Vol.07

INTELLIGENT SYSTEMS

iBASE

www.ibase.com.tw

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About IBASE

HQ
Taipei, Taiwan

Stock Code
TPEx 8050
(Since 2003)

Chairman
C. S. Lin

Capital
US$ 66.2M

Revenue
US$ 161M
(2024/Group)

Employees
1,010
(Group)
770
(IBASE HQ)

Design and Manufacturing of Robust Computing Platforms

Company Profile

IBASE Technology specializes in the design and manufacture of robust industrial PC products and has been serving the global market since its establishment in 2000. All manufacturing and quality control operations are conducted in IBASE's own facilities in Taiwan, which are certified to ISO 9001, ISO 13485, ISO 14001, and ISO 27001 standards. The company's current product offerings include x86 and RISC-based industrial motherboards, embedded systems, Edge AI computers, panel PCs, network appliances, and digital signage players. IBASE is publicly listed on the Taipei Exchange (TPEx: 8050) and has become a leading global provider of innovative industrial and embedded computing solutions.

UK Herts

Vietnam Vinh Phuc

Japan Tokyo

Headquarters

Taiwan Taipei

USA Sunnyvale

Italy Domodossola

Singapore

China Shanghai

Core Competence – R&D Design Capabilities

IBASE excels in delivering advanced R&D design capabilities through a team of experienced, reliable, and highly skilled engineers. Our core expertise lies in adaptive innovation and customized design solutions tailored to diverse industry requirements. By leveraging rapid prototyping and flexible design processes, we help customers accelerate time-to-market and gain a competitive edge in today's fast-evolving technology landscape. From concept to completion, IBASE prioritizes precision, efficiency, and reliability—making us a trusted partner for businesses seeking advanced industrial computing solutions.

Experienced, Reliable & Highly Skilled Engineering Team

Adaptive Innovation & Custom Design Capabilities

Rapid Prototyping & Flexible Design for Faster Time-to-Market

Core Competence
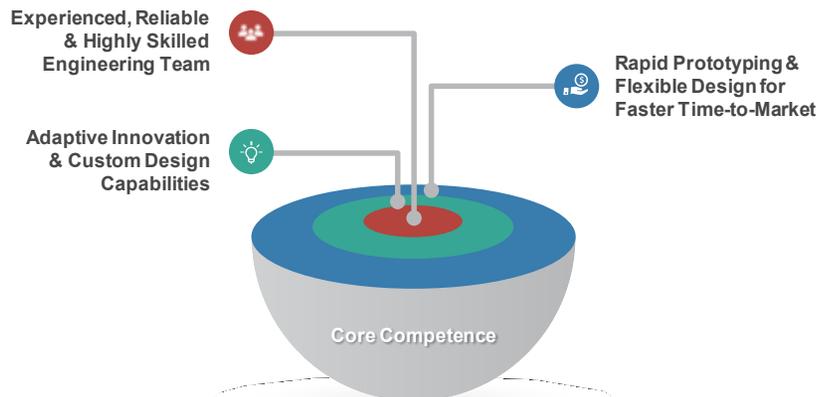
Design & Manufacturing Services

Established to become a leading global provider of embedded board and system solutions, IBASE manufactures and supplies cutting-edge products based on the latest technologies to meet market demands. Our R&D and product management teams have the expertise to design and develop innovative products that meet customer requirements and design specifications. We place great importance on research and development, investing heavily in manpower and resources to consistently deliver high-quality, innovative products. IBASE is also committed to environmental compliance by working to prevent pollution through the avoidance of banned or restricted substances in our production processes and products, helping our customers address their environmental challenges.

Inputs	Product Management	Outputs
Customer Requirements		Hardware Design — Electronic, Mechanical & Thermal Designs
Market Trend	**Product Management** — By Outstanding Product Management Team	Software Design — Embedded Controller, BIOS, IPMI, FPGA, CPLD and Embedded OS Designs
Technology Trend		Manufacturing — Sanchung, Hsinchuang and Pingzhen Manufacturing Sites in Taiwan
Research for Improvement		Logistics — Flexible Procurement & Logistics Management

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
ISO 9001 | ISO 14001 | ISO 13485 | GREAT ISO 27001 | IAS | CE | FC | CCC | UL

Our ESG Commitments

Making a positive contribution to benefit the communities and society.

Adopting energy saving and carbon reduction measures to reduce our impact on the environment.

Committing to economic development and strengthening governance practices.

SOCIAL

ENVIRONMENTAL

GOVERNANCE
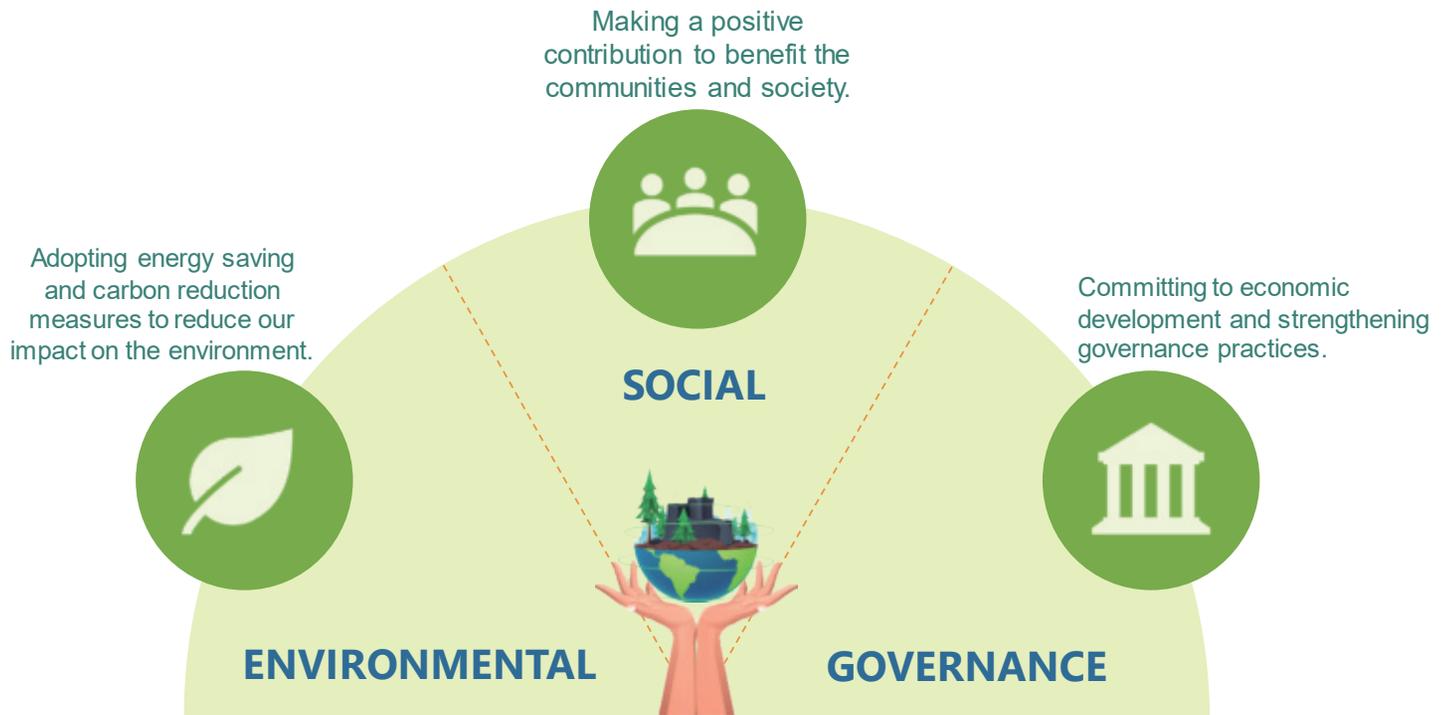
Sustainable Development Goals (SDGs)

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
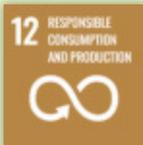
IBASE Edge AI Products Selection Guide

Product		Architecture		Form Factor	
Category	Model No.	x86	RISC	Board	System
Edge AI Computer	EC3000		NVIDIA®		v
	EC3020		NVIDIA®		v
	EC3100		NVIDIA®		v
	EC3500		NVIDIA®		v
	ISR215F		NXP		v
	ISR500		MediaTek		v
	CMI211-1005	Intel®			v
	ASB200-962U	Intel®			v
	ASB210-962H	Intel®			v
	ASB210-953	Intel®			v
	AMI242	Intel®			v
	MAF801	Intel®			v
	SI-624-AI	Intel®			v
	AES100	Intel®			v
Edge AI Transportation System	MPT-3100V-AI	Intel®			v
Edge AI Server	INA8505	Intel®			v
	ES1001	AMD			v
	ES1002	AMD			v
AI Edge Board	MI1005	Intel®		Mini-ITX	
	IB962	Intel®		3.5 SBC	
	MBB1001	AMD		ATX	
	MBB1002	AMD		eATX	
	IB301	AMD		3.5" SBC	
	IBR500		MediaTek	3.5" SBC	
	IBR215		NXP	2.5" SBC	
	IBR300		NXP	2.5" SBC	
	RM-N8MP		NXP	SMARC	
	RM-N95		NXP	SMARC	
	RON-956		NXP	OSM Size L	

AI Inference Computing Power						OS	
TOPS (Optional)	CPU	NPU	GPU (MXM)	GPU (PCIe x16)	AI Accelerator (Module)	Windows	Linux
20 ~ 40	Jetson™						Jetpack 6.1
67 ~ 157	Jetson™						Jetpack 6.2
34 ~ 157	Jetson™						Jetpack 6.2
200 ~ 275	Jetson™						Jetpack 6.2
2.3	i.MX 8M Plus	Built-in					Yocto5, Android14, Debian12
3.2	Genio	Built-in					Yocto5, Android14, Ubuntu 22.04
36	Core™ Ultra	Built-in			Via M.2 slot	Win11	Ubuntu 24.10
12	Core™ Ultra	Built-in			Via M.2 slot	Win11	Ubuntu 24.04
12	Core™ Ultra	Built-in			Via M.2 slot	Win11	Ubuntu 24.04
26	Core™				Via M.2 slot	Win10	Ubuntu 20.04
11	Core™			1	Via M.2 slot	Win11	Ubuntu 22.04
	Core™			2	Via M.2 slot	Win11	v
	Core™		1			Win10	v
	Core™			1		Win11	Ubuntu 22.04
26	Atom™				Onboard	Win11	Ubuntu 22.04
	Xeon® D			1			v
	Ryzen™			1		Win11 Win Server 2022	Ubuntu 22.04
	EPYC™			5		Win Server 2022 Win Server 2025	Ubuntu 22.04
36 ~ 99	Core™ Ultra	Built-in			Via M.2 slot	Win11	Ubuntu 24.10
36	Core™ Ultra	Built-in			Via M.2 slot	Win11	Ubuntu 24.04
	Ryzen™			1		Win11 Win Server 2022	Ubuntu 22.04
	EPYC™			5		Win Server 2022 Win Server 2025	Ubuntu 22.04
39	Ryzen™					Win11	Ubuntu 22.04
3.2	Genio	Built-in					Yocto5, Android14, Ubuntu 22.04
2.3	i.MX 8M Plus	Built-in					Yocto5, Android14, Debian12
0.5	i.MX 93	Built-in					Yocto5
2.3	i.MX 8M Plus	Built-in					Yocto4
2	i.MX 95	Built-in					Yocto5
2	i.MX 95	Built-in					v

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.

ACS200
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ASB100-PI800
P. 88

Intelligent Transportation Gateway

IBASE intelligent transportation systems can be deployed at various points in transport networks 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.

