"(D) x 6.14"(H)
Weight	Depends on the configuration of power supply and motherboard related components
Operating Temperature	0°C~45°C (32°F~113°F) (for 65W CPU) @60°C, non-condensing
Storage Temperature	-20°C~80°C (-4°F~176°F), @60°C, non-condensing
Relative Humidity	10~90% @ 60°C, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 1 grms / 5~500Hz / random operation
Shock	With SSD: Operating 20G, IEC 60068-2-27, half-sine, 11 ms duration Non-Operating 40G, IEC 60068-2-27, half-sine, 11 ms duration With SSD
Certification	CE FCC Class A / LVD

Ordering Information

CMB101M	Chassis with MicroATX motherboard w/o CPU, memory, storage, supports 7th/6th Gen Intel® i7/i5/i3 / Pentium® / Celeron® QC/DC processors, up to 4.2GHz
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Dimensions and Drawing





Features

- AMD Ryzen™ Embedded 8000 series APU on board, up to 8 cores/16 threads
- Dual Channel SO-DIMM, DDR5 5600, Max. 128GB/slot, Total capacity: 256GB
- 1x eDP, 1x LVDS, 1x DP 2.1, 1x HDMI 2.1
- 2x Intel® I226-V 2.5 Gigabit LAN, 2x USB 3.2, 4x USB 2.0
- 1x M.2 B-key for 5G or LTE options
- 1x M.2 E-key for Wi-Fi, Bluetooth or capture card options
- Supports 2x RS232/422/485 COM port, 2x RS232 COM port

Specifications

System Mainboard	IB301
CPU Type	AMD Ryzen™ Embedded 8000 series APU
System Speed	Max. 5.1 GHz
Memory	Dual Channel SO-DIMM, DDR5 5600, Max. 128GB/slot, Total capacity: 256GB
Front Panel External I/O	1x eDP or 1x LVDS (By BOM) 1x DP 2.1 1x HDMI 2.1
Rear Panel External I/O	2x Intel® I226-V 2.5 G LAN 2x USB 3.2 Gen2 4x USB 2.0 4x COM ports, COM 1 & 2 : RS-232/422/485 via BIOS setting, COM 3 & 4 : RS232 1x Digital IO port, 4-In & 4-Out
Expansion Slots	1x PCI-E Gen4 x4 M.2 E-key Type 2230 1x PCI-E Gen4 x4 B-key Type 3052 1x mini-SIM card slot B-key
Storage	1x PCI-E Gen4 x4 (M.2 NVMe) M-key Type 2280
Construction	TBD
Chassis Color	TBD
Mounting Type	N/A
Dimensions	TBD
Weight	TBD
Operating Temperature	0°C ~ 60°C (32°F~140°F)
Storage Temperature	-20°C ~ 80°C (-4°F to 176°F)
Relative Humidity	90% (non-condensing@60°C)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B (TBD)

Note: The specification will subject to change without notice.

Ordering Information

CP101	AMD Ryzen™ 8000 APU on board 3.5-Inch Disk-Size with dual LAN, 1x DP1, 1x HDMI, 1x eDP, 1x LVDS, 12V – 24V DC-in
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Note: The specification will subject to change without notice.



Preliminary



Features

- AMD Ryzen™ Embedded R2000 series APU on board, up to 4 cores/8 threads
- Onboard DDR4 memory, Max. 8GB
- 2x HDMI 2.0b & LVDS: 5V/3.3V, 24 bit, dual channel (LVDS: 1920x1080 @60 Hz)
- 2x GbE LAN, 4x COM, 2x USB 3.2 Gen2 (10Gbps) [with PDPC support], 3x USB 2.0 via pin headers
- Supports 1x M.2 (M-key, type 2280) & 1x M.2 (E-key, type 2230)
- Supports 4x COM - COM1/COM2: RS-232/422/485, COM3/COM4: RS232 (Default: RS-232, adjustable in BIOS)

Specifications

System Mainboard	IB200 with AMD Ryzen™ R2312 CPU
CPU Type	AMD Ryzen™ Embedded R2000 Series on board
System Speed	Up to 3.5GHz
Memory	Onboard DDR4 memory, Max. 8GB
Front Panel External I/O	2x HDMI (2.0b), 1x 24-bit dual channel LVDS 2x Intel® I2261T Gigabit LAN 3x USB 2.0 (pin header) ; 2x USB 3.2 Gen2 (10Gbps) Built-in audio w/ Realtek audio codec ALC888S-VD2-GR Digital I/O(4-in/ 4-out)
Rear Panel External I/O	COM1 / COM2 : RS-232/422/485 (Default: RS-232, adjustable via BIOS) COM3 / COM4 : RS232
Expansion Slots	1x M.2 (M-key, type 2280) 1x M.2 (E-key, type 2230)
Storage	1x SATA III 1x M.2 (M-key)
Construction	Aluminum & steel
Chassis Color	Gray
Mounting Type	Mounting bracket x 2 ; CP100 V-A1 RoHS2
Dimensions	94 mm (W) x 133 mm (D) x 51.4 mm (H) 3.7" (W) x 5.23" (D) x 2.02" (H)
Weight	TBD
Operating Temperature	0°C~45°C (32°F~113°F)
Storage Temperature	-10°C ~ 80°C (-14°F ~ 176°F)
Relative Humidity	90% (non-condensing@60°C)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operating: 0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / LVD / FCC Class B (TBD)

Note: The specification will subject to change without notice.

Ordering Information

CP100-2312	AMD Ryzen™ R2312 APU on board 2.5-inch Disk-Size w/dual LAN, 1x DP1, 1x HDMI, 1x eDP, 1x LVDS, 12V – 24V DC-in
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Note: The specification will subject to change without notice.



Rear I/O

Features

- Onboard Intel® Core™ Ultra 100H Series Processor (TDP@28W)
- Multiple M.2 sockets (B-key/ E-key and M-key)
- 2x DDR5-5600 SO-DIMM, Max. 64GB
- 2.5G LAN, USB 3.2, USB 2.0, TPM 2.0
- Supports HDMI, DP & COM, External GPIO
- Optional VESA mount bracket

Specifications

System Mainboard	IB962AF-165H/ IB962AF-135H
CPU Type	Intel® Core™ Ultra 100H Series Mobile Processors
System Speed	Up to 5.0GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB
Front Panel External I/O	3x USB 3.2 1x USB 2.0 1x DisplayPort 1x HDMI 1x DB9 for COM#1 (RS232/422/485) 2x 2.5G LAN
Rear Panel External I/O	1x power button 1x Digital I/O (4-in/4-out) 2x Antenna holes 1x HDD LED 1x 3-pin DC-in terminal block for 24V power adaptor
Expansion Slots	3x M.2 sockets (B-key/ E-key and M-key)
Storage	1x M.2 (M2280), supports NVMe 1x 2.5" HDD or SSD
Construction	Aluminum & steel 1x System fan
Chassis Color	Black
Mounting Type	Desktop & wall mount bracket Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08" (W) x 5.9" (D) x 2.83" (H)
Weight	1.6 kg
Operating Temperature	0°C ~ 45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~ +80°C (-4°F~176°F)
Relative Humidity	5% ~ 90% @ 45°C (non-condensing)
Vibration	Operating: 1Grms / 3~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

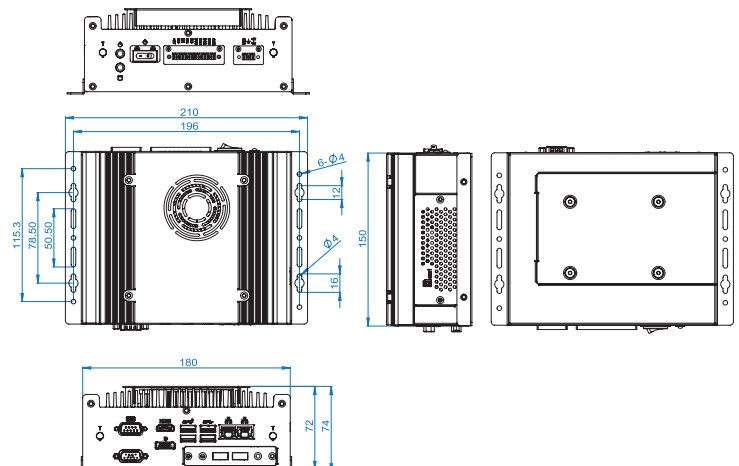
Ordering Information

ASB210-962H-7M	Chassis with IB962AF-165H, Intel® Core™ Ultra7 CPU (TDP@28W), w/ system fan, 1x COM, 2x DDR5 memory slot, desktop stand & mounting bracket, w/o memory / 90W power adaptor and VESA mount bracket
ASB210-962H-5M	Chassis with IB962AF-135H, Intel® Core™ Ultra5 CPU (TDP@28W), w/ system fan, 1x COM, 2x DDR5 memory slot, desktop stand & mounting bracket, w/o memory / 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire-type compatible with IEC62368-1/EN62368-1 [PN: A005PS090W0100710P]
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R] Wifi antenna kit [PN: A024MDWIFI0042400P (Intel® 9260) + SC2WIFI----A10M00R (WiFi kit)]