AMI242
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AGS104L
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ACS100
P. 48

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
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ARS200
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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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CMI300-1001
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Comparison Table

Models		EC3000	EC3020	EC3100	EC3500
System	Processor	Orin™ NX 8GB/Orin Nano™ 8GB/4GB: 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/Orin Nano™ 8GB: 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/Orin Nano™ 8GB/4GB: 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	N/A
	Memory	Orin™ NX 8GB: 8GB 128-bit LPDDR5 102.4GB/s Orin Nano™ 8GB: 8GB 128-bit LPDDR5 102 GB/s Orin Nano™ 4GB: 4GB 64-bit LPDDR5 51 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 102 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 102 GB/s Orin Nano™ 4GB: 4GB 64-bit LPDDR5 51 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	fixed
	Graphics	Orin™ NX 8GB, Orin 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	Orin™ NX 16GB/8GB, Orin Nano™ 8GB: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores	Orin™ NX 16GB/8GB, Orin 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 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	Orin™ NX: HDMI 2.1 Orin Nano™: HDMI 1.4	HDMI 2.1
	Ethernet	1x GbE	2x Gb LAN	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 20 pin terminal support 1x UART, 1x CAN, 1x I²C	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	2x USB 3.2 Type-A 1x USB 2.0 type C for recovery	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	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	1x 20 pin terminal support 4x GPIOs	4x DI + 4 x DO (pin1 with isolation output 5V @ 0.5A)	N/A
Storage Interface	SATA HDD	N/A	N/A	N/A	N/A
	mSATA/M.2	1x M.2 2230 1x M.2 2242 NVMe (Default)	1x M.2 2280	1x M.2 2280	1x M.2 2280 1x eMMC
Expansion Slots	PCI Express	N/A	N/A	N/A	N/A
	Mini PCIe/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 E-key 2230 for Wi-Fi 1x M.2 2280 M-key NVMe	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	12V~24V DC-in	9V~36V DC-in	9V~36V DC-in
	Power Connector	2-pin terminal block	4-pin terminal block	Lockable power connector	4-pin terminal block
	Power Protection	N/A	N/A	N/A	N/A
Mechanical	Dimensions	130mm x 102mm x 47.5mm	126mm x 96mm x 73.9mm	220mm x 174mm x 80mm	150mm x 120mm x 70mm
	Weight	0.8 kg	1 kg	3 kg	1.35 kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Black and Red	Black and Red	Black and Red	Black and Red
	Mounting	Wall mount, DIN rail	Wall mount	Wall mount	Wall mount
Environmental	Operating Temperature	-15°C~55°C (-5°F~131°F)(Target)	-25°C~60°C (-13°F~140°F)	-20°C~60°C (-40°F~140°F)	0°C ~ 50 °C (32°F~122°F)
	Storage Temperature	-40°C~85°C (-40°F~185°F)	-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 B	CE/FCC Class A	CE/FCC Class A	CE, FCC & LVD
	Others	N/A	10-pin: Supports OOB management via OOB module 40-pin wafer: Supports PSE/5G card functions via daughter board (Optional)	N/A	1x MicroSD slot
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Comparison Table

Models		AES100	AES200	MAF801	SI-624-AI
System	Processor	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors	Intel® Core™ 9/7/5/3 Processors Series 2 (Bartlett Lake-S)	14th/13th Gen Intel® Core™ i7/i5/i3 Processors TDP 35/65W	Intel® 12th/13th Gen Intel® RPL-S Core™ Processors
	PCH	Intel® R680E PCH	Intel® R680E PCH	Intel® R680E	N/A
	Memory	2x DDR5-5600/4800 SO-DIMM	2x DDR5-5600/4800 SO-DIMM	2x DDR5-5600 SO-DIMM	4x DDR4-3200 U-DIMM, Max. 128GB
	Max. Memory	64GB	64GB	64GB	128GB
	Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® UHD Graphics 770	NVIDIA MXM A2000
I/O Interface	Display	1x HDMI 1x DisplayPort 1x VGA (optional)	1x HDMI 1x DisplayPort 1x VGA (optional)	1x HDMI 2.0 1x DVI-I	4x DP
	Ethernet	1x Intel® I226-LM 2.5G LAN 2x Intel® I226-IT 2.5G LAN	1x Intel® I226-LM 2.5G LAN 2x Intel® I226-IT 2.5G LAN	1x Intel® I226LM GbE 2x Intel® I226V GbE	2x Intel® I210T GbE LAN
	Serial Port	4x RS232/RS422/485 2x RS232	4x RS232/RS422/485 2x RS232	2x RS-232/422/485 2x RS-232	2x RS232
	USB	2x USB 3.2 Gen.2 4x USB 3.2 Gen.1	2x USB 3.2 Gen.2 4x USB 3.2 Gen.1	6x USB 3.0,	2x USB 3.1 2x USB 3.2
	Audio	1x Line-out, 1x Mic-in	1x Line-out, 1x Mic-in	1x Speaker out	1x Audio connector for Line-in/out/MIC
	Digital I/O	8-in & 8-out	8-in & 8-out	NA	4-in & 4-out
Storage Interface	SATA HDD	2x 2.5" SSD	4x 2.5" HDD/SSD	2x SATA 3.0	1x Power / HDD LED
	mSATA/M.2	1x 2280 M.2 M-key socket (PCIe x 4)	1x 2280 M.2 M-key socket (PCIe x4)	1x M.2 2080 M-key	2x M.2 NVMe SSD
Expansion Slots	PCI Express	1x PCIe(x16) Gen.4 slot 2x PCIe(x4) Gen.4 slots	2x PCIe(x16) Gen.4 (x8) 2x PCIe(x8) Gen.4 (x4) 1x PCIe(x8) Gen.3 (x1)	TF1: N/A TF3: 2x PCIexpress x16 slot	N/A
	Mini PCIe/M.2	2x Mini PCIe full-size 1x M.2 2230 E-key socket 1x M.2 3042/52 B-key socket 1x M.2 2280 M-key socket	2x Mini PCIe full-size 1x M.2 2230 E-key socket 1x M.2 3042/52 B-key socket 1x M.2 2280 M-key socket	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)
Power	Power input	8V~48V DC-input	8V~48V DC-input	24V DC-input	+19V DC-input
	Power Connector	4-pin terminal block	4-pin terminal block	4-pin terminal block	4-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	213.8mm (W) x 363.6mm (D) x 215mm (H)	262mm (W) x 363.6mm (D) x 215mm (H)	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)
	Weight	7.5 kg	TBD	MAF801-TF1: TBD MAF801-TF3: TBD	3.8 kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & Steel	SGCC
	Chassis Color	Silver & Gray	Silver & Gray	Black	Black and white
	Mounting	Wall mount	Wall mount	N/A	Stand system bracket
Environmental	Operating Temperature	-20°C to 60°C (-4°F~140°F) *with airflow	-20°C to 60°C (-4°F~140°F) *with airflow	-10°C to 50°C (14°F to 122°F)	0°C~45°C (32°F~113°F)
	Storage Temperature	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)	-20°C to 80°C (-4°F to 176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE (EN 62368 / EN55032 / EN55035) & LVD, FCC Class A	CE (EN 62368 / EN55032 / EN55035) & LVD, FCC Class A	CE/FCC Class B	CE/FCC/LVD/UL/CCC
	Others	N/A	N/A	N/A	N/A
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iBASE

Comparison Table

	ES1001	ES1002	AGS100T	AGS101T	AGS102T
	AMD Ryzen™ Embedded 7000 Processors	AMD EPYC™ 8004 Series	Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 & Pentium® N4200/ Celeron® N3350 Processors	Intel® Atom® x6212RE/ x6414RE Processors	Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 & Pentium® N4200/ Celeron® N3350 Processors
	B650	N/A	N/A	N/A	N/A
	Dual Channel DDR5 5200	6x DDR5 4800, RDIMM 6 slots,	1x DDR3L-1866 SO-DIMM	1x DDR4-3200 SO-DIMM	1x DDR3L-1866 SO-DIMM
	Max.128GB Supports ECC	Up to 576GB Supports ECC 3600/4000/4400/4800 MHz, 16 GB, 32 GB, 64 GB, 96GB	8GB	16GB	8GB
	N/A	N/A	Intel® HD Graphics 505	Intel® Gen11 UHD Graphics	Intel® HD Graphics 505
	1x HDMI 2.1, 1x DP 2.0, 1x DVI-D port	N/A	1x DisplayPort 1x DVI-I	1x HDMI 1x DVI-I	1x DisplayPort 1x DVI-I
	2x Intel® I226-V 2.5 Gigabit LAN	2x 10GbE, Intel® X710-AT2	For E-series CPU: Intel® I210IT GbE LAN For N-series CPU: Intel® I211AT GbE LAN	3x Intel® I225IT 2.5G GbE LAN	For E-series CPU: Intel® I210IT GbE LAN For N-series CPU: Intel® I211AT GbE LAN
	1x Dua l 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)]	2x RS232/RS422/485	2x RS232/RS422/485 2x RS232	4x RS232/RS422/485
	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	4x USB 3.0	2x USB 3.1 2x USB 2.0	4x USB 3.0 1x USB 2.0
	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	1x Speaker-out	1x Speaker-out & Mic-in	1x Speaker-out
	Digital IO 4in/4out	N/A	N/A	4-in & 4-out	4-in & 4-out
	4x SATA 6Gb/s SUPPORT	4x SATA(6Gb/s)	N/A	1x 2.5" slot	N/A
	N/A	NVMe: 1x 22110/2280 (PCIe Gen5) NVMe: 2x MCIO x4	1x mSATA 1x 3042 M.2 B-key socket 1x 2230 M.2 E-key socket	1x mSATA	1x mSATA 1x 3042 M.2 B-key socket 1x 2230 M.2 E-key socket
	1x PCIe x16 supports (Gen5) 1x PCIe x4 supports (Gen5) 1x PCIe x4 supports (Gen4) 2x PCIe x1 supports (Gen4) 2x PCI	5x PCIe x16 slots PCIe x16 SLOT2 (Gen4 x16 link, from CPU) PCIe x16 SLOT3 (Gen4 x16 link, from CPU) PCIe x16 SLOT5 (Gen5 x16 link, from CPU), CXL support PCIe x16 SLOT6 (Gen5 x16 link, from CPU) , CXL support PCIe x16 SLOT7 (Gen5 x16 link, from CPU), CXL support	N/A	N/A	N/A
	N/A	N/A	1x Mini PCIe slot	2x Mini PCIe slot 1x M.2 B-key	1x Mini PCIe slot
	1x ATX standard 24-pin type & 4-pins type (+12V only)	1x ATX standard 24-pin type & 4-pins type (+12V only)	9V~36V DC-input	9V~36V DC-input	9V~36V DC-input
	1x ATX standard 24-pin	1x 24-pin SSI power connector 3x 8-pin SSI 12V power connector	3-pin terminal block	3-pin terminal block	3-pin terminal block
	N/A	N/A	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
	427mm (W) x 407.6mm (D) x 177mm (H)	483mm (W) x 510mm (H) x 177mm (D)	160mm (W) x 110mm (D) x 44mm (H)	190mm (W) x 110mm (D) x 52mm (H)	160mm (W) x 110mm (D) x 44mm (H)
	TBD	TBD	1 kg	1.05 kg	1 kg
	Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Black	Black	Silver & Gray	Silver & Gray	Silver & Gray
	N/A	N/A	Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount	Desktop & wall mount DIN-rail mount
	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	E-series CPU: -40°C~70°C (-40°F~158°F) N-series CPU: -20°C~60°C (-4°F~140°F)	-20°C~70°C (-4°F~158°F)	E-series CPU: -40°C~70°C (-40°F~158°F) N-series CPU: -20°C~60°C (-4°F~140°F)
	-20°C~80°C (-4°F~176°F)	-20°C to 80°C (-4°F to 176°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/LVD/FCC Class B	TBD	CE/FCC/LVD/UL	CE/FCC/LVD(pre-scan)	CE/FCC/LVD/UL
	N/A	N/A	TPM 2.0	TPM 2.0	TPM 2.0
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Comparison Table

Preliminary

Models	AGS103T	AGS104L	AGS104T	AGS105T
System — Processor	Intel® Atom® x6RE/ x6414RE Processors	Intel® Atom® x7433RE/ x7211RE Processors	Intel® Atom® x7433RE/ x7211RE Processors	Intel® Atom® x7433RE/ x7211RE Processors
PCH	N/A	N/A	N/A	N/A
Memory	1x DDR4-3200 SO-DIMM	1x DDR5-4800 SO-DIMM	1x DDR5-4800 SO-DIMM	1x DDR5-4800 SO-DIMM
Max. Memory	16GB	16GB	16GB	16GB
Graphics	Intel® Gen11 UHD Graphics	Intel® Atom™ SoC integrated Gen 12 UHD graphics	Intel® Atom™ SoC integrated Gen 12 UHD graphics	Intel® Atom™ SoC integrated Gen 12 UHD graphics
I/O Interface — Display	1x HDMI 1x DVI-I	1x HDMI 1x DisplayPort 1x USB Type-C	1x HDMI 1x DisplayPort 1x USB Type-C	1x HDMI 1x DisplayPort 1x USB Type-C
Ethernet	3x Intel® I225IT 2.5G GbE LAN	2x Intel® I226IT 2.5G LAN	2x Intel® I226IT 2.5G LAN	3x Intel® I226IT 2.5G LAN
Serial Port	2x RS232/RS422/485 2x RS232	2x RS232/RS422/485	4x RS232/RS422/485	4x RS232/RS422/485
USB	2x USB 3.1 2x USB 2.0	3x USB 3.2 ports 1x USB 3.2(Type-C)	3x USB 3.2 ports 1x USB 3.2(Type-C) 1x USB 2.0 port	2x USB 3.2 ports 1x USB 3.2(Type-C) 1x USB 2.0 port
Audio	1x Speaker-out & Mic-in	1x Line-out/ Mic-in	1x Line-out/ Mic-in	1x Line-out/ Mic-in
Digital I/O	4-in & 4-out	N/A	4-in & 4-out	4-in & 4-out
Storage Interface — SATA HDD	1x 2.5" slot (for AGS103TS)	N/A	N/A	N/A
mSATA/M.2	1x mSATA	1x mSATA 1x M.2 B-key (SATA / PCIe x1)	1x mSATA 1x M.2 B-key (SATA / PCIe x1)	1x mSATA 1x M.2 B-key SATA
Expansion Slots — PCI Express	N/A	N/A	N/A	N/A
Mini PCIe/M.2	2x Mini PCIe slot 1x M.2 B-key	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket 1x Mini PCIe full-size 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	190mm (W) x 110mm (D) x 52mm (H)	160mm(W) x 110mm(D) x 44mm(H)	160mm(W) x 110mm(D) x 44mm(H)	160mm(W) x 110mm(D) x 44mm(H)
Weight	1.2 kg	1.0 kg	1.2 kg	1.0 kg
Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Chassis Color	Silver & Gray	Silver & Gray	Silver & Gray	Silver & Gray
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
Environmental — Operating Temperature	-20℃~70℃ (-4°F~158°F)	-40℃~70℃ (-40°F~158°F)	-40℃~70℃ (-40°F~158°F)	-40℃~70℃ (-40°F~158°F)
Storage Temperature	-40℃~85℃ (-40°F~185°F)	-50℃ ~ 80℃ (-58°F~176°F)	-50℃ ~ 80℃ (-58°F~176°F)	-40℃~85℃ (-40°F~185°F)
Certification	CE/FCC/LVD(pre-scan)	CE/FCC/LVD	CE/FCC/LVD	CE/FCC/LVD
Others	TPM 2.0	TPM 2.0	TPM 2.0	N/A
Page No.	p. 41	p. 40	p. 39	p. 38