Recommended Processor List

Processor Number	Intel® Core™ Ultra 100 Series Processors – Intel® MTL U/H Platform	
	Intel® Core™ Ultra 7	Intel® Core™ Ultra 5
	165H	135H
Base Freq (GHz)	1.4	1.7
Intel® Turbo Boost Technology 2.0 (GHz)	5.0	4.6
Last Level Cache	24M	18
Cores/Threads	16/22	14/18
Memory Speed (DDR5)	5600	5600
TDP	28W	28W

Dimensions and Drawing





Rear I/O

Features

- Slim System with IBASE IB953 3.5" Single Board Computer (TDP-up to 28W)
- Onboard 11th Gen Intel® Core™ U-Series Processor
- Supports 3x M.2 sockets (B-key/E-key and M-key)
- 12V (-10%) ~ 24V (+10%) DC-in power input
- 2x DDR4-3200 SO-DIMM, Max. 64GB
- 3x USB 3.1, 1x USB 2.0, 2x Intel® GbE, 1x COM
- External GPIO, 2x DisplayPort, TPM (2.0)
- Optional VESA mount bracket

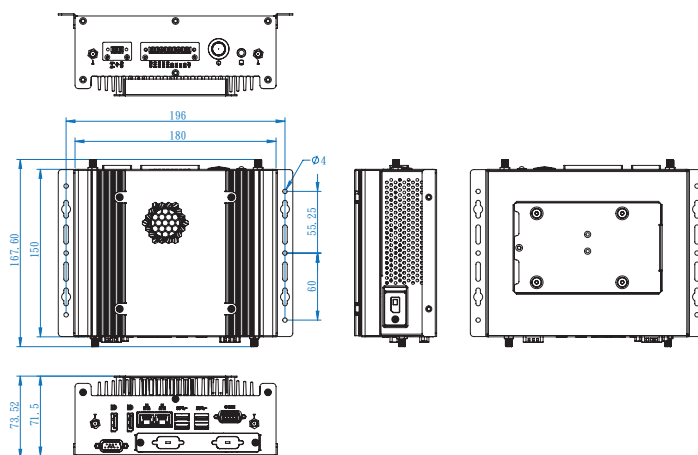
Specifications

System Mainboard	IB953AF-i7/ IB953AF-i5/ IB953EF-i3
CPU Type	Intel® Core™ i7-1185G7E Processor Intel® Core™ i5-1145G7E Processor Intel® Core™ i3-1115G4E Processor
System Speed	Up to 4.4GHz
Memory	2x DDR4-3200 SO-DIMM, Max. 64GB
Front Panel External I/O	3x USB 3.1 1x USB 2.0 2x DisplayPort 1x DB9 for COM#1 (RS232/422/485) 2x Gigabit LAN
Rear Panel External I/O	1x power button 1x Digital I/O (4-in/4-out) 2x Antenna holes 1x HDD LED 1x 3-pin DC-in terminal block for 12V (-10%) ~ 24V (+10%)
Expansion Slots	2x M.2 sockets (B-key/ E-key)
Storage	1x M.2 M-key 2280, supports NVMe, PCI-E(4x) only
Construction	Aluminum & steel 1x System fan
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08" (W) x 5.9" (D) x 2.83" (H)
Weight	1.5kg
Operating Temperature	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 1Grms / 3~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ASB210-953-i7M	Chassis with IB953AF-i7, Intel® i7-1185G7E CPU (TDP-up to 28W), w/ system fan, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB210-953-i5M	Chassis with IB953AF-i5, Intel® i5-1145G7E CPU (TDP-up to 28W), w/ system fan, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB210-953-i3M	Chassis with IB953EF-i3, Intel® i3-1115G4E CPU (TDP-up to 28W), w/ system fan, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire type compatible with IEC62368-1/EN62368-1 [PN: A005PS090W0100700P]
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R] WiFi antenna kit [PN: A024MDWiFi0042400P (Intel® 9260) + SC2WiFi---A10M00R (WiFi Kit)]

Dimensions and Drawing





Features

- Onboard Intel® Core™ Ultra 100U Series mobile Processors (TDP@15W)
- Multiple M.2 sockets (B-key/ E-key and M-key)
- 2x DDR5-5600 SO-DIMM, Max.64GB
- 2.5G LAN, USB 3.2, USB 2.0, TPM 2.0
- Supports HDMI, DP & COM, External GPIO
- Optional VESA mount bracket

Specifications

System Mainboard	IB962AF-165U/ IB962AF-135U
CPU Type	Intel® Core™ Ultra 100U Series Mobile Processors
System Speed	Up to 4.9GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB
Front Panel External I/O	3x USB 3.2 1x USB 2.0 1x DisplayPort 1x HDMI 1x DB9 for COM#1 (RS232/422/485) 2x 2.5G LAN
Rear Panel External I/O	1x power button 1x Digital I/O (4-in/4-out) 2x Antenna holes 1x HDD LED 1x 3-pin DC-in terminal block for 24V power adaptor
Expansion Slots	3x M.2 sockets (B-key/ E-key and M-key)
Storage	1x M.2 (M2280), supports NVMe 1x 2.5" HDD or SSD
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop & wall mount bracket Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08" (W) x 5.9" (D) x 2.83" (H)
Weight	1.5kg
Operating Temperature	0°C ~ 45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~ +80°C (-4°F~176°F)
Relative Humidity	5% ~ 90% @ 45°C (non-condensing)
Vibration	Operating: 1Grms / 3~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

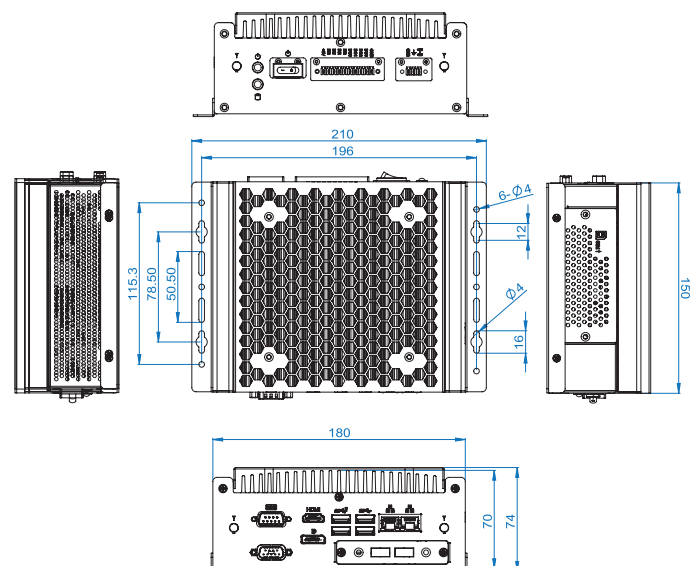
Ordering Information

ASB200-962U-7M	Fanless chassis with IB962AF-165U, Intel® Core™ Ultra7 CPU(TDP@15W), w/ 1x COM, 2x DDR5 memory slot, desktop stand & mounting bracket, w/o memory/ 90W power adaptor and VESA mount bracket
ASB200-962U-5M	Fanless chassis with IB962AF-135U, Intel® Core™ Ultra5 CPU(TDP@15W), w/ 1x COM, 2x DDR5 memory slot, desktop stand & mounting bracket, w/o memory/ 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire-type compatible with IEC62368-1/EN62368-1 [PN: A005PS090W0100710P]
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R] Wifi antenna kit [PN: A024MDWIFI0042400P (Intel® 9260) + SC2WIFI----A10MOOR (Wifi Kit)]

Recommended Processor List

Processor Number	Intel® Core™ Ultra 100 Series Processors – Intel® MTU U/H Platform	
	Intel® Core™ Ultra 7	Intel® Core™ Ultra 5
	165U	135U
Base Freq (GHz)	1.7	1.6
Intel® Turbo Boost Technology 2.0 (GHz)	4.9	4.4
Last Level Cache	12M	12
Cores/Threads	12/14	12/14
Memory Speed (DDR5)	5600	5600
TDP	15W	15W

Dimensions and Drawing





Rear I/O

Features

- Fanless system with IBASE IB953 3.5" Single Board Computer (TDP 15W)
- Onboard 11th Gen Intel® Core™ U-Series Processor
- Supports 3x M.2 sockets (B-key/E-key and M-key)
- 12V (-10%) ~ 24V (+10%) DC-in power input
- 2x DDR4-3200 SO-DIMM, Max. 64GB
- 3x USB 3.1, 1x USB 2.0, 2x Intel® GbE, 1x COM
- External GPIO, 2x DisplayPort, TPM (2.0)
- Optional VESA mount bracket

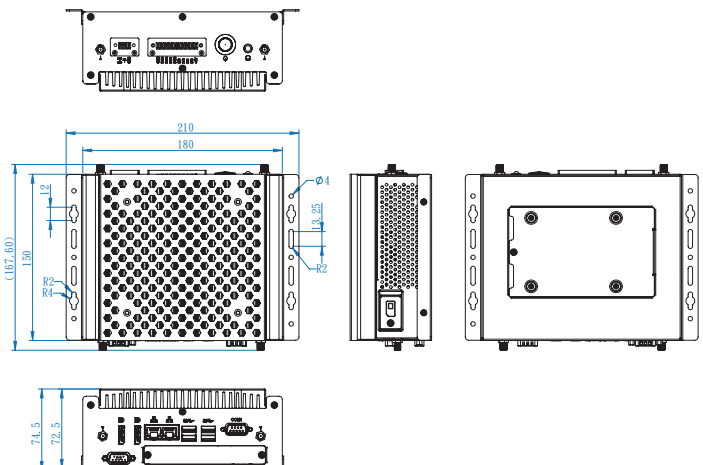
Specifications

System Mainboard	IB953AF-i7/ IB953AF-i5/ IB953EF-i3/ IB953EF-CEL
CPU Type	Intel® Core™ i7-1185G7E Processor Intel® Core™ i5-1145G7E Processor Intel® Core™ i3-1115G4E Processor Intel® Celeron® 6305E Processor
System Speed	Up to 4.4GHz
Memory	2x DDR4-3200 SO-DIMM, Max. 64GB
Front Panel External I/O	3x USB 3.1 1x USB 2.0 2x DisplayPort 1x DB9 for COM#1 (RS232/422/485) 2x Gigabit LAN
Rear Panel External I/O	1x power button 1x Digital I/O (4-in/4-out) 2x Antenna holes 1x HDD LED 1x 3-pin DC-in terminal block for 12V (-10%) ~ 24V (+10%)
Expansion Slots	2x M.2 sockets (B-key/ E-key)
Storage	1x M.2 M-key 2280, Supports NVMe, PCI-E(4x) only
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08" (W) x 5.9" (D) x 2.83" (H)
Weight	1.5kg
Operating Temperature	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 1Grms / 3~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ASB200-953-i7M	Fanless chassis with IB953AF-i7, Intel® i7-1185G7E CPU, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB200-953-i5M	Fanless chassis with IB953AF-i5, Intel® i5-1145G7E CPU, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB200-953-i3M	Fanless chassis with IB953EF-i3, Intel® i3-1115G4E CPU, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB200-953-CEL-M	Fanless chassis with IB953EF-CEL, Intel® Celeron® 6305E CPU, 1x COM, 2x DDR4 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire type compatible with IEC62368-1/EN62368-1 [PN: A005PS090W0100700P]
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R] WiFi antenna kit [PN: A024MDWiFi0042400P (Intel® 9260) + SC2WiFi----A10M00R (WiFi Kit)]

Dimensions and Drawing

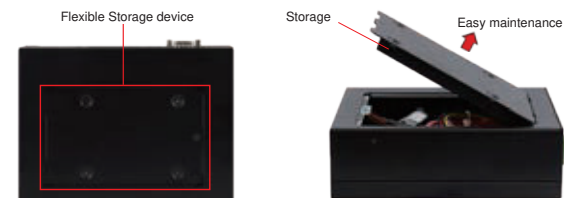




Rear I/O

Features

- Fanless system with IBASE IB919 3.5" Single Board Computer
- Onboard 8th Gen Intel® Core™ U-Series Processor
- Supports 2x M.2 sockets (E-key, CNVi / M-key, NVMe)
- 12V (-10%) ~ 24V (+10%) DC-in power Input
- 2x DDR4 SO-DIMM, Max.32GB
- 4x USB 3.1, 2x Intel® Gigabit LAN
- 1x COM ports, External GPIO
- 2x DisplayPort (1x by Type-C), TPM (2.0)
- Optional VESA mount bracket



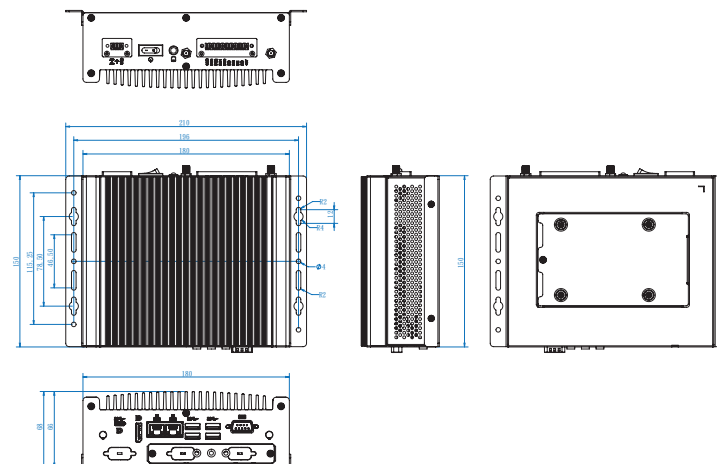
Specifications

System Mainboard	IB919AF-8665/ IB919AF-8365/ IB919EF-8145/ IB919EF-4305
CPU Type	Intel® Core™ i7 8665UE Processor Intel® Core™ i5 8365UE Processor Intel® Core™ i3 8145UE Processor Intel® Celeron® 4305UE Processor
System Speed	Up to 4.4GHz
Memory	2x 8GB DDR4-2666 SO-DIMM, Max.32GB
Front Panel External I/O	4x USB 3.1 2x DP 1x DB9 for COM#1 (RS232/422/485) 2x LAN
Rear Panel External I/O	1x power button 1x Digital I/O (4-in/4-out) 2x Antenna holes 1x HDD LED 1x 3-pin DC-in terminal block for 12V (-10%) ~ 24V (+10%)
Expansion Slots	2x M.2 (E-key, M-key)
Storage	1x 2.5" HDD or SSD
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 66mm (H) 7.08" (W) x 5.9" (D) x 2.6" (H)
Weight	1.5kg
Operating Temperature	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ASB200-919-i7	Fanless chassis with IB919AF-8665, Intel® i7-8665UE 1.7GHz CPU, 1x COM, 2x 8GB DDR4 memory, 1x 2.5" SATAIII 64GB TLC SSD, w/o 90W power adaptor and VESA mount bracket
ASB200-919-i5	Fanless chassis with IB919AF-8365, Intel® i5-8365UE 1.6GHz CPU, 1x COM, 2x 8GB DDR4 memory, 1x 2.5" SATAIII 64GB TLC SSD, w/o 90W power adaptor and VESA mount bracket
ASB200-919-i3	Fanless chassis with IB919EF-8145, Intel® i3-8145UE 2.2GHz CPU, 1x COM, 2x 8GB DDR4 memory, 1x 2.5" SATAIII 64GB TLC SSD, w/o 90W power adaptor and VESA mount bracket
ASB200-919-CEL	Fanless chassis with IB919EF-4305, Intel® Celeron® 4305UE 2.0GHz CPU, 1x COM, 2x 8GB DDR4 memory, 1x 2.5" SATAIII 64GB TLC SSD, w/o 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, DC-jack or bare wire type compatible with IEC62368-1/EN62368-1
SC2ASB2----0A1100R	WiFi antenna kit

Dimensions and Drawing





Rear I/O

Features

- Fanless system with IBASE IB916 3.5" Single Board Computer
- Onboard 6th Gen Intel® Core™ U-series Processor
- iSMART- for auto-scheduler and power resume
- 12V (-10%) ~ 24V (+10%) DC wide-range power input
- Supports 1x Mini PCI-E (full-size)
- Supports 1x 2.5" SATA HDD
- 4x USB 3.0, DP/HDMI, 1x DisplayPort
- Wall mount kit included