Comparison Table

ACS100	ACS200	ACS313	ACS413
Intel® Atom® x7000E Series/ N-series N97 & Core™ 3 N55 Processor	Intel® Atom® x7000E Series/ N-series N97 & Core™ 3 N55 Processor	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz)	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz)
N/A	N/A	N/A	N/A
1x DDR5 SO-DIMM	1x DDR5 SO-DIMM	2x DDR5 SO-DIMM	2x DDR5 SO-DIMM
16GB	16GB	96GB	96GB
Intel® UHD Graphics	Intel® UHD Graphics	Intel® UHD Graphics for 13th Gen Intel® Processors	Intel® UHD Graphics for 13th Gen Intel® Processors
1x HDMI Port 1x USB Type-C	1x HDMI Port 1x USB Type-C	1x HDMI Port 1x USB Type-C	1x HDMI Port 1x USB Type-C
2x Intel® I216-V 2.5GbE LAN	2x Intel® I216-V 2.5GbE LAN	2x Intel® I216-V 2.5GbE LAN 1x Intel® I216-LM 2.5GbE LAN	2x Intel® I216-V 2.5GbE LAN 1x Intel® I216-LM 2.5GbE LAN
1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 1x RS232 Optional 4x RS232 (pin9: 0,5V,12V)	2x RS232/RS422/485 (Isolation)	2x RS232/RS422/485 (Isolation)
2x USB 3.2 4x USB 2.0 1x USB Type-C	2x USB 3.2 4x USB 2.0 1x USB Type-C	6x USB 3.2 2x USB Type-C	6x USB 3.2 2x USB Type-C
N/A	1x Combo Audio (Earphone & Mic)	1x Combo Audio (Earphone & Mic)	1x Combo Audio (Earphone & Mic)
4-in & 4-out	4-in & 4-out	4-in & 4-out	4-in & 4-out
N/A	N/A	1x 2.5" HDD/SSD (external-accessible)	1x 2.5" HDD/SSD (external-accessible)
1x 2280 M.2 M-key socket (mSATA/PCIex1)	1x 2280 M.2 M-key socket (mSATA/PCIex1)	2x 2280 M.2 M-key sockets	2x 2280 M.2 M-key sockets
N/A	N/A	N/A	2x PCIe (x4) slot
1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket with nano SIM slot	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket with nano SIM slot	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket with 2x nano SIM slot	1x 2230 M.2 E-key socket 1x 3052 M.2 B-key socket with 2 x nano SIM slot
19V~24V DC-input	9V~36V DC-input	24V±5% DC-input	24V±5% DC-input
DC Jack with lock	2-pin terminal block	3-pin terminal block	3-pin terminal block
N/A	N/A	Over/Under/Reverse voltage protection	Over/Under/Reverse voltage protection
166.6mm (W) x 110mm (D) x 54.15mm (H)	242.2mm (W) x 110mm (D) x 54.15mm (H)	275mm (W) x 140mm (D) x 70mm (H)	275mm (W) x 140mm (D) x 117mm (H)
1.25 kg	1.65 kg	2.75 kg	3.5 kg
Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Silver & Gray	Silver & Gray	Silver & Gray	Silver & Gray
Desktop & wall mount VESA mount 75x75, 100x100mm	Desktop & wall mount VESA mount 75x75, 100x100mm	Desktop & wall mount VESA mount 100x100mm	Desktop & wall mount VESA mount 100x100mm
N97, N355 : -20℃~40℃ (-4°F~104°F) N150: -20℃~70℃ (-4°F~158°F) *with airflow	X7835RE CPU: -30℃~60℃ (-22°F~140°F) N-series CPU: -20℃~45℃ (-4°F~113°F)	-10℃ ~ 60℃ (14°F~140°F) *with airflow -10℃ ~ 50℃ (14°F to 122°F) without airflow	-10℃ ~ 60℃ (14°F~140°F) *with airflow -10℃ ~ 50℃ (14°F to 122°F) without airflow
-30~70℃ (-22°F~158°F)	-40℃~80℃(-40°F~176°F)	-20℃ ~ 80℃ (-4°F to 176°F)	-20℃ ~ 80℃ (-4°F to 176°F)
CE/FCC/LVD	CE/FCC/LVD(pre-scan)	CE/FCC/LVD	CE/FCC/LVD
H/W TPM 2.0	H/W TPM 2.0	H/W TPM 2.0	H/W TPM 2.0
p. 48	p. 47	p. 46	p. 45

Comparison Table

Models		ARS200	AMS210	AMS310
System	**Processor**	14/13th Intel® Core™-I U-series Processor	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)	10th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)
	PCH	N/A	Intel® Q370 PCH	Intel® H420E PCH
	Memory	1x DDR5-5600 SO-DIMM	2x 4GB DDR4-2666/2400 SO-DIMM	2x DDR4-2933 SO-DIMM
	Max. Memory	32GB	32GB	64GB
	Graphics	Intel® New Iris Xe Gfx	Intel® HD Graphics	10th Gen Intel® DT processor integrated HD Gfx
I/O Interface	**Display**	2x HDMI 2.0	3x DisplayPort	2x DisplayPort 1x HDMI
	Ethernet	2x Intel® I226IT 2.5G LAN	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I210IT Gigabit LAN 1x Intel® I210IT Gigabit LAN	2x Intel® I225V 2.5G LAN
	Serial Port	2x RS-232/422/485 2x RS-232	1x RS232/RS422/485 3x RS232 (optional)	1x RS232/RS422/485 1x RS232
	USB	2x USB 3.2	4x USB 3.1 4x USB 2.0	4x USB 3.0 2x USB 2.0
	Audio	NA	1x Line-out	1x Line-out
	Digital I/O	NA	4-in & 4-out (optional)	4-in & 4-out (optional)
Storage Interface	**SATA HDD**	NA	2x 2.5″ HDD or SSD	1x 2.5" HDD or SSD
	mSATA/M.2	1x M.2 2280 M-key	1x mSATA via mPCIe	1x M.2 M-key 2280 SATA SSD
Expansion Slots	**PCI Express**	NA	2x PCIe (x16) (by ABP-IP701/ABP-IP702/ABP-IP703)	1x PCIe (x8) + 1x PCIe (x4)
	Mini PCIe/ M.2	1x M.2 2230 E-key 1x M.2 3042/52 B-key	1x Mini PCIe slot	1x M.2 E-key 1x M.2 B-key
Power	**Power input**	12V~24V DC-input	24V (±10%) DC-input	24V (±10%) DC-input
	Power Connector	4-pin M12	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**	319.0 mm(W) x 230.0 mm(D) x 94 mm(H)	297.4mm (W) x 266.2mm (D) x 78.5mm (H)	275mm (W) x 150mm (D) x 117mm (H)
	Weight	4.2 kg	3.7 kg	3.3 kg
	Construction	Aluminum & Steel	SGCC	Aluminum & steel
	Chassis Color	Silver & Black	Silver	Silver & Gray
	Mounting	Desktop & wall mount	Desktop or wall mount	Desktop & wall mount DIN-rail mount
Environmental	**Operating Temperature**	-20 ~ 70 °C (14 ~ 158 °F)	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	-20°C ~ 80°C (-4°F to 176°F)	-20°C~80°C (-4°F~176°F)	-20°C~80°C (-4°F~176°F)
	Certification	CE / FCC Class B	CE/FCC/LVD (Prescan only)	CE/FCC/LVD
	Page No.	p. 49	p. 50	p. 54

Comparison Table

AMS312	AMS320	AMS322	AMI230
10th Gen Intel® Core™ DT i7/i5/i3 Processors (Max. 35W TDP)	11th Gen Inte® Core™ i7/i5/i3 Processors	11th Gen Inte® Core™ i7/i5/i3 Processors	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)
Intel® Q470E PCH	N/A	N/A	Intel® Q370 PCH
2x DDR4-2933 SO-DIMM	2x DDR4 3200 SO-DIMM, Max. 64GB	2x DDR4 3200 SO-DIMM, Max. 64GB	2x DDR4-2666/2400 SO-DIMM
64GB	64GB	64GB	32GB
10th Gen Intel® DT processor integrated HD Gfx	Intel® Iris® Xe Graphics	Intel® Iris® Xe Graphics	Intel® HD Graphics
2x DisplayPort 1x HDMI	2x DisplayPort	2x DisplayPort	1x HDMI+ DisplayPort 1x DVI-D
2x Intel® I225V 2.5G LAN	3x Intel® I226V 2.5G LAN	3x Intel® I226V 2.5G LAN	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I211AT Gigabit LAN 1x Intel® I211AT Gigabit LAN *2 ports supports PoE+*
1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 1x RS232	1x RS232/RS422/485 3x RS232
4x USB 3.0 2x USB 2.0	3x USB 3.1 3x USB 2.0	3x USB 3.1 3x USB 2.0	8x USB 3.1
1x Line-out	1x Line-out	1x Line-out	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)
1x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
1x M.2 M-key 2280 SATA SSD	2 x M.2 (E-key & B-key)	N/A	1x M.2 (M-key)
1x PCIe (x8) + 1x PCIe (x4)	N/A	2x PCIe (x4)	N/A
1x M.2 E-key 1x M.2 B-key	1x M.2 2042 E-key (USB 2.0 & PCIe) 1x M.2 3052 B-key (USB 2.0 & 3.0)	1x M.2 2042 E-key (USB 2.0 & PCIe) 1x M.2 3052 B-key (USB 2.0 & 3.0)	3x M.2 (B-key/E-key/M-key)
24V (±10%) DC-input	24V (±10%) DC-input	24V (±10%) DC-input	12V (±10%) or 18V (-10%)~24V (+10%) DC-input
3-pin terminal block	3-pin terminal block	3-pin 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
275mm (W) x 150mm (D) x 117mm (H)	275mm (W) x 140mm (D) x 70mm (H)	275mm (W) x 140mm (D) x 117mm (H)	210mm (W) x 265mm (D) x 77mm (H)
3.5 kg	3.5 kg	3.5 kg	4 kg
Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Silver & Gray	Silver & Gray	Silver & Gray	Silver & Gray
Desktop or wall mount (wall mount kit included) Side mounting DIN-rail mounting (optional)	Desktop or wall mount (wall mount kit included) Side mounting DIN-rail mounting (optional)	Desktop or wall mount (wall mount kit included) Side mounting DIN-rail mounting (optional)	Desktop & wall mount
-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 to 60°C (14°F~140°F) *with airflow -10°C to 50°C (14°F to 122°F) without airflow	-20°C~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
p. 53	p. 52	p. 51	p. 61

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.

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Comparison Table

Models		AMI231	AMI232	AMI240
System	**Processor**	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)	9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)	14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)
	PCH	Intel® Q370 PCH	Intel® Q370 PCH	Intel® Q670E PCH
	Memory	2x 8GB DDR4-2666/2400 SO-DIMM	2x 8GB DDR4-2666/2400 SO-DIMM	2x DDR5-5600 SO-DIMM
	Max. Memory	32GB	32GB	64GB
	Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics
I/O Interface	**Display**	1x HDMI+ DisplayPort 1x DVI-D	1x HDMI+ DisplayPort 1x DVI-D	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 GbE supports PoE+*	1x Intel® I219LM GbE PHY 1x Intel® I210IT Gigabit LAN 1x Intel® I211AT Gigabit LAN 1x Intel® I211AT Gigabit LAN *2 GbE 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 GbE supports PoE+*
	Serial Port	1x RS232/RS422/485 3x RS232	1x RS232/RS422/485 3x RS232	2x RS232/RS422/485 2x RS232
	USB	8x USB 3.1	8x USB 3.1	8x USB 3.1
	Audio	1x Line-out, 1x Mic-in	1x Line-out, 1x Mic-in	N/A
	Digital I/O	N/A	N/A	N/A
Storage Interface	**SATA HDD**	2x 2.5" storage	2x 2.5" storage	1x 2.5" storage
	mSATA/M.2	1x M.2 (M-key)	1x M.2 (M-key)	1x M.2 (M-key)
Expansion Slots	**PCI Express**	1x PCIe (x16) + 1x PCI	1x PCIe (x8) + 1x PCIe (x1) or 1x PCIe (x16) + 1x PCI	N/A
	Mini PCIe/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	12V (±10%) or 18V (-10%)~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 109mm (H)	210mm (W) x 285mm (D) x 128.6mm (H)	210mm (W) x 265mm (D) x 77mm (H)
	Weight	4.5 kg	4.9 kg	4.1 kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Silver & Gray	Silver & Gray	Silver & Gray
	Mounting	Desktop or wall mount	Desktop or wall mount	Desktop & wall mount
Environmental	**Operating Temperature**	-20°C to 70°C (-4°F~158°F) (for 35W CPU)	-20°C to 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
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Comparison Table

AMI241	AMI242	CMB108
14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)	Intel® Core™ Ultra 200E Series, 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 DT processors (TDP 65W)
Intel® Q670E PCH	Intel® Q670E PCH Intel® R680E PCH	Intel® Q670E
2x DDR5-5600 SO-DIMM	2x DDR5-5600/4800 SO-DIMM	2x DDR5-4800/5600 U-DIMM
64GB	64GB	64GB
Intel® HD Graphics	Intel® HD Graphics	Intel® Core I integrated Graphics
2x HDMI 2x DisplayPort	2x HDMI 2x DisplayPort	1x HDMI 2x DisplayPort
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 GbE 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 GbE supports PoE+*	Intel® I226LM 2.5 Gigabit LAN Intel® I226V 2.5 Gigabit LAN
2x RS232/RS422/485 4x RS232	2x RS232/RS422/485 4x RS232	2x RS232/422/485, 2x RS232
8x USB 3.1	8x USB 3.2 2x USB 2.0	4x USB 3.2 (Gen2) 2x USB3.1 (Gen1)
N/A	N/A	Line-In/LINE-Out/MIC-out
N/A	4-in & 4-out (optional)	4-in/4-out
2x 2.5" storage	1x 2.5" HDD or SSD	4x 2.5" SATA (supports RAID 0/1)
1x M.2 (M-key)	1x M.2 (M-key)	M.2 (M-key)
1x PCIe (x16)	1x PCIe (x16)	1x PCIe(16X) 2x PCIe(x4)
3x M.2 (B-key/E-key/M-key)	3x M.2 (B-key/E-key/M-key)	4x M.2 (B-key/ E-key/ M-key/M-key)
24V (+10%) DC-input	24V (+10%) DC-input	AC-IN 100V~240V
5-pin DC-in terminal block	5-pin DC-in terminal block	ATX power
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
210mm (W) x 285mm(D) x 109mm (H)	210mm (W) x 285mm (D) x 128.6mm (H)	325mm(W) x 350mm(D) x 156mm(H)
4.9 kg	5.2 kg	Depends on the configuration of power supply and motherboard related components
Aluminum & steel	Aluminum & steel	SECC
Silver & Gray	Silver & Gray	Black
Desktop & wall mount	Desktop & wall mount	Desktop & wall mount
-20℃~70℃ (-4°F~158°F) (for 35W CPU)	-20℃~70℃ (-4°F~158°F) (for 35W CPU)	0℃~45℃ (32°F~113°F) (for 65W CPU) @60℃, non-condensing
-20℃~80℃ (-4°F~176°F)	-20℃~80℃ (-4°F~176°F)	-20℃~80℃ (-4°F~176°F), @60℃, non-condensing
CE/FCC/LVD	CE/FCC/LVD	CE FCC Class A / LVD
p. 57	p. 56	p. 64

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.

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Comparison Table

Models		CMI300-988	CMI300-997	CMI300-1001
System	Processor	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)
	PCH	NA	N/A	Q670E
	Memory	2x 4GB DDR4 SO-DIMM	2x DDR5-5600/4800 SO-DIMM	2x DDR5-5600 SO-DIMM
	Max. Memory	Max. 32GB	64GB	64GB
	Graphics	NA	N/A	integrated Xe graphics
I/O Interface	Display	1x HDMI+DisplayPort	2x DisplayPort 1x HDMI	1x DisplayPort 1x HDMI
	Ethernet	2x RJ-45 Gigabit Ethernet port	2x 2.5G LAN	2x 2.5G LAN 2x 10G LAN
	Serial Port	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
	USB	4x USB 3.1 ports	6x USB 3.2 ports	4x USB 3.2 ports
	Audio	[Line-in / Line-out / Mic-in]	3-port Audio Jack	N/A
	Digital I/O	NA	N/A	N/A
Storage Interface	SATA HDD	NA	N/A	N/A
	mSATA/M.2	1x M.2 (M Key:2280)	2x M.2 (M-key)	2x M.2 (E-key/M-key)
Expansion Slots	PCI Express	1x Mini PCIe socket	N/A	PCIe (16x) x1 [G5]
	Mini PCIe/M.2	NA	4x M.2 sockets (B-key/ E-key and M-key)	2x M.2 (E-key/M-key)
Power	Power input	84W power adaptor	12V~24V DC-in	24V DC-in
	Power Connector	NA	power button with LED indicator	power button with LED indicator
	Power Protection	NA	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
Mechanical	Dimensions	200mm (W) x 200mm (D) x 62mm (H)	200mm(W) x 200mm(D) x 62mm(H)	200mm(W) x 200mm(D) x 62mm(H)
	Weight	1.8 kg	1.9 kg	1.9 kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Black	Black	Black
	Mounting	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
Environmental	Operating Temperature	0℃~45℃ (32°F~113°F)	0 ℃ ~ +45 ℃ (32°F~113°F)	0 ℃ ~ +45 ℃ (32°F~113°F)
	Storage Temperature	-20℃~80℃ (-4°F~176°F)	-20℃~+80℃ (-4°F~176°F)	-20℃~+80℃ (-4°F~176°F)
	Certification	CE/FCC Class A	CE/LVD/FCC Class B	CE/LVD/FCC Class B
	Page No.	p. 68	p. 66 - 67	p. 65

Comparison Table

CMI212-990	CMI212-999	CMI211-990	CMI211-992
6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile Processors	10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop Processors	6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile Processors	7th Gen Intel® Core™ i7-7820EQ Processors
MI990VF: Intel® CM236 MI990EF: Intel® HM170	MI999AF: Intel® W480E MI999EF: Intel® H420E	MI990VF: Intel® CM236 MI990EF: Intel® HM170	Intel® CM238
2x DDR4-2133 SO-DIMM	2x DDR4-2933/2666 SO-DIMM	2x DDR4-2133 SO-DIMM	2x DDR4-2400 SO-DIMM
Max. 32GB	Max. 64GB	Max. 32GB	Max. 32GB
Intel® HD Graphics 530	Intel® UHD Graphics 630	Intel® HD Graphics 530	Intel® HD Graphics 630
1x DVI-D 1x HDMI 1x DP	1x DVI-D 1x HDMI 1x DP	1x DVI-D 1x HDMI 1x DP	1x DVI-D 1x HDMI 1x DP
1x Intel® I219LM/V Gigabit LAN 1x Intel® I210AT Gigabit LAN	1x Intel® I219LM/V Gigabit LAN 1x Intel® I210AT Gigabit LAN	1x Intel® I219LM/V Gigabit LAN 1x Intel® I210AT Gigabit LAN	1x Intel® I219LM Gigabit LAN 1x Intel® I210AT Gigabit LAN
2x RS232/422/485 2x RS232	2x RS232/422/485 2x RS232	2x RS232/422/485	2x RS232/422/485
6x USB 3.0 2x USB 2.0	6x USB 3.2 2x USB 2.0	6x USB 3.0 2x USB 2.0	6x USB 3.0 2x USB 2.0
1x Audio jack for Line-out / Line-in / Mic-in	1x Audio jack for Line-out / Line-in / Mic-in	1x Audio jack for Line-out / Line-in / Mic-in	1x Audio jack for Line-out / Line-in / Mic-in
N/A	N/A	N/A	N/A
1x 2.5" Storage drive bay	1x 2.5" Storage drive bay	1x 2.5" Storage drive bay	1x 2.5" Storage drive bay
1x M.2 (M-key) / 1 x mSATA	1x M.2 (M-key)	1x M.2 (M-key) / 1 x mSATA	1x M.2 (M-key) / 1 x mSATA
2x PCIe (x16) expansion slot	2x PCIe (x16) expansion slot	1x PCIe (x16) expansion slot	1x PCIe (x16) expansion slot
1x M.2 sockets (M-key) 2x Mini PCIe	2x M.2 sockets (E-key and M-key)	1x M.2 sockets (M-key) 2x Mini PCIe	1x M.2 sockets (M-key) 2x Mini PCIe
AC-In 100V~240V	AC-In 100V~240V	AC-In 100V~240V	AC-In 100V~240V
ATX power supply	ATX power supply	ATX power supply	ATX power supply
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
198mm (W) x 235mm (D) x 118mm (H)	198mm (W) x 235mm (D) x 118mm (H)	300mm (W) x 205mm (D) x 72mm (H)	300mm (W) x 205mm (D) x 72mm (H)
2.7 kg	3.0 kg	2.8 kg	2.91 kg
SECC	SECC	SECC	SECC
Black	Black	Black	Black
Wall mount & Desktop	Wall mount & Desktop	Wall mount & Desktop	Wall mount & Desktop
0°C~45°C (32°F~113°F)	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 A (Pre-scan only)	CE / LVD / FCC Class A (Pre-scan only)	CE / LVD / FCC Class A (Pre-scan only)	CE / LVD / FCC Class A (Pre-scan only)
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Comparison Table

Models		CMI211-999	CMI211-1005	ASB210-953	ASB210-962H
System	**Processor**	10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop Processors	Intel® Core™ Ultra 200H series mobile Processors	11th Gen Intel® Core™ U-Series Processor	Intel® Core™ Ultra 100H Series mobile Processors
	PCH	MI999AF: Intel® W480E MI999EF: Intel® H420E	N/A	N/A	N/A
	Memory	2x DDR4-2933/2666 SO-DIMM	2x DDR5-6400 cSO-DIMM	2x DDR4-3200 SO-DIMM	2x DDR5-5600 SO-DIMM
	Max. Memory	Max. 64GB	Max. 96GB	64GB	96GB
	Graphics	Intel® UHD Graphics 630	Intel® UHD Graphics 630	i7 & i5: Intel® Iris® X^e i3 & Celeron: Intel® UHD Graphics	N/A
I/O Interface	**Display**	1x DVI-D 1x HDMI 1x DP	1x DP 1x HDMI 1x DP thru USB Type-C	2x DisplayPort	1x DisplayPort 1x HDMI
	Ethernet	1x Intel® I219LM/V Gigabit LAN 1x Intel® I210AT Gigabit LAN	1x Intel® I226LM 2.5G LAN 2x Intel® I226V 2.5G LAN	i7 & i5: Intel® I219LM Gigabit LAN PHY i3 & Celeron: Intel® I219V Gigabit LAN PHY Intel® I211AT PCIe Gigabit LAN (as 2nd LAN)	2x 2.5G LAN
	Serial Port	2x RS232/422/485	2x RS232/422/485	1x RS232/422/485	1x RS232/422/485
	USB	6x USB 3.2 2x USB 2.0	4x USB 3.2 4x USB 2.0	3x USB 3.1 1x USB 2.0	3x USB 3.2 1x USB 2.0
	Audio	1x Audio jack for Line-out / Line-in / Mic-in	1x Audio jack for Line-out / Line-in / Mic-in	N/A (optional)	N/A
	Digital I/O	N/A	N/A	4-in & 4-out	4-in & 4-out
Storage Interface	**SATA HDD**	1x 2.5″ Storage drive bay	1x 2.5″ Storage drive bay	1x 2.5″ HDD or SSD	1x 2.5″ HDD or SSD
	mSATA/M.2	1x M.2 (M-key)	2x M.2 (M-key)	1x M.2 2280 PCIe SSD	1x M.2 (M-key)
Expansion Slots	**PCI Express**	1x PCIe (x16) expansion slot	1x PCIe (x4) expansion slot	N/A	N/A
	Mini PCIe/M.2	2x M.2 sockets (E-key and M-key)	3x M.2 sockets (1x E-key and 2x M-key)	2x M.2 (B-key/E-key)	3x M.2 sockets (B-key/ E-key and M-key)
Power	**Power input**	AC-In 100V~240V	AC-In 100V~240V	12V (-10%) ~ 24V (+10%) DC-input	24V (+10%) DC-input
	Power Connector	ATX power supply	ATX power supply	3-pin terminal block DC-jack (optional)	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**	300mm (W) x 205mm (D) x 72mm (H)	300mm (W) x 205mm (D) x 72mm (H)	180mm(W) x 150mm(D) x 71mm(H)	180mm (W) x 150mm (D) x 72mm (H)
	Weight	3.2 kg	3.2 kg	1.8 kg	1.6 kg
	Construction	SECC	SECC	Aluminum & steel	Aluminum & steel
	Chassis Color	Black	Black	Black	Black
	Mounting	Wall mount & Desktop	Wall mount & Desktop	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)	0°C~45°C (32°F~113°F)	0°C~45°C (32°F~113°F) *with airflow 0.9m/s	-10°C ~50°C(14°F~122°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)	-20°C ~80°C(-4°F~176°F)
	Certification	CE / LVD / FCC Class A (Pre-scan only)	CE / LVD / FCC Class B	CE/LVD/FCC	CE/LVD/FCC Class B
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Comparison Table