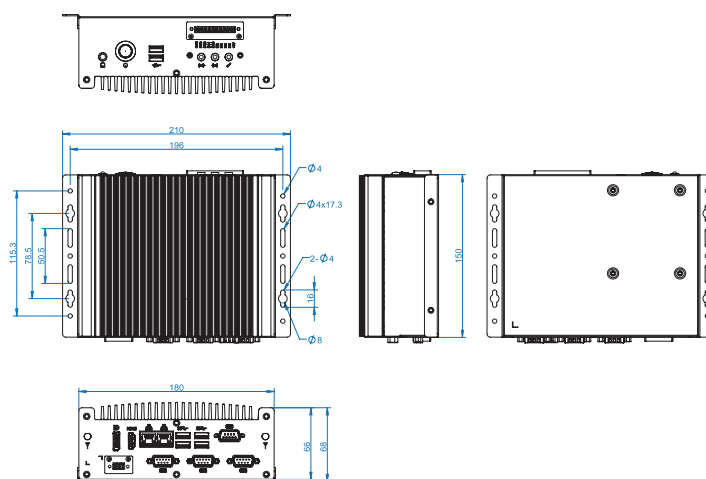
Specifications

System Mainboard	IB916AF-7600 / IB916AF-7300 / IB916F-7100
CPU Type	Intel® Core™ i7 7600U Processor Intel® Core™ i5 7300U Processor Intel® Core™ i3 7100U Processor
System Speed	Up to 2.8GHz
Memory	2x 4GB DDR4-2133 SO-DIMM, Max.32GB
Front Panel External I/O	1x power button 2x USB 2.0 1x Audio jack for Line-out / Line-in / MIC-in 1x HDD LED 1x Digital I/O (4-in / 4-out)
Rear Panel External I/O	4x USB 3.0 port 1x HDMI, 1x DisplayPort 1x RS232/422/485 port for COM#1 3x RS232 ports for COM#2/COM#3/ COM#4 2x RJ45 Gigabit Ethernet port 1x 3-pin DC-in terminal block for 12V (-10%)~24V (+10%)
Expansion Slots	1x Full-size Mini PCI-E socket (USB 2.0 + SATA)
Storage	1x 2.5" HDD or SSD
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 66mm (H) 7.09" (W) x 5.91" (D) x 2.6" (H)
Weight	1.8kg
Operating Temperature	0°C~45°C (32°F~113°F) (With HDD) -20°C~60°C (-4°F~140°F) (With SSD)
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating : 0.25Grms / 5~500Hz Non-operating : 1Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE / LVD / FCC Class B

Ordering Information

ASB200-916-i7	Fanless chassis with IB916AF-7600, Intel® i7-7600U 2.8GHz CPU, 4x COM, 2x 4GB DDR4 memory, 1x 2.5" 64GB MLC SSD, w/o 90W power adaptor and VESA mount bracket
ASB200-916-i5	Fanless chassis with IB916AF-7300, Intel® i5-7300U 2.6GHz CPU, 4x COM, 2x 4GB DDR4 memory, 1x 2.5" 64GB MLC SSD, w/o 90W power adaptor and VESA mount bracket
ASB200-916-i3	Fanless chassis with IB916F-7100, Intel® i3-7100U 2.4GHz CPU, 4x COM, 2x 4GB DDR4 memory, 1x 2.5" 64GB MLC SSD, w/o 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V @3.75) power adaptor, DC-jack or bare wire type, Compatible with IEC62368-1/EN62368-1
Optional Accessories	WiFi/BT antenna kit

Dimensions and Drawing





Rear I/O

Specifications

System Mainboard	IB915AF-6600 / IB915AF-6300 / IB915AF-6100
CPU Type	Intel® Core™ i7 6600U Processor Intel® Core™ i5 6300U Processor Intel® Core™ i3 6100U Processor
System Speed	2.6GHz / 2.4GHz / 2.3GHz
Memory	2x 2GB DDR3L-1600 SO-DIMM Memory, Max. 16GB
Front Panel External I/O	1x power button 2x USB 2.0 1x Audio jack for Line-out / Line-in / MIC-in 1x HDD LED 1x Digital I/O (4-in / 4-out)
Rear Panel External I/O	1x COM thru RJ50 connector (RS-232/422/485) 3x COM (RS232) 4x USB 3.0 ports 1x USB 3.1 port (Type-C) 1x DisplayPort 2x RJ-45 GbE connector 1x 3-pin DC-in terminal block for 12V (-10%)~24V (+10%)
Expansion Slots	1x Full-size Mini PCI-E socket
Storage	1x 2.5" HDD or SSD
Construction	Aluminum & Steel
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 66mm (H) 7.09" (W) x 5.91" (D) x 2.6" (H)
Weight	1.8kg
Operating Temperature	0°C~40°C (32°F~104°F) (With HDD) -10°C~50°C (14°F~122°F) (With SSD)
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating : 0.25Grms / 5~500Hz Non-operating : 1Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE / LVD / FCC Class B

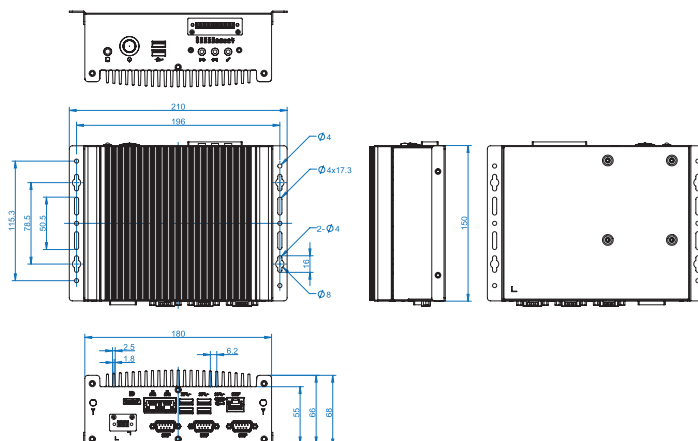
Features

- Fanless system with IBASE IB915 3.5" Single Board Computer
- Onboard 6th Gen Intel® Core™ U-series Processor
- iSMART- for auto-scheduler and power resume
- 12V (-10%) ~ 24V (+10%) DC wide-range power input
- Supports 1x Mini PCI-E (full-size)
- Supports 1x 2.5" SATA HDD
- 1x USB 3.1 port (Type-C), 4x USB 3.0 ports
- Wall mount kit included

Ordering Information

ASB200-915-i7	Fanless chassis with IB915AF-6600, Intel® i7-6600U 2.6GHz CPU, 4x COM, 2x 2GB DDR3L memory, 1x 2.5" 64GB MLC SSD, supports iAMT1.0, w/o 90W power adaptor and VESA mount bracket
ASB200-915-i5	Fanless chassis with IB915AF-6300, Intel® i5-6300U 2.4GHz CPU, 4x COM, 2x 2GB DDR3L memory, 1x 2.5" 64GB MLC SSD, supports iAMT1.0, w/o 90W power adaptor and VESA mount bracket
ASB200-915-i3	Fanless chassis with IB915F-6100, Intel® i3-6100U 2.3GHz CPU, 4x COM, 2x 2GB DDR3L memory, 1x 2.5" 64GB MLC SSD, w/o 90W power adaptor and VESA mount bracket
ASB200-915-i7-DC	Fanless chassis with IB915AF-6600, Intel® i7-6600U 2.6GHz CPU, 4x COM, 2x 2GB DDR3L memory, 1x 2.5" 64GB MLC SSD, 1x90W power adaptor, supports iAMT1.0, w/o VESA mount bracket
ASB200-915-i5-DC	Fanless chassis with IB915AF-6300, Intel® i5-6300U 2.4GHz CPU, 4x COM, 2x 2GB DDR3L memory, 1x 2.5" 64GB MLC SSD, 1x 90W power adaptor, supports iAMT1.0, w/o VESA mount bracket
ASB200-915-i3-DC	Fanless chassis with IB915F-6100, Intel® i3-6100U 2.3GHz CPU, 4x COM, 2x 2GB DDR3L memory, 1x 2.5" 64GB MLC SSD, 1x 90W power adaptor, w/o VESA mount bracket
90W power adaptor (optional)	90W (24V @3.75) power adaptor, DC-jack or bare wire type, Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing





Features

- Slim system with IBASE IB838 3.5" Single Board Computer
- Onboard Intel® N-series Processor
- Supports 2x M.2 sockets (B-key/E-key)
- 9V ~ 36V DC Wide-Range power input
- 1x DDR5 SO-DIMM, Max.16 GB
- 3x USB 3.2 + 1x USB Type-C, 2x Intel® 2.5G LAN
- 2x DisplayPort, External Digital I/O, fTPM
- Wall mount kit included