	ASB210-966	ASB201-839	ASB200-838	ASB200-915
	Intel® Core™ Ultra 300H Processor	Intel® Core™ 3 Processor N355	Intel® Atom® N Series	6th Gen Intel® Core™ U-series Processor
	N/A	N/A	N/A	N/A
	2x DDR5-6400 cSO-DIMM	1x DDR5-4800 SO-DIMM	1x DDR5-4800 SO-DIMM	2x DDR3L-1600 SO-DIMM
	128GB	16GB	16GB	16GB
	Intel® Xe3 Graphics	Intel® SoC integrated Graphics	Intel® UHD Graphics	Intel® HD Graphics 520
	1x DisplayPort 1x HDMI 1x USB Type-C	2x DisplayPort	1x DisplayPort	1x DisplayPort
	2x 2.5G LAN	2x 2.5G LAN	2x Intel® I226-V 2.5G LAN	1x Intel® I219LM Gigabit LAN PHY 1x Intel® I211AT Gigabit LAN
	1x RS232/422/485	1x RS232/422/485	1x RS232/RS422/485 3x RS232	1x RS232/RS422/485 3x RS232
	2x USB 3.2 1x USB 2.0 1x USB Type-C	2x USB 3.2	2x USB3.1 1x USB 3.0	1x USB 3.1 Type-C 4x USB 3.0 2x USB 2.0
	N/A	1x Audio Jack for Line-out / Line-in / Mic-in	1x Line-out, 1x Line-out, 1x Mic-in	1x Line-out, 1x Line-in, 1x Mic-in
	4-in & 4-out	4-in & 4-out	4-in & 4-out	4-in & 4-out
	1x 2.5" SSD	1x 2.5" SSD	1x 2.5" HDD or SSD	1x 2.5" HDD or SSD
	2x M.2 (M-key 2280 &2242)	1x M.2 M-key 2280 (SATA type)	1x M.2 B-key PCIe	1x mSATA
	N/A	N/A	N/A	N/A
	3x M.2 sockets (1x E-key and 2x M-key)	3x M.2 sockets (B-key/ E-key and M-key)	2x M.2 (B-key/E-key)	1x Mini PCIe slot
	12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input
	3-pin terminal block	3-pin terminal block	3-pin terminal block DC-jack (optional)	3-pin terminal block DC-jack (optional)
	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection
	180mm (W) x 150mm (D) x 72mm (H)	240mm (W) x 162mm (D) x 42mm (H)	180mm(W) x 150mm(D) x 71mm(H)	180mm(W) x 150mm(D) x 66mm(H)
	1.6 kg	1.7 kg	1.8 kg	1.8 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 Optional VESA mount kit	Desktop or wall mount Optional VESA mount kit	Desktop & wall mount Optional VESA mount kit
	0°C~45°C (32°F~113°F)	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	-10°C~50°C (14°F~122°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/LVD/FCC Class B	CE/FCC/LVD	CE/FCC/LVD
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Comparison Table

Models		ASB200-916	ASB200-919	ASB200-953
System	**Processor**	7th Gen Intel® Core™ U-series Processor	8th Gen Intel® Core™ U-Series Processor	11th Gen Intel® Core™ U-Series Processor
	PCH	N/A	N/A	N/A
	Memory	2x DDR3L-1600 SO-DIMM	2x 8GB DDR4-2666 SO-DIMM	2x DDR4-3200 SO-DIMM
	Max. Memory	32GB	32GB	64GB
	Graphics	Intel® HD Graphics 620	Intel® UHD Graphics 610	i7 & i5: Intel® Iris® Xᵉ i3 & Celeron: Intel® UHD Graphics
I/O Interface	**Display**	1x DisplayPort, 1x HDMI	2x DisplayPort (1 by Type-C)	2x DisplayPort
	Ethernet	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 PCIe Gigabit LAN	i7 & i5: Intel® I219LM Gigabit LAN PHY i3 & Celeron: Intel® I219V Gigabit LAN PHY Intel® I211AT PCIe Gigabit LAN (as 2nd LAN)
	Serial Port	1x RS232/RS422/485 3x RS232"	1x RS232/422/485	1x RS232/422/485
	USB	4x USB 3.0 2x USB 2.0	4x USB3.1	3x USB 3.1 1x USB 2.0
	Audio	1x Line-out, 1x Line-in, 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 mSATA	N/A	1x M.2 2280 PCIe SSD
Expansion Slots	**PCI Express**	N/A	N/A	N/A
	Mini PCIe/M.2	1x Mini PCIe slot	2x M.2 (M-key/E-key)	2x M.2 (B-key/E-key)
Power	**Power input**	12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input	12V (-10%) ~ 24V (+10%) DC-input
	Power Connector	3-pin terminal block DC-jack (optional)	3-pin terminal block DC-jack (optional)	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**	180mm(W) x 150mm(D) x 66mm(H)	180mm(W) x 150mm(D) x 66mm(H)	180mm(W) x 150mm(D) x 71mm(H)
	Weight	1.8 kg	1.5 kg	1.7 kg
	Construction	Aluminum & steel	Aluminum & steel	Aluminum & steel
	Chassis Color	Black	Black	Black
	Mounting	Desktop & 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**	-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
	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	CE/LVD/FCC
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Comparison Table

ASB200-962U	ASB100-PI800	ASB100-PI900	CP100
Intel® Core™ Ultra 100U Series mobile Processors	Intel® Atom® x7433RE Processor	Intel® Core™ Ultra 100U series mobile Processors	AMD Ryzen™ Embedded R2000 series APU on board
N/A	N/A	N/A	NA
2x DDR5-5600 SO-DIMM	1x DDR5-4800 SO-DIMM	1x DDR5-5600 SO-DIMM	Onboard DDR4 memory
96GB	16GB	48GB	Max. 8GB
N/A	N/A	Intel® Graphics	NA
1x DisplayPort 1x HDMI	1x DisplayPort 1x HDMI	1x HDMI 1x DP thru USB Type-C	2x HDMI (2.0b), 1x 24-bit dual channel LVDS
2x 2.5G LAN	2x 2.5G LAN	1x 2.5G LAN	2x Intel® I226IT Gigabit LAN
1x RS232/422/485	2x RS232/422/485 port for COM	1x RS232/422/485	COM1 / COM2 : RS-232/422/485 (Default: RS-232, adjustable in BIOS) COM3 / COM4 : RS232
3x USB 3.2 1x USB 2.0	4x USB 3.2 ports	3x USB 3.2 1x USB Type-C 2x USB2.0	3x USB 2.0 (pin header) ; 2x USB 3.2 Gen2 (10Gbps)
N/A	N/A	N/A	Built-in audio w/ Realtek audio codec ALC888S-VD2-GR
4-in & 4-out	N/A	N/A	Digital I/O(4-in/ 4-out)
1x 2.5" HDD or SSD	N/A	N/A	1x SATA III
1x M.2 (M-key)	1x M.2 (M-key)	1x M.2 (M-key 2242)	1x M-key, type: 2280, 1x E-key, type: 2230
N/A	N/A	N/A	NA
3x M.2 sockets (B-key/ E-key and M-key)	2x M.2 (E-key/M-key)	2x M.2 (E-key/M-key)	NA
24V (+10%) DC-input	12V (+10%) DC-in	12V (+10%) DC-input	1x DC in connector
3-pin terminal block	DC-in connector	DC-in connector	DC in connector
OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	OVP, UVP, Reverse voltage protection	TBD
180mm(W) x 150mm(D) x 66mm(H)	133mm (W) x 102.2mm (D) x 51.5mm (H)	133mm (W) x 102.2mm (D) x 51.5mm (H)	94 mm (W) x 133 mm (D) x 51.4 mm (H)
1.5 kg	1.0 kg	1.2 kg	0.9 kg
Aluminum & steel	Aluminum & steel	Aluminum & steel	Aluminum & steel
Black	Silver & Gray	Silver & Gray	Gray
Desktop or wall mount Optional VESA mount kit	Desktop & wall mount bracket	Desktop & wall mount bracket	Desktop & wall mount
-10℃~55℃ (14℉~131℉) *with airflow 0.9m/s	-20℃~50℃ (-4℉~122℉) *with airflow 0.9m/s	0℃~50℃ (32℉~122℉) *with airflow 0.9m/s	0℃~45℃ (32℉~113℉)
-20℃ ~80℃(-4℉~176℉)	-20℃~+80℃ (-4℉~176℉)	-20℃ ~80℃(-4℉~176℉)	-10℃ ~ 80℃ (14℉ to 176℉)
CE/LVD/FCC Class B	CE/LVD/FCC Class B	CE/LVD/FCC Class B	CE / LVD / FCC Class B
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EC3500

Edge AI Computer
NVIDIA® Jetson AGX Orin™ Series

Features

- NVIDIA® Jetson AGX Orin™ series
- 64GB eMMC, 1x MicroSD slot
- 1x 10G LAN, 1x 1G LAN
- 2x USB 3.2 Gen1 Type-A, 1x USB 3.2 Gen2 Type-C
- 1x USB 2.0 Type-C (OTG)
- 1x HDMI
- 1x M.2 B-key 3042/3052 for 4G/5G
- 1x M.2 E-key 2230 for WiFi/BT/GPS
- 1x M.2 M-key 2280 for NVMe SSD
- Wide-power input range +9V to +36VDC
- Supports Ubuntu 22.04 OS

Specifications

System Mainboard	NVIDIA® Jetson AGX Orin™ 32GB/64GB SOM module with Carrier Board
CPU Type	32GB: 8-core NVIDIA® Arm Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 64GB: 12-core NVIDIA® Arm Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
System Speed	2.2 GHz
Memory	32/64 GB 256-bit LPDDR5 204.8 GB/s
Front Panel External I/O	1x HDMI 2.1 2x USB 3.2 Gen1 Type-A 1x USB 2.0 Type-C (OTG only) 1x USB 3.2 Type-C Gen 2 1x DC-in 9V~36V DC / 4-pin DC jack power 1x RJ45 GbE for 1G 1x RJ45 GbE for 10G
Rear Panel External I/O	1x Power button 1x MicroSD slot 1x Micro SIM holder 1x Recovery button 1x Reset button 2x Antenna holes
Expansion Slots	1x M.2 B-key 3042/3052 (LTE/5G - USB3) w/ Micro SIM holder: cellular function 1x M.2 E-key 2230 (PCIe/USB2): WiFi/BT/GPS function 1x M.2 M-key (NVMe) 2280: 1x MicroSD slot
Storage	64GB eMMC 5.1
Construction	SGCC
Chassis Color	Black & Red
Mounting Type	DIN rail, wall mount
Dimensions	150mm (W) x 125mm (D) x 70mm (H)
Weight	1.35 kg
Operating Temperature	0°C~50°C (32°F~122°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	0%~ 90% (non-condensing)
Vibration	Operatiing: 1 grms / 3~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE, FCC & LVD

Ordering Information

EC3500-64	NVIDIA® Jetson AGX Orin™ series, 64 GB 256-bit LPDDR5 204.8 GB/s, 64GB eMMC 5.1, HDMI 2.1, 1G LAN 10GbE LAN, USB2.0/3.0,SIM/MicroSD, DC 9V~36V, WiFi/BT/GPS/4G/5G(option)
EC3500-32	NVIDIA® Jetson AGX Orin™ series, 32 GB 256-bit LPDDR5 204.8 GB/s, 64GB eMMC 5.1 HDMI 2.1, 1G LAN 10GbE LAN, USB2.0/3.0,SIM/MicroSD, DC 9V~36V,WiFi/BT/GPS/4G/5G(option)

Dimensions and Drawing

EC3100

Edge AI Computer
NVIDIA® Jetson Orin™ NX and Orin™ Nano Series

Features

- NVIDIA® Jetson Orin™ NX and Orin™ Nano series
- 2x GbE LAN (1 for OOB)
- 1x USB Type-C supports Recovery Mode and OTG
- 2x USB 3.2 Type-A, 2 x USB 2.0 Type-A
- 1x DB9 for RS232 COM port, 1 x DB9 for CANBus
- 1x HDMI
- 1x M.2 3052 B-key for 4G/5G
- 1x M.2 3042 B-key for OOB 4G
- 1x M.2 2230 E-key for WiFi/BT/GPS
- 1x M.2 2280 M-key for NVMe SSD
- 1x Summit connector for PoE Board
- Wide-power input range +9V to +36VDC
- Supports Ubuntu 22.04 OS