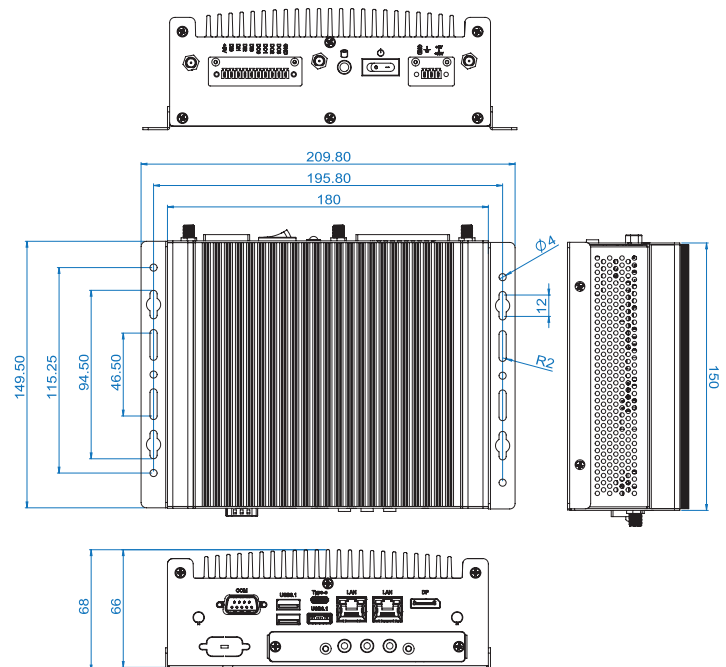
Specifications

System Mainboard	IB838F
CPU Type	Intel® N-Series
System Speed	Up to 1.25GHz
Memory	1x DDR5-4800 SO-DIMM, Max.16GB
Front Panel External I/O	1x power button 1x Digital I/O (4-in/4-out) 2x USB 2.0 1x HDD LED 1x 3-pin DC-in terminal block for 12V (-10%) ~ 24V (+10%)
Rear Panel External I/O	3x USB 3.2 1x USB Type-C 1x DisplayPort 1x DB9 for COM#1 1x DB9 for COM#2 2x 2.5G LAN
Expansion Slots	2x M.2 sockets (B-key/ E-key)
Storage	1x 2.5" HDD or SSD
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08" (W) x 5.9" (D) x 2.83" (H)
Weight	TBD
Operating Temperature	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ASB200-838-i3M	Fanless chassis with IB838-i3 w/ Intel® Atom i3-N305, 4x COM, 1x DDR5 memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
60W power adaptor (optional)	60W (12V@5A) power adaptor (bare wire type) Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing



CMI Series Chassis & Motherboard

CMI211 System



CMI212 System



CMI222 System



CMI300 System



Compatible Motherboard List

Model	CMI211	CMI212	CMI222	CMI300
MI999	V	V		
MI989	V			
MI992	V			
MI991	V	V		
MI990	V	V		
MI988				V
MI808			V	
MI997				V
MI1001				V

Comparison of CMI Series

System Width

7.8-inch
(198mm)



CMI212

7.87-inch
(200mm)



CMI300

11.81-inch
(300mm)



CMI211

11.81-inch
(300mm)



CMI222

System Depth

9.25-inch
(235mm)



CMI212

7.87-inch
(200mm)



CMI300

8.07-inch
(205mm)



CMI211

9.84-inch
(250mm)



CMI222



Features

- LGA1700 for 14th/13th/12th Gen Intel® Core™ desktop SoC processor
- 2x M.2 sockets (E-key and M-key)
- 2x DDR5-5600 SO-DIMM, Max.64GB
- Supports DP, HDMI, COM and USB 3.2
- 2x Intel® 2.5G LAN & 2x Intel® 10G LAN
- Supports Digital I/O, iAMT(16.1), TPM (2.0)
- +24V DC input

Specifications

System Mainboard	MI1001AF
CPU Type	14th/13th/12th Gen Intel® Core I / DT processors (RPL-S Refresh platform)
System Speed	Up to 5.8GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB
Front Panel External I/O	4x Antenna holes (reserved) power button with LED indicator
Rear Panel External I/O	4x USB 3.2 1x DisplayPort 1x HDMI 2x DB9 for COM (RS232/422/485) 2x 2.5G LAN 2x 10G LAN 1x 24V DC-input
Expansion Slots	2x M.2 sockets (E-key and M-key)
Storage	1x M.2 (M2280), supports NVMe
Construction	Aluminum & Steel 1x System fan
Chassis Color	Black
Mounting	Desktop & wall mounting bracket Optional VESA mounting kit
Dimensions	200mm(W) x 200mm(D) x 62mm(H) 7.87" (W) x 7.87" (D) x 2.44" (H)
Others	With active CPU cooler, Optional power adaptor Power Requirement: 24V DC-in Operating System: Windows 10 /11, Ubuntu
Weight	1.9 kg
Operating Temperature	0 °C ~ 45 °C (32°F~113°F)

Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5% ~ 90% @45°C (non-condensing)
Vibration	Operating: 1 Grms / 3~500Hz
Shock	Operating: 20G/11 ms Duration Non-operating: 40G/11 ms Duration
Certification	CE, FCC Class B & LVD

Ordering Information

CMI300-1001AF-10GM	(CMI) Embedded system with MI1001AF-10G & CPU cooler, w/o CPU/memory/SSD/Power adaptor, iAMT (16.1), mounting brackets (RoHS2)
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Rear I/O

Features

- AMD Ryzen™ Embedded V1807B on board
- Dual-channel memory, up to 32GB DDR4
- Supports HDMI & DisplayPort
- 2x Gigabit Ethernet, 4x USB 3.1, 4x COM
- Wall mount kit included, optional VESA mount kit
- 1x Mini PCI-E socket, 1x M.2 (M-key)

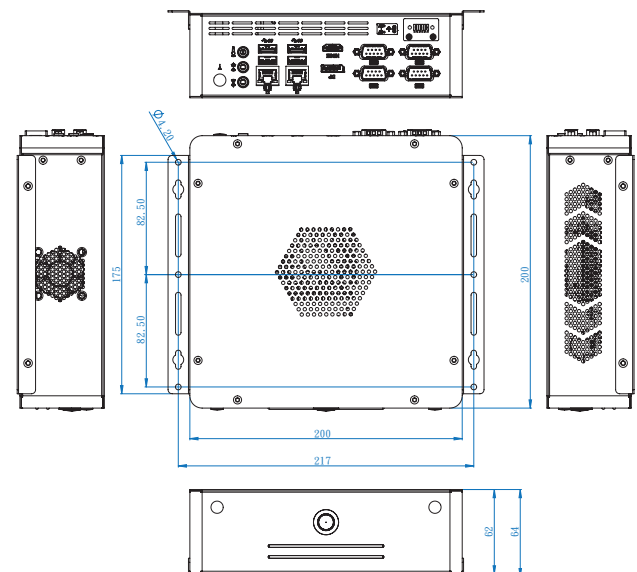
Specifications

System Mainboard	MI988F
CPU Type	AMD Ryzen™ Embedded V1000 Series
PCH	N/A
System Speed	Up to 3.8GHz
Memory	2x 4GB DDR4 SO-DIMM, Max. 32GB
Front-side Panel I/O	2x Antenna hole reserved power button
Rear-side Panel I/O	2x RS232/422/485 for COM#1~#2 2x RS232 for COM#3~#4 4x USB 3.1 ports 2x RJ-45 Gigabit Ethernet port 1x HDMI+DisplayPort 1x Audio port for [Line-in / Line-out / Mic-in] 1x Antenna hole reserved
Storage Interface	1x 2.5" SSD
Expansion Slots	1x Mini PCI-E socket, 1x M.2 (M Key:2280)
Power Supply	84W power adaptor
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop or wall mount bracket Optional VESA mount kit
Dimensions	200mm (W) x 200mm (D) x 62mm (H) 7.87" (W) x 7.87" (D) x 2.44" (H)
Weight	1.8kg
Operating Temperature	0°C~45°C (32°F~113°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 0.25Grms / 5~500Hz Non-operating: 1Grms / 5~500Hz
Certification	CE/FCC Class A

Ordering Information

CMI300-988-1807	Embedded System with MI988F-1807 (AMD V1807B 3.35/3.8GHz on board), w/ 128GB 2.5" SSD, 1x 4GB DDR4 memory, 84W power adaptor (RoHS2) Compatible with IEC62368-1/EN62368-1
CMI300-988-1605	Embedded System with MI988F-1605 (AMD V1605B 2.0/3.6GHz on board), w/ 128GB 2.5" SSD, 1x 4GB DDR4 memory, 84W power adaptor (RoHS2) Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing





Features

- LGA1700 13th/12th Gen Intel® Core™ desktop SoC processor compatible
- 2x DDR5 SO-DIMM sockets, Max. 64GB for DDR5-5600 /4800 (Non-ECC)
- Supports 2x DisplayPorts & 1x HDMI
- 2x Intel® 2.5G LAN, 6x USB 3.2, 2x COM, 2x NVMe for storage devices
- 4x M.2 sockets (2x M-key/ B-key/ E-key)
- Wall mount kit included, optional VESA mount kit
- Dimension: 200(W) x 200(D) x 62(H) mm

Specifications

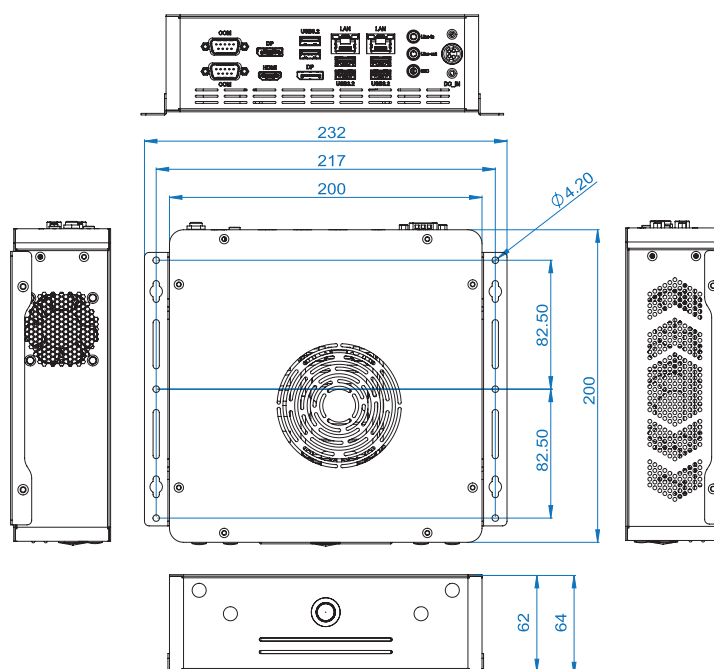
System Mainboard	MI997AF
CPU Type	13th/12th Intel® core™ desktop SoC processors (45W or 15W TDP)
System Speed	Up to 4.8GHz
Memory	2x DDR5-5600/4800 SO-DIMM, Max. 64GB
Front Panel External I/O	4x Antenna Hole reserved power button with LED indicator
Rear Panel External I/O	2x RS232/422/485 port for COM#1 ~COM#2 2x DisplayPort + 1x HDMI 6x USB 3.2 ports 2x RJ-45 2.5G LAN 3-port Audio Jack 1x DC-jack
Expansion Slots	1x M.2 B-key 3052 (LTE/5G/4G) 1x M.2 E-key 2230 (WiFi/BT) 2x M.2 M-key 2280 (NVMe)
Storage	2x M.2 2280 M-key for NVMe SSD
Construction	Aluminum & Wteel
Chassis Color	Black
Mounting	Desktop & wall mount bracket Optional VESA mount kit
Dimensions	200mm(W) x 200mm(D) x 62mm(H) 7.87" (W) x 7.87" (D) x 2.44" (H)
Others	With Active CPU Cooler, Optional Power adaptor Power Requirement: +12~+24V DC-in Operating System: Windows 10 /11, Ubuntu
Weight	1.9 kg
Operating Temperature	0 °C ~ +45 °C (32°F~113°F)
Storage Temperature	-20°C~+80°C (-4°F~176°F)

Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 1 Grms / 3~500Hz
Shock	Operating: 20G/11 ms Duration Non-operating: 40G/11 ms Duration
Certification	CE, FCC Class B & LVD

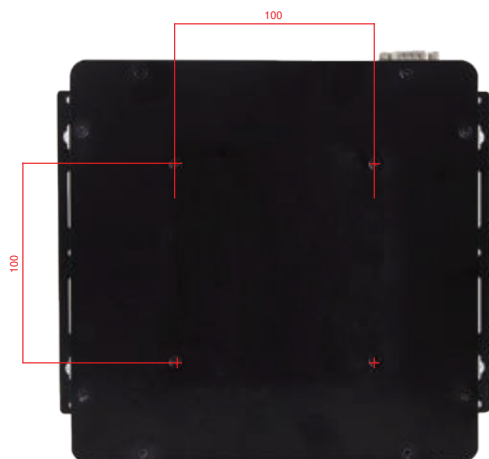
Ordering Information

CMI300-997M	(CMI) Embedded system with Mi997AF & CPU cooler, w/o CPU/memory/SSD/Power adaptor, Support iAMT (16.1), mounting brackets (RoHS2)
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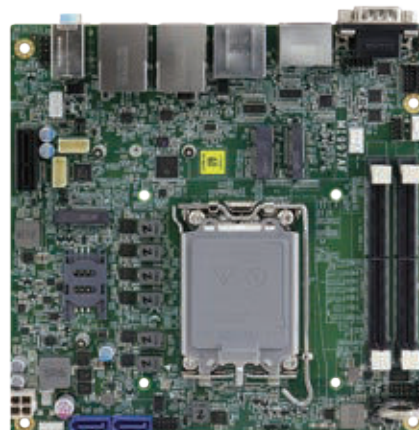
Dimensions and Drawing



Desk mount / VESA mount



MI997 Motherboard



Recommended Processor List

Processor	Core number	Base ~ Turbo (Max.)	TDP	L3 Cache	Use Condition Embedded
i7-12800HL	14	2.40 GHz ~ 4.80 GHz	45 W	24MB	Yes (10 years)
i7-12700HL	14	2.30 GHz ~ 4.70 GHz	45 W	24MB	Yes (10 years)
i5-12600HL	12	2.70 GHz ~ 4.50 GHz	45 W	18MB	Yes (10 years)
i5-12500HL	12	2.50 GHz ~ 4.50 GHz	45 W	18MB	Yes (10 years)
i3-12300HL	8	2.00 GHz ~ 4.40 GHz	45 W	12MB	Yes (10 years)
i7-1265UL	10	1.80 GHz ~ 4.80 GHz	15 W	12MB	Yes (10 years)
i7-1255UL	10	1.70 GHz ~ 4.70 GHz	15 W	12MB	Yes (10 years)
i5-1245UL	10	1.60 GHz ~ 4.40 GHz	15 W	12MB	Yes (10 years)
i5-1235UL	10	1.30 GHz ~ 4.40 GHz	15 W	12MB	Yes (10 years)
i3-1215UL	6	1.20 GHz ~ 4.40 GHz	15 W	10MB	Yes (10 years)
Celeron® Processor 7305L	5	1.10 GHz ~ 1.10 GHz	15 W	8MB	Yes (10 years)
Core™ 3 100HL	8	2.1 GHz ~ 4.6 GHz	45 W	12MB	Yes (10 years)
Core™ 3 100UL	6	1.2 GHz ~ 4.5 GHz	15 W	10MB	Yes (10 years)
Core™ 5 120HL	12	2.6 GHz ~ 4.7 GHz	45 W	18MB	Yes (10 years)
Core™ 5 120UL	10	1.3 GHz ~ 4.6 GHz	15 W	12MB	Yes (10 years)
Core™ 5 130HL	12	2.8 GHz ~ 4.8 GHz	45 W	18MB	Yes (10 years)
Core™ 5 130UL	10	1.6 GHz ~ 4.7 GHz	15 W	12MB	Yes (10 years)
Core™ 7 150HL	14	2.5 GHz ~ 5 GHz	45 W	24MB	Yes (10 years)
Core™ 7 150UL	10	1.7 GHz ~ 5 GHz	15 W	12MB	Yes (10 years)
Core™ 7 160HL	14	2.5 GHz ~ 5.2 GHz	45 W	24MB	Yes (10 years)
Core™ 7 160UL	10	1.8 GHz ~ 5.2GHz	15 W	12MB	Yes (10 years)