Specifications

System Mainboard	NVIDIA® Jetson Orin™ NX 16GB/8GB NVIDIA® Jetson Orin™ Nano 8GB/4GB Module with carrier board
CPU Type	NVIDIA® Jetson Orin™ NX 16GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit 2MB L2 + 4MB L3 NVIDIA® Jetson Orin™ NX 8GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3 NVIDIA® Jetson Orin™ Nano 8GB and 4GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3
System Speed	EC3100-NX16 / EC3100-NX8: 2.0 GHz EC3100-NANO8 / EC3100-NANO4: 1.7 GHz
Memory	NVIDIA® Jetson Orin™ NX 16GB: 16GB 128-bit LPDDR5 102.4GB/s NVIDIA® Jetson Orin™ NX 8GB: 8GB 128-bit LPDDR5 102.4GB/s NVIDIA® Jetson Orin™ Nano 8GB: 8GB 128-bit LPDDR5 102 GB/s NVIDIA® Jetson Orin™ Nano 4GB: 4GB 128-bit LPDDR5 51 GB/s
Front Panel External I/O	1x RJ45 GbE for OOB 1x RJ45 GbE for system 1x HDMI 2.1 Type-A 2x USB 3.2 Type-A Gen2, 2x USB 2.0 Type-A 1x Line-out jack 1x Mic-in jack 1x Power button 1x Recovery button 1x Reset button 4x RJ45 GbE support PoE (optional) 1x Antenna holes
Rear Panel External I/O	1x DC-in 9V~36V lockable power jack 1x Remote power connector 4x DI + 4 x DO (pin1 with isolation output 5V @ 0.5A) 2x Edge insert nano SIM socket 1x USB 2.0 Type-C (OTG) 1x USB 2.0 Micro-USB (OOB OTG) 1x RS232 COM port DB9 connector 1x CANBus DB9 connector 2x Antenna holes
Expansion Slots	1x M.2 3052 B-key 4G/5G 1x M.2 3042 B-key OOB 4G 1x M.2 2230 E-key WiFi/BT/GPS 1x M.2 2280 M-key NVMe
Storage	1x M.2 2280 M-Key for SSD (Default NVMe 128 GB)
Construction	SGCC
Chassis Color	Black & Red
Mounting Type	wall mount
Dimensions	220mm (W) x 174mm (D) x 80mm (H)
Weight	3 kg
Operating Temperature	-20°C~60°C (-40°F~140°F)
Storage Temperature	-40°C~80°C (-40°F~176°F)
Relative Humidity	10%~90% (non-condensing)
Vibration	Operatiing: 1 grms / 3~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE, FCC Class A & LVD

Ordering Information

EC3100-NX16	NVIDIA® Jetson Orin™ NX 16GB, 1x HDMI, 2x GbE, 4x USB, 2x USB-C for OOB and recovery, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-Key, 4x DI+4xDO, 2x DB9 connector, with power adaptor, with RTC battery
EC3100-NX8	NVIDIA® Jetson Orin™ NX 8GB, 1x HDMI, 2x GbE, 4x USB, 2x USB-C for OOB and recovery, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-Key, 4x DI+4xDO, 2x DB9 connector, with power adaptor, with RTC battery
EC3100-NANO8	NVIDIA® Jetson Orin™ Nano 8GB, 1x HDMI, 2x GbE, 4x USB, 2x USB-C for OOB and recovery, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-Key, 4x DI+4xDO, 2x DB9 connector, with power adaptor, with RTC battery
EC3100-NANO4	NVIDIA® Jetson Orin™ Nano 4GB, 1x HDMI, 2x GbE, 4x USB, 2x USB-C for OOB and recovery, 2x M.2 B-key, 1x M.2 E-key, 1x M.2 M-Key, 4x DI+4xDO, 2x DB9 connector, with power adaptor, with RTC battery

Dimensions and Drawing

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.

iBASE 29

EC3020

Edge AI Computer
NVIDIA® Jetson Orin™ NX and Orin™ Nano Series

Features

- • NVIDIA® Jetson Orin™ NX and Orin™ Nano Series
- • 1x HDMI 4Kp60 for Orin™ NX, 1x HDMI 4Kp30 for Orin Nano™
- • 2x GbE LAN
- • 1x USB 2.0 Type C (supports OS flash)
- • 2x USB 3.2 Gen2 Type-A
- • 1x 20 pin Supports 2x I²C, 2x UART, 4x GPIOs, 1x CAN
- • 1x M.2 2230 E-key for WiFi/BT, 1x M.2 2280 M-key for NVMe
- • Supports PSE board/OOB board/5G daughter board (optional)
- • Wide power input range +12V to +24V DC
- • Supports Ubuntu 22.04 OS

Specifications

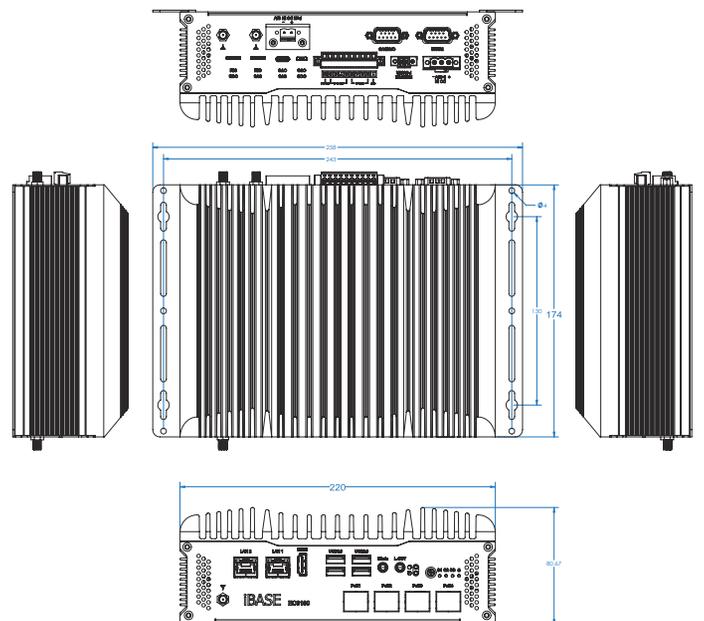|	
System Mainboard	NVIDIA® Jetson Orin™ NX 16GB/8GB NVIDIA® Jetson Orin™ Nano 8GB Module with carrier board
CPU Type	NVIDIA® Jetson Orin™ NX 16GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 NVIDIA® Jetson Orin™ NX 8GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 NVIDIA® Jetson Orin™ Nano 8GB and 4GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3
System Speed	EC3020-NX16/ EC3020-NX-8: 2.0 GHz EC3020-NANO8: 1.7 GHz
Memory	NVIDIA® Jetson Orin™ NX 16GB: 16GB 128-bit LPDDR5 102.4GB/s NVIDIA® Jetson Orin™ NX 8GB: 8GB 128-bit LPDDR5 102.4GB/s NVIDIA® Jetson Orin™ Nano 8GB: 4GB 64-bit LPDDR5 51 GB/s
Front Panel External I/O	2x Gigabit Ethernet (1x PoE, Optional) 1x HDMI Type-A 2x USB 3.2 Gen2 Type-A 1x USB 2.0 Type-C for Recovery 1x Power button 1x Recovery button
Rear Panel External I/O	2x Antenna 1x 12-24V DC Jack input with Lock
Expansion Slots	1x M.2 2230 E-key for WiFi/BT, 1x 20-pin Expansion Terminal Block supports 2x I²C, 2x UART, 4x GPIOs, 1x CAN PSE Board/OOB Board/5G Daughter Board (Optional)
Storage	1x M.2 2280 M-key for NVMe (Default NVMe 256 GB)
Construction	Aluminum & steel
Chassis Color	Black & Red
Mounting Type	wall mount
Dimensions	126mm (W) x 96mm (D) x 73.9mm (H)
Weight	1.25 kg
Operating Temperature	-25°C~40°C (Orin NX super mode) -25°C~60°C (Orin NX normal/Nano normal/Nano super mode)
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 A

Ordering Information

EC3020-NX16	NVIDIA® Jetson Orin™ NX 16GB, 1x HDMI, 2x GbE, 2x USB 3.2, 1x USB 2.0 Type C for recovery 1x M.2 2230 E Key for wifi, 12V to 24V DC INput, -25°C ~+60°C operating temperature, with power adapter, with RTC battery
EC3020-NX8	NVIDIA® Jetson Orin™ NX 8GB, 1x HDMI, 2x GbE, 2x USB 3.2, 1x USB 2.0 Type C for recovery 1x M.2 2230 E Key for wifi, 12V to 24V DC INput, -25°C ~+60°C operating temperature, with power adapter, with RTC battery
EC3020-NANO8	NVIDIA® Jetson Orin™ Nano 8GB, 1x HDMI, 2x GbE, 2x USB 3.2, 1x USB 2.0 Type C for recovery 1x M.2 2230 E Key for wifi, 12V to 24V DC INput, -25°C ~+60°C operating temperature, with power adapter, with RTC battery

Dimensions and Drawing

iBASE

EC3000

Edge AI Computer
NVIDIA® Jetson Orin™ NX and Orin™ Nano Series
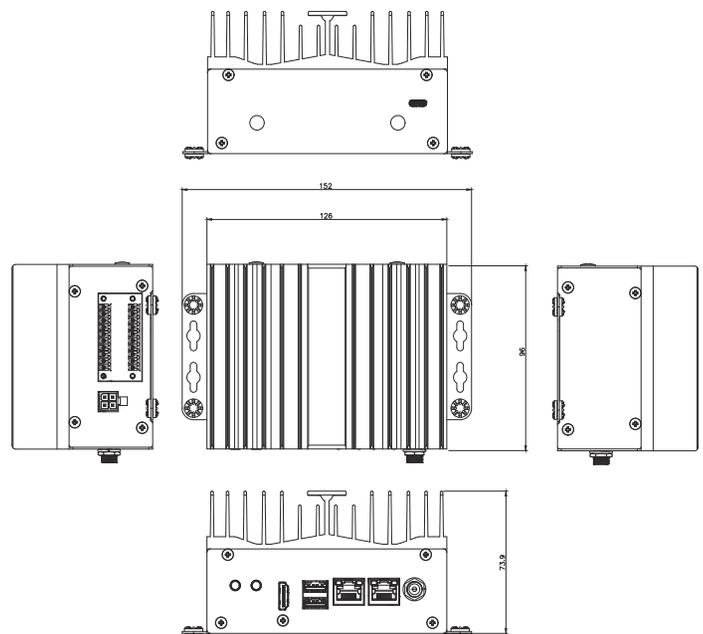
Features

- NVIDIA® Jetson Orin™ NX and Orin™ Nano series
- 1x GbE LAN
- 1x Micro USB supports OS flash
- 2x USB 3.2 Gen2 Type-A
- 2x USB 2.0 Type-A
- 2x COM/DIO/CANBus, 1x HDMI
- 1x M.2 3042/3052 B-key for 4G/5G for M.2 2242 B+M-key NVMe SSD
- 1x M.2 2230 E-key WiFi/BT/NVMe SSD
- Wide power input range +12V to +24V DC
- Supports Ubuntu 22.04 OS

Specifications

System Mainboard	NVIDIA® Jetson Orin™ NX 8GB NVIDIA® Jetson Orin™ Nano 8GB/4GB Module with carrier board
CPU Type	Orin™ NX 8GB and Orin™ Nano 8GB/4GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3000-NX8: 2.0 GHz EC3000-NANO8/ EC3000-NANO4: 1.5 GHz
Memory	NVIDIA® Jetson Orin™ NX 8GB: 8GB 128-bit LPDDR5 102.4 GB/s NVIDIA® Jetson Orin™ Nano 8GB: 8GB 128-bit LPDDR5 102 GB/s NVIDIA® Jetson Orin™ Nano 4GB: 4GB 64-bit LPDDR5 51 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
Rear Panel External I/O	1x DB9 connector for RS-232/485 and CanBus 1x DB15 connector for RS-232/422/485 and DIO x8 2x Antenna 1x 12-24V 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) 1x M.2 E-key (2230) (WiFi/BT/Storage)
Storage	1x M.2 2242 B+M Key NVMe (Default 128GB) 1x M.2 2230 E Key NVMe
Construction	Aluminum & steel
Chassis Color	Black & Red
Mounting Type	wall mount
Dimensions	130mm (W) x 102mm (D) x 47.5mm (H)
Weight	0.8 kg
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	Operatiing: 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-NX8	NVIDIA® Jetson Orin™ NX 8GB, 1x HDMI, 1x GbE, 4x USB, M.2 B+M/E Key, 12V to 24V DC input, -15°C ~+55°C operating temperature, with power adapter, with RTC battery
EC3000-NANO8	NVIDIA® Jetson Orin™ Nano 8GB, 1x HDMI, 1x GbE, 4x USB, M.2 B+M/E Key, 12V to 24V DC input, -15°C ~ + 55°C operating temperature, with power adapter, with RTC battery
EC3000-NANO4	NVIDIA® Jetson Orin™ Nano™ 4GB, 1x HDMI, 1x GbE, 4x USB, M.2 B+M/E Key, 12V to 24V DC input, -15°C~+55°C operating temperature, with power adapter, with RTC battery