CMI212 System Family

Mini-ITX System

Expandable System with IBASE Mini-ITX Motherboard

CMI212-999 / CMI212-991 / CMI212-990



Rear I/O



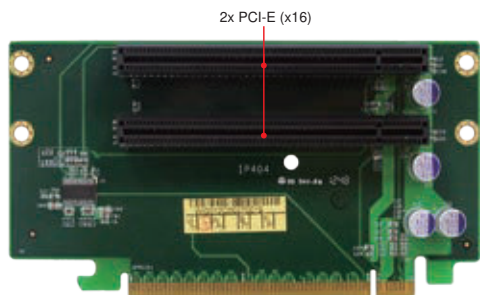
Specifications

	Model	CMI212-999		CMI212-991	CMI212-990
System	System Mainboard	MI999AFE-Q		MI991AF	MI990VF/MI990EF
	Processor	10th Gen Intel® Core™ i7/i5/i3/ Pentium® / Celeron® desktop processors		6th Gen Intel® Core™ i7/i5/i3/ Pentium® / Celeron® desktop processors	6th Gen Intel® Core™ i7/i5/i3/ Pentium® / Celeron® mobile processors
	PCH	MI999AFE-Q: Intel® Q470E		Intel® Q170	MI990VF: Intel® CM236 MI990EF: Intel® HM170
	System Speed	Up to 4.8 GHz		Up to 4.0 GHz	Up to 3.7 GHz
	Memory	2x DDR4-2933/2666 SO-DIMM		2x DDR4-2133 SO-DIMM	2x DDR4-2133 SO-DIMM
I/O Interface	Front-side Panel I/O	1x Power LED, 1x HDD LED 1x power button, 1x reset button 2x USB 2.0 ports			
	Rear side Panel I/O	2x RS232 ports via pin header 2x Antenna hole 1x DC-jack for power input 2x COM DB9 1x DVI 1x HDMI 1x DisplayPort 6x USB 2x LAN RJ45 1x 3-ports audio jack			
Storage Interface	SATA	1x 2.5" HDD drive bay			
	mSATA / M.2	1x M.2	1x mSATA		1x mSATA
Expansion Slots	PCI-E Expansion	2x PCI-E (x16) expansion slots (2x PCI-E (x8) signal)			
	Add-on Card Max. Size	111mm(W) x 185mm(D) x 17mm(H) (For MI990) 111mm(W) x 185mm(D) x 11mm(H) (For MI999/MI991)			
Power Supply	AC Adaptor	330W power adaptor Input voltage: 100V~240V Input frequency: 47Hz~63Hz Output voltage: 24V Output current: 0A to 12.5A Compatible with IEC62368-1/EN62368-1		150W power adaptor Input voltage: 100V~240V Input frequency: 47Hz~63Hz Output voltage: 12V Output current: 0A to 12.5A Compatible with IEC62368-1/EN62368-1	
Mechanical	Construction	SGCC			
	Chassis Color	Black			
	Mounting Type	Wall mount & Desktop			
	Dimensions	198mm (W) x 235mm (D) x 118mm (H) 7.8" (W) x 9.25" (D) x 4.65" (H)			
	Weight	3kg	3kg		2.7kg
Environmental	Operating Temperature	0°C~45°C (32°F~113°F)			
	Storage Temperature	-20°C~80°C (-4°F~176°F)			
	Humidity	5% ~ 90% @45C (non-condensing)			
	Vibration	Non-Operating : 1.0 grms / 5~500Hz / random Operating : 0.25 grms / 5~500Hz / random			
	Certification	CE / LVD / FCC Class A (Pre-scan only)			

CMI212 System Family

Expansion Cards

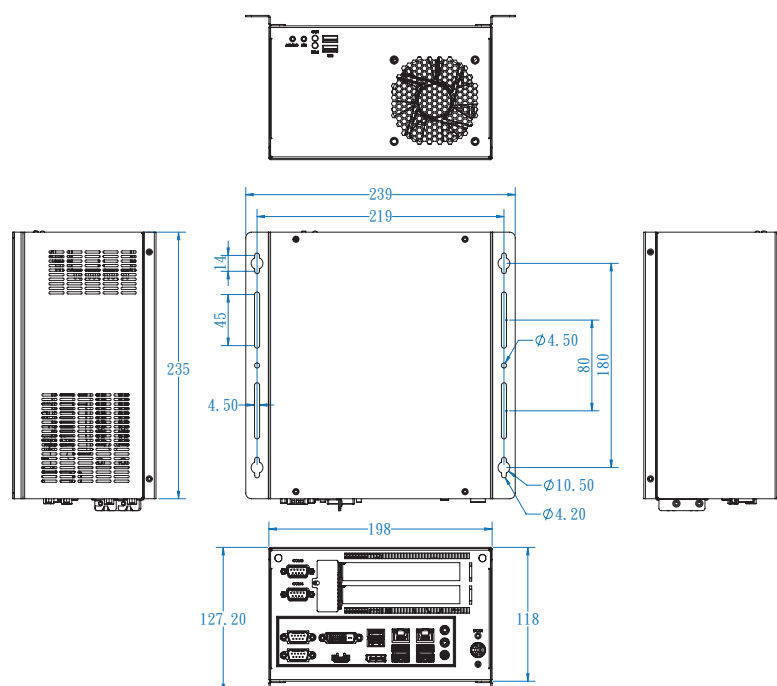
IP404



Ordering Information

CMI212-999AFM	Chassis with MI999AFE-Q + IP404 riser card, w/o CPU, HDD, memory, w/ 330W power adaptor, 2.5" HDD holder, 2x PCI-E (x16) expansion slots (with PCI-E (x8) signal) (RoHS2)
CMI212-991AFM	Chassis with MI991AF + IP404 riser card, w/o CPU, HDD, memory, w/ 150W power adaptor, 2.5" HDD holder, 2x PCI-E (x16) expansion slots (with PCI-E (x8) signal) (RoHS2)
CMI212-991EFM	Chassis with MI991EF + IP404 riser card, w/o CPU, HDD, memory, w/ 150W power adaptor, 2.5" HDD holder, 2x PCI-E (x16) expansion slots (with PCI-E (x8) signal) (RoHS2)
CMI212-990-6820M	Chassis with MI990VF-6820 + IP404 riser card, w/o HDD, memory, w/ 150W power adaptor, 2.5" HDD holder, 2x PCI-E (x16) expansion slots (with PCI-E (x8) signal) (RoHS2)
CMI212-990-6440M	Chassis with MI990VF-6440 + IP404 riser card, w/o HDD, memory, w/ 150W power adaptor, 2.5" HDD holder, 2x PCI-E (x16) expansion slots (with PCI-E (x8) signal) (RoHS2)
CMI212-990-6100M	Chassis with MI990EF-6100 + IP404 riser card, w/o HDD, memory, w/ 150W power adaptor, 2.5" HDD holder, 2x PCI-E (x16) expansion slots (with PCI-E (x8) signal) (RoHS2)

Dimensions and Drawing



CMI211 System Family

Mini-ITX System

Expandable System with IBASE Mini-ITX Motherboard

CMI211-999 / CMI211-992VF-7820 / CMI211-991 / CMI211-990



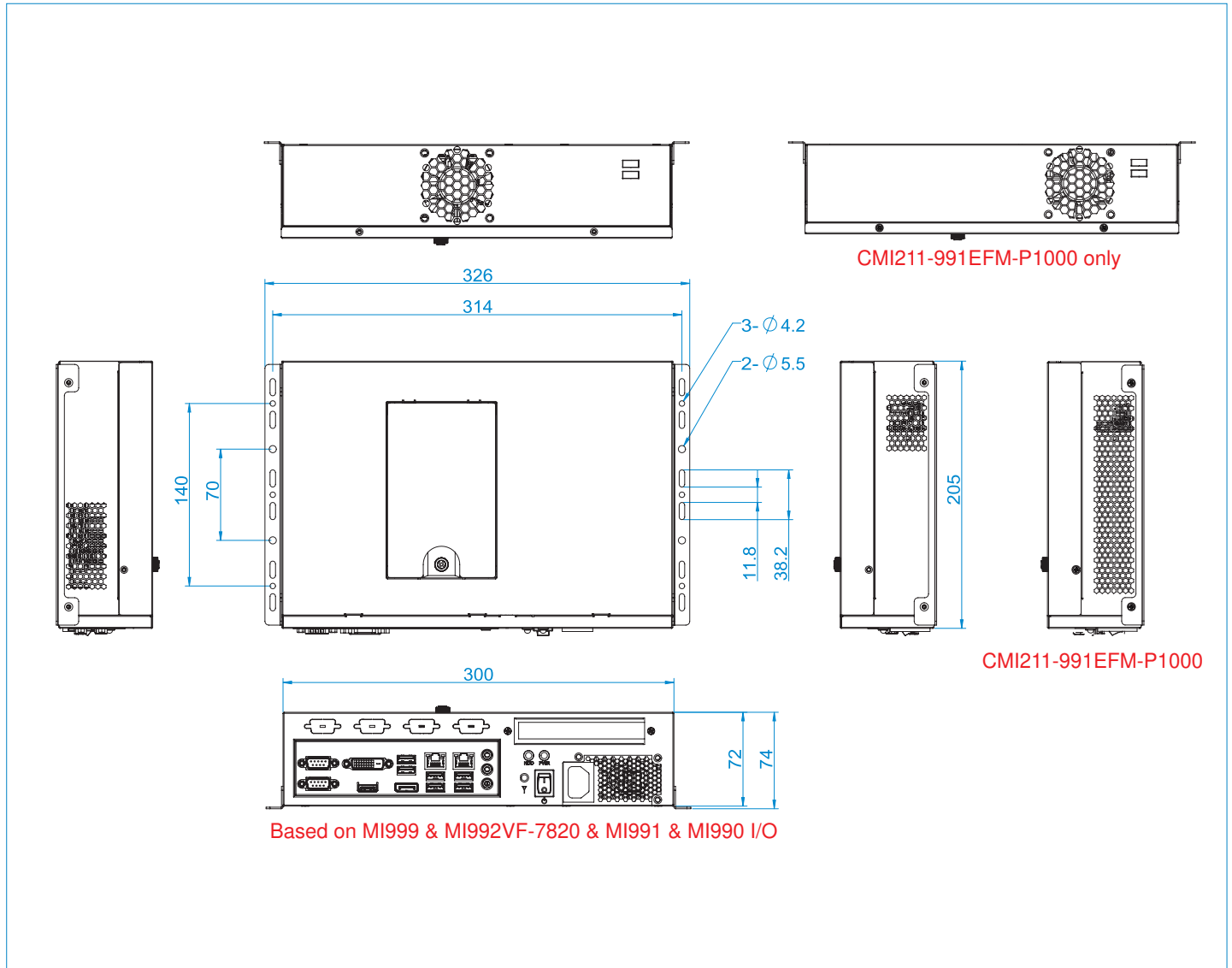
Rear I/O (Based on MI999 & MI992VF-7820 & MI991 & MI990 I/O)