Dimensions and Drawing

AES200

Expandable Edge AI Computer
Intel® Core™ 9/7/5/3 Processors Series 2 (Bartlett Lake-S Platform) & PCIe GPU Card Support

Preliminary
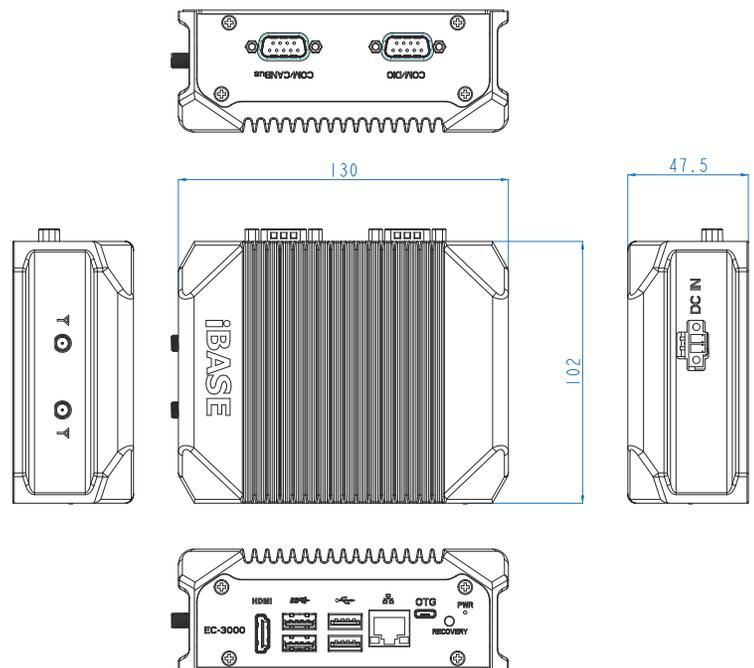
Features

- Intel® Core™ 9/7/5/3 Processors Series 2 (Bartlett Lake-S Platform)
- 3x 2.5GbE LAN ports & 6x USB 3.2
- 1x DisplayPort (DP++) + 1x HDMI 2.0 + 1x VGA (optional)
- Built-in 8-in / 8-out isolated Digital I/O
- 4x removable drive bays for SSD with RAID 0/1
- 1x accessible M.2 NVMe SSD (optional)
- Supports iAMT (v16.1) & TPM (2.0)
- 8V~48V DC 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	Intel® Core™ 9/7/5/3 Processors Series 2 (Bartlett Lake-S) / 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 2x USB 3.2 Gen.2, 4x USB 3.2 Gen.1 4x COM (RS232/422/485) 2x COM (RS232) 8-in & 8-out isolated DIO 1x Line-out & MIC-in 6x antenna holes 1x remote power switch 1x power button, 3x LED (storage, WLAN, WWAN) 2x PCIe(x16) [Gen.4 (x8)] + 2x PCIe(x8) [Gen.4 (x4)] + 1x PCIe(x8) [Gen.3 (x1)]
Rear Panel External I/O	1x 4-pin terminal block for 8V~48V power input with ignition 1x 3-pin terminal block for GND 1x IGN button
Expansion Slots	1x M.2 2230 E-key socket for WLAN & BT (PCIe + USB 2.0 + SMBus). 1x M.2 3042/52 B-key socket for WWAN (4G/5G) (PCIe + USB3.2 Gen.1) 1x M.2 2280 M-key socket for NVMe SSD (PCIe x4 [Gen.4]) 2x Mini PCIe full-size socket for CAN FD module (PCIe + USB 2.0 + SMBus)
Storage	2x 2.5" HDD/SSD (front-accessible) 1x front-accessible M.2 2280 M-key tray for NVMe SSD (PCIe x4 [Gen.4]) [optional]
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mounting
Dimensions	262mm (W) x 363.6mm (D) x 215mm (H) 10.3" (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

AES200M	Expandable Edge AI System with MBA-100 (R680E PCH), w/o CPU/ memory/storage/ Power adaptor; supports vPro & iAMT v16.1, 2x PCIe(x16) [Gen.4 (x8)] + 2x PCIe(x8) [Gen.4 (x4)] + 1x PCIe(x8) [Gen.3 (x1)], desktop/wall mounting brackets (RoHS 2)

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.

AES100

Expandable Edge AI Computer
14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors & PCIe GPU Card Support

Features

- 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (65W/35W)
- 3x 2.5GbE LAN ports & 6x USB 3.2
- 1x DisplayPort (DP++) + 1x HDMI 2.0 + 1x VGA(optional)
- Built-in 8-in & 8-out isolated Digital I/O
- 2x removable drive bays for SSD with RAID0/1
- 1x accessible M.2 NVMe SSD (optional)
- Supports iAMT(16.1) & TPM (2.0)
- 8V~48V DC input with ignition control

Specifications

System Mainboard	MBA-100 with Intel® R680E PCH
CPU Type	14th/13th Gen Intel® Core™ i9/i7/i5/i3 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 2x USB 3.2 Gen.2, 4x USB 3.2 Gen.1 4x COM (RS232/422/485) 2x COM (RS232) 8-in & 8-out isolated DIO 1x Line-out & MIC-in 6x antenna holes 1x remote power switch 1x power button, 3x LED (storage, WLAN, WWAN) 1x PCIe(x16) Gen.4 + 2x PCIe(x4) Gen.4
Rear Panel External I/O	1x 4-pin for 8V~48V power input w/ ignition 1x 3-pin for IGN 2x External accessible Nano SIM sockets
Expansion Slots	1x M.2 2230 E-key (PCIe + USB 2.0 + SMBus). 1x M.2 3042/52 B-key (PCIe + USB3.2 Gen.1) 1x M.2 2280 M-key (PCIe x4 [Gen.4]) 2x Mini PCIe full-size (PCIe + USB 2.0 + SMBus)
Storage	2x 2.5" HDD/SSD (front-accessible) 1x front-accessible M.2 2280 M-key tray for NVMe SSD (PCIe x4 [Gen.4]) [optional]
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mount
Dimensions	213.8mm (W) x 363.6mm (D) x 215mm (H) 8.4" (W) x 14.3" (D) x 8.46" (H)
Weight	9.4 kg
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	MIL- STD-810H Operating (SSD): 2,26 Grms (5~500 Hz)

Shock	MIL-STD-810H Operating: Sawtooth: 20G, 11msec (Z-axis)
Certification	CE (EN 62368-1 / EN55032 / EN55035) FCC Class A

Ordering Information

AES100M	Expandable Edge AI System with MBA-100 (R680E PCH), w/o CPU/ memory/storage/ Power adaptor; supports vPro & iAMT 16.1, 1x PCIe(x16) slot, 2x PCIe(x4) slots, desktop/wall mounting brackets (RoHS2)

Dimensions and Drawing

iBASE

MAF801

Expandable Edge AI Computer
14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/Celeron® Processors
& PCIe GPU Cards Support
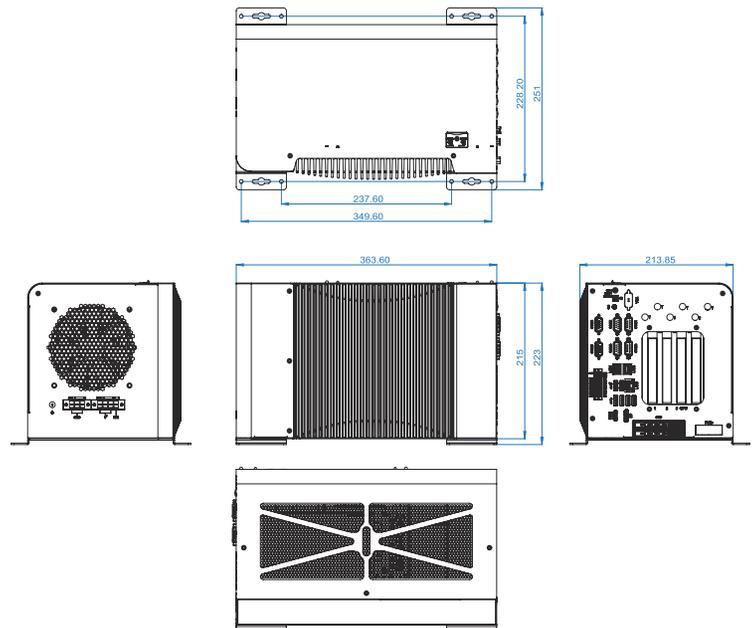
MAF801-TF3   MAF801-TF1

Features

● Supports 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/Celeron® Processors & PCIe GPU Cards Support, TDP 35/65W

● 2x DDR5 SO-DIMM, Dual Channel

● 3x 2.5G Ethernet ports

● 1x HDMI, 1x DVI-I, 6x USB3.2

● 1x M.2 2280 M-Key, 2x M.2 2280 B+M Key

● 2x SATA 3.0 removable drive bays for SSD (with RAID 0/1)

● Supports 2x PCIe high-performance graphics cards

● Independent power input for graphics card

Specifications

System Mainboard	MBA801 with Intel® R680E PCH
CPU Type	14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3/Celeron® 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 PCIexpress (x16) 2x M.2 2280 B-key + M-key
Storage	2x 2.5" HDD/SSD (external-access) 1x M.2 2080 M-key (SATA & PCIe)
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℃ to 50℃ (14°F to 122°F)
Storage Temperature	-20℃ to 80℃ (-4°F to 176°F)
Relative Humidity	5~90% @ 45℃, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operatiing: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-F1	Expandable edge AI system with MBA801 (R680E PCH w/o CPU/Memory/storage/power supply)
MAF801-F3	Expandable edge AI system with MBA801 and PCIe expansion card (R680E PCH w/o CPU/Memory/storage/power supply)
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type, Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

MAF801-F3
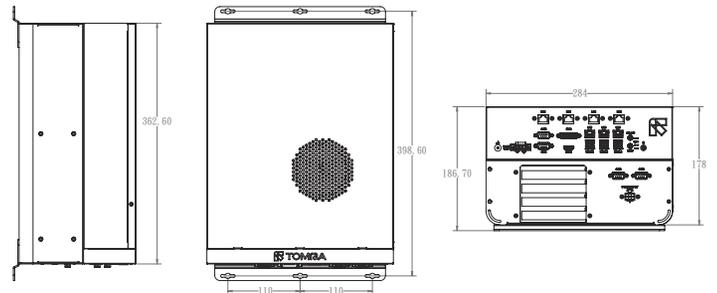
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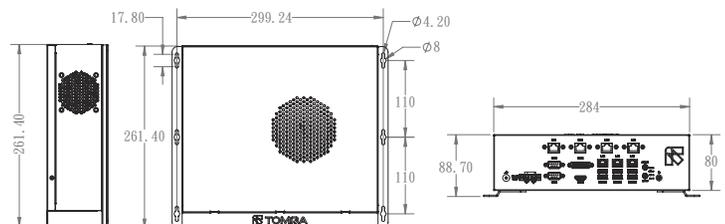
SI-624-AI

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 option
- 1x M.2 B-key (3052) for 5G option
- 2x M.2 NVMe SSD drive bay
- Supports OOB function via I210 LAN port (option)
- Supports TPM 2.0
- Compact and rugged design

Specifications

System Mainboard	MBD624
CPU Type	13th/12th Gen Intel® Core™ processors
System Speed	Up to 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 PCIe(x4) Gen.4 signal only) 1x M.2 (E-key, type: 2230, 2x PCIe(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) x73.1mm(H) 129.6"(W) x 82.6"(D) x 28.7"(H)
Weight	3.8 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	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

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

Dimensions and Drawing

250.25

329.20

73.10

2.83

5.66

Ø 2.90

18

R1

ES1002

Edge AI Server
AMD EPYC™ 8004 (Siena) Series Processors
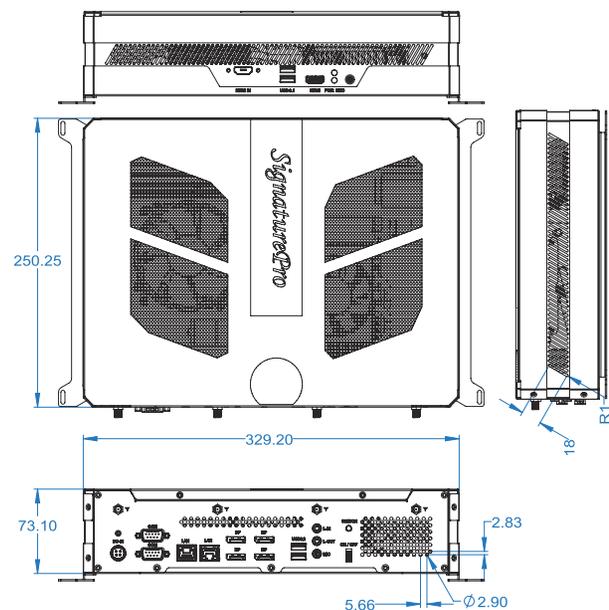
Preliminary