Specifications

Model		CMI211-999	CMI211-992VF-7820	CMI211-991	CMI211-990
System	System Mainboard	MI999AF/ MI999EF	MI992VF	MI991AF/MI991VF	MI990VF/MI990EF
	Processor	10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop processors	7th Gen Intel® Core™ i7-7820EQ Processors	6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop processors	6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile processors
	PCH	MI999AF: Intel® W480E MI999EF: Intel® H420E	Intel® CM238	MI991AF: Intel® Q170 MI991EF: Intel® H110	MI990VF: Intel® CM236 MI990EF: Intel® HM170
	System Speed	Up to 4.7 GHz	Up to 3.7 GHz	Up to 4.0 GHz	Up to 3.7 GHz
	Memory	2x DDR4-3200 SO-DIMM	2x DDR4 -2400 SO-DIMM	2x DDR4-2133 SO-DIMM	2x DDR4-2133 SO-DIMM
I/O Interface	Front-side Panel I/O	2x USB 2.0 ports 2x Antenna hole	2x USB 2.0 ports		
	Rear-side Panel I/O	1x AC-inlet, 1x power button 1x Power LED, 1x HDD LED Based on different motherboard I/O ports	1x AC-inlet, 1x power button 1x Power LED, 1x HDD LED 1x Antenna hole Based on different motherboard I/O ports		
Storage Interface	SATA	1x 2.5" HDD drive bay			
	M.2 / mSATA	1x M.2 (MI999AF only)	1x mSATA	1x mSATA	1x mSATA
Expansion Slots	PCI-E Expansion	1x PCI-E (x16) expansion slot			
	Add-on card Max. Size	111mm(W) x 168mm(D) x 18mm(H)			
Power Supply	ATX Power	Industrial 250W ATX power supply Input voltage: 100V ~ 240V Input frequency: 47Hz ~ 63Hz Compatible with IEC62368-1/EN62368-1			
Mechanical	Construction	SECC			
	Chassis Color	Black			
	Mounting Type	Wall mount & Desktop			
	Dimensions	300mm (W) x 205mm (D) x 72mm (H) 11.81" (W) x 8.07" (D) x 2.83" (H)			
	Weight	TBD	2.91kg	3.1kg	2.8kg
Environmental	Operating Temperature	0°C~45°C (32°F~113°F)			
	Storage Temperature	-20°C~80°C (-4°F~176°F)			
	Humidity	5% ~ 90% @45C (non-condensing)			
	Vibration	Non-Operating : 1.0 grms / 5~500Hz / random Operating : 0.25 grms / 5~500Hz / random			
	Certification	CE / LVD / FCC Class B (Pre-scan only)			

CMI211 System Family

Dimensions and Drawing



Ordering Information

CMI211-999AFM	Chassis with MI999AFE-W (W480E) + IP119 riser card, w/o HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-999EFM	Chassis with MI999EFE-H (H420E) + IP119 riser card, w/o HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-992VF-7820M	Chassis with MI992VF-7820 + IP119 riser card, w/o CPU, HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-991AFM	Chassis with MI991AF + IP119 riser card, w/o CPU, HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-991EFM	Chassis with MI991EF + IP119 riser card, w/o CPU, HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-990-6820M	Chassis with MI990VF-6820E + IP119 riser card, w/o HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-990-6440M	Chassis with MI990VF-6440E + IP119 riser card, w/o HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)
CMI211-990-6100M	Chassis with MI990EF-6100E + IP119 riser card, w/o HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCI-E (x16) expansion slot (RoHS2)

Embedded Function Cards

Riser Cards



IP245

Features

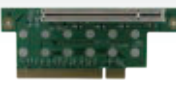
- 130mm x 60mm
- IT8893E chipset
- PCI-E (x1) interface to 2x PCI slot



IP246

Features

- 30mm x 60mm
- IT8893E & PEX8603 chipset
- 1x PCI-E (x1) to PCI + 1x PCI-E (x1) slot



IP271

Features

- 129.97mm x 51.25mm
- 1x PCI interface to PCI slot



IP340

Features

- 110mm x 62.5mm
- 2x PCI interface to PCI slot



IP404

Features

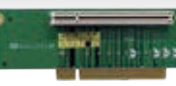
- 139.7mm x 75.74mm
- PCI-E (x16) interface to 2x PCI-E (x8)



IP405

Features

- 139.25mm x 62.78mm
- PCI-E (x16) interface to 2x PCI-E (x8)



IP115

Features

- 139.7mm x 51.38mm
- 1x PCI interface to PCI



IP116-R

Features

- 139.7mm x 55.34mm
- 1x PCI-E (x16) interface to PCI-E (x16) slot



IP118

Features

- 119.63mm x 64.5mm
- 1x PCI-E (x16) interface to PCI-E (x16) slot



IP119

Features

- 123.96mm x 55.50mm
- 1x PCI-E (x16) interface to PCI-E (x16) slot

Embedded Function Cards

Riser Card



IP155

Features

- 139.7mm x 75.74mm
- ASM1083 chipset
- 1x PCI interface to 2x PCI slot

Daughter Boards



ID107

Features

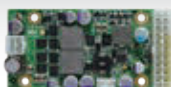
- 55mm x 47mm
- Amplifier board
- TPA3110D2 on board



ID600

Features

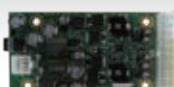
- 90 mm x 70mm
- +19V ~ +24V DC to DC converter
- 300W ATX power board



ID452

Features

- 90 mm x 45mm
- +12V ~ +24V DC to DC converter
- 120W ATX power board



ID450-R

Features

- 90 mm x 45mm
- +12V only DC to DC converter
- 120W ATX power board

Function Card



IB-CFAST

Features

- 72.4mm x 57.5mm
- SATA + power connector (CFAST socket)

Mini PCI-E Cards with Expansion

IBD182



Features:

- PCI-E to 2x RS232
- XR17V352 chipset
- 50.95mm x 30mm

IBD183



Features:

- USB to UART, 1x RS232+1x RS422/485
- XR21V1412 chipset
- 50.95mm x 30mm

IBD184



Features:

- PCI-E to 4x RS232
- XR17V354 chipset
- 50.95mm x 30mm

IBD185



Features:

- USB to GPIO
- 16-in /16-out
- STM32F103V8 chipset
- 50.95mm x 30mm

IBD186



Features:

- PCI-E to 2x RS232 w/ isolation
- XR17V352 & 2x LTM2882CY-3 chipset
- 50.95mm x 30mm

IBD188



Features:

- PCI-E to 8x RS232
- XR17V358 chipset
- 50.95mm x 30mm

IBD190



Features:

- PCI-E to 1x GbE LAN
- 1x Intel® I211-AT chipset
- 50.95mm x 30mm

IBD192



Features:

- PCI-E to 2x GbE LAN
- 2x Intel® I211-AT or 2x Intel® I210-AT chipset
- 50.95mm x 30mm

IBD193



Features:

- PCI-E to MRAM storage
- 1x MR2A16ACYS35 chipset
- 50.95mm x 30mm

IBD194



Features:

- USB to 2nd VGA Display
- Resolution up to 1920x1080 (Max.)
- DisplayLink DL-165 chipset
- 50.95 mm x 30 mm

IBD195



Features:

- PCI-E to 2x CAN Bus
- Dual channel isolation
- 50.95mm x 30mm

IBD196



Features:

- Mini-PCI-E to M.2 E key
- 54.5mm x 30mm

[illegible]