Features

- AMD EPYC™ 8004 (Siena) Series Processors
- 6x DDR5 4800, up to 576GB, supports ECC
- 5x PCIe (x16) slots
- 2x USB 3.2 Gen1: 2x USB 3.2 Gen1 with PDPC support
- 4x SATA 6Gb/s
- 1x PCIe Gen5 22110/2280, 2x MCIO (x4)
- 2x Intel® X710-AT2 (Dual 10GbE port)

Specifications

|	
System Mainboard	MBB1002 with AMD EYPC™ Siena 8004 Series CPU
CPU Type	AMD Ryzen Siena 8000 Series CPU (225W cTDP)
System Speed	Up to 3.1GHz
Memory	6x DDR5 4800, RDIMM 6 slots, Max. up to 576 GB Supports 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	2x USB 3.2 Gen1 with PDPC support 4x SATA 6Gb/s 1x PCIe Gen5 22110/2280, 2x MCIO (x4)
Expansion Slots	5x PCIe (x16) slots - PCIe (x16)_SLOT2 (Gen5 (x16) link, from CPU) - PCIe (x16)_SLOT3 (Gen5 (x16) link, from CPU) - PCIe (x16)_SLOT5 (Gen5 (x16) link, from CPU), CXL support - PCIe (x16)_SLOT6 (Gen5 (x16) link, from CPU), CXL support - PCIE (x16)_SLOT7 (Gen5 (x16) link, from CPU), CXL support
Storage	4x SATA (6Gb/s) NVMe: 1x 22110/2280 (PCIe 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	TBC
Operating Temperature	-10°C to 60°C (14°F~140°F) *with air flow -10°C to 50°C (14°F to 122°F) without air flow
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 Operatiing: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 (TBC)

Note: The specification will subject to change without notice.

Ordering Information

ES1002	Chassis with eATX motherboard w/o CPU, memory, storage, support AMD EYPC™ Siena 8004 Series processors

Note: The order information will subject to change without notice.

Dimensions and Drawing

432.60

510.00

482.60
464.60

101.60 / 177.00

iBASE

ES1001

Edge AI Server
AMD Ryzen™ Embedded 7000 Series Processors

Features

- AMD Ryzen™ Embedded 7000 Series 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 PCIe x16 (Gen5) / 1x PCIe x4 (Gen5) 1x PCIe x4 (Gen4) / 1x PCIe x1 (Gen3) /1x PCI
- 2x M.2 2280 M-key (PCIe x2 Gen4, supports NVMe) supports RAID 0, 1
- TPM 2.0

Preliminary

Specifications

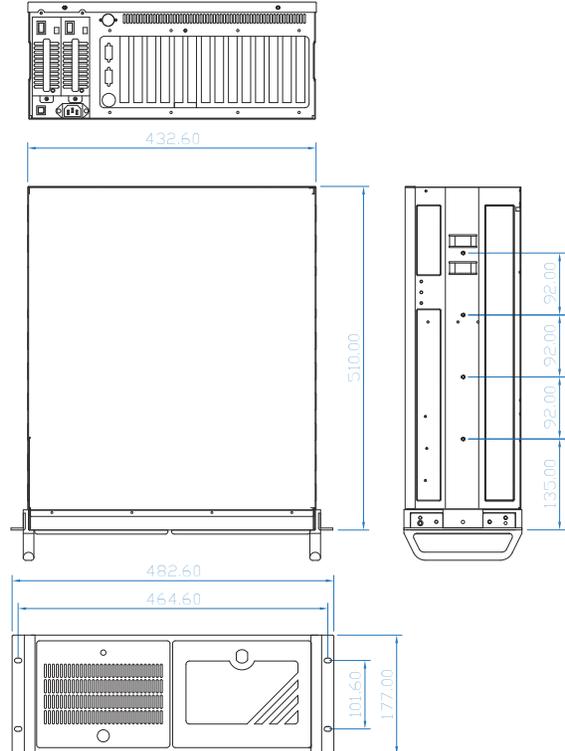|	
System Mainboard	AMD Ryzen™ Embedded 7000 series ATX Motherboard
CPU Type	AMD Ryzen™ Embedded 7000 Processors
System Speed	Max. 4.7GHz
Memory	Dual Channel DDR5 5200, UDIMM 4 slots, Max. 128GB, ECC support
Front Panel External I/O	2x USB 2.0 via pin header 2x USB 2.0 Type-A vertical connector 4x USB 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 PCIe x16 (Gen5) / 1x PCIe x4 (Gen5) 1x PCIe x4 (Gen4) / 1x PCIe x1 (Gen3) 1x PCI
Storage	4 x SATA 6Gb/s 2x M.2 2280 M-key (PCIe 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 Operatiing: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.

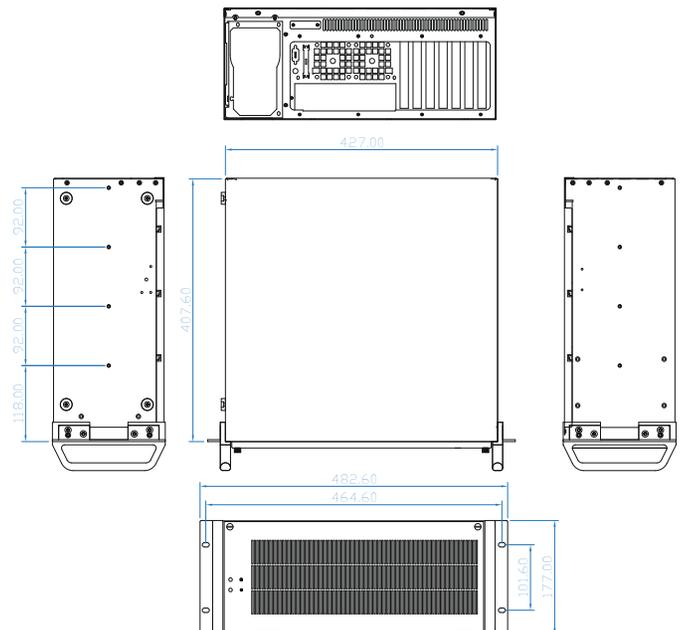## Ordering Information

ES1001	Chassis with ATX motherboard w/o CPU, memory, storage, supports AMD Ryzen™ Embedded 7000 Series processors

Note: The order information will subject to change without notice.

Dimensions and Drawing

AGS105T

IoT Gateway Edge Computing System
Intel® Atom® x7433RE/x7211RE Processors

NEW · **Fanless** · **Wide Temperature** · **Wide-range power input** · **5G**

Preliminary

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 mount & 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-in 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 PCIe full-size socket for CAN FD module (PCIe + USB 2.0 + SATA) 1x M.2 2230 E-key socket for WLAN & BT (PCIe + USB 2.0 + SMBus) 1x M.2 3042/52 B-key socket for WWAN (4G/5G) (PCIe + USB3.2 Gen.1 + SATA)
Storage	1x M.2 B-key for SATA SSD 1x Mini PCIe socket mSATA SSD (optional)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mount (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	1.2 kg
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)

iBASE

AGS104T

IoT Gateway Edge Computing System
Intel® Atom® x7433RE/x7211RE Processors

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 PCIe 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 PCIe socket (SATA) 1x 2230 M.2 E-key socket (USB 2.0 + PCIe) 1x 3052 M.2 B-key socket (USB 3.2 + PCIe + SATA)
Storage	1x Mini PCIe socket mSATA SSD 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 mount (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	1.2 kg
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	Windows 11 LTSC and Linux Ubuntu

Ordering Information

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-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)
60W power adaptor (optional)	60W (12V@5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1

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

AGS104L

IoT Gateway Edge Computing System
Intel® Atom® x7433RE/x7211RE Processors
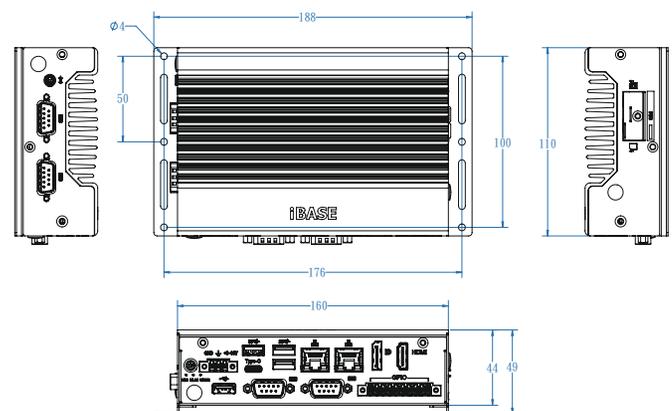
Features

- Fanless system with iBASE MBE104T-1 proprietary board
- Intel® Atom® x7433RE/x7211RE Processors
- HDMI & DisplayPort, USB Type-C (For DP & USB 3.2)
- M.2 B-key 3052 port supports 5G/4G/LTE, M.2 E-key 2230 supports WiFi/BT
- Full-size Mini PCIe for mSATA
- 2x 2.5G LAN port, 3x USB 3.2, 2x COM (RS232/422/485)
- 9V~36V DC wide-range power input, Over/Under/Reverse voltage protection
- Wide-range operating temperature from -40°C to 70°C
- Wall mount & fTPM 2.0
- Supports Windows 11 LTSC

## Specifications

System Mainboard	MBE104T-7433-1 / MBE104T-7211-1
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) 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
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 PCIe socket (SATA) 1x 2230 M.2 E-key socket (USB 2.0 + PCIe) 1x 3052 M.2 B-key socket (USB 3.2 + PCIe + SATA)
Storage	1x Mini PCIe socket mSATA SSD 1x M.2 B-key for SATA SSD
Construction	Aluminum + SGCC
Chassis Color	Silver & Gray
Mounting	Desktop & wall mount & DIN-rail mounting
Dimensions	160mm(W) x 110mm(D) x 44mm(H) 6.3"(W) x 4.33"(D) x 1.73"(H)
Weight	1.0 kg
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: 2Grms / 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	Windows 11 LTSC and Linux Ubuntu

Ordering Information

AGS104L-7433M	Fanless System supports fTPM2.0 w/ Intel® Atom™ Processor x7433RE, 2x 2.5G Ethernet, 2x COM, w/o memory, storage, optional 12V/60W power adaptor and DIN-rail bracket (RoHS2)
AGS104L-7211M	Fanless System supports fTPM2.0 w/ Intel® Atom™ Processor x7211RE, 2x 2.5G Ethernet, 2x COM, w/o memory, storage, optional 12V/60W power adaptor and DIN-rail bracket (RoHS2)
60W power adaptor (optional)	60W (12V@5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1
Optional Accessories	WiFi/BT antenna kit, 5G/4G/LTE antenna kit, DIN-rail bracket

Dimensions and Drawing

AGS103T

IoT Gateway Edge Computing System
Intel® Atom® x6414RE/x6212RE Processors
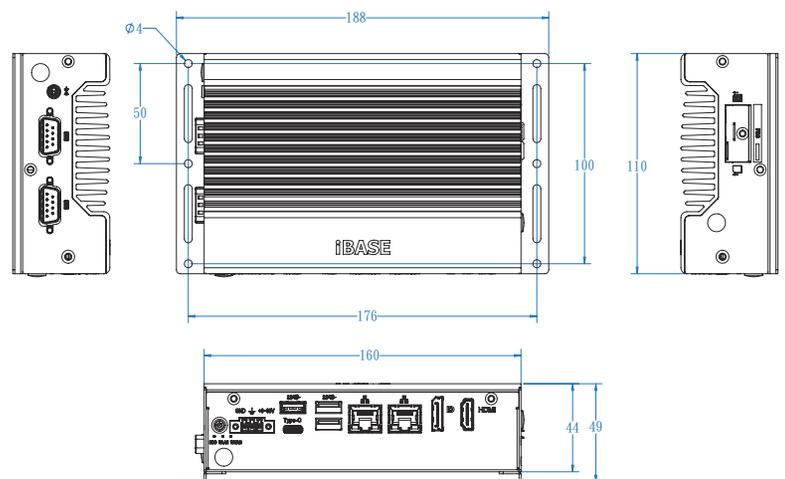
Features

- 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 ports supports 5G module
- Optional 1x 2.5'' SSD (AGS103TS)
- 3x 2.5G Ethernet ports
- 2x full-size Mini PCIe
- 4x COM (RS232/422/485), 2x USB 3.1 & 2x USB 2.0
- 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 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 PCIe socket (USB 2.0) 1x Full-size Mini PCIe socket (USB 2.0 + SATA) 1x M.2 B-key socket (USB 3.0 + PCIe)
Storage	1x Mini PCIe 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 mount (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	1.2 kg
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

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
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire type compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

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.

iBASE   41

AGS102T

IoT Gateway Edge Computing System
Intel® Atom® x7/x5, Pentium® & Celeron® Processors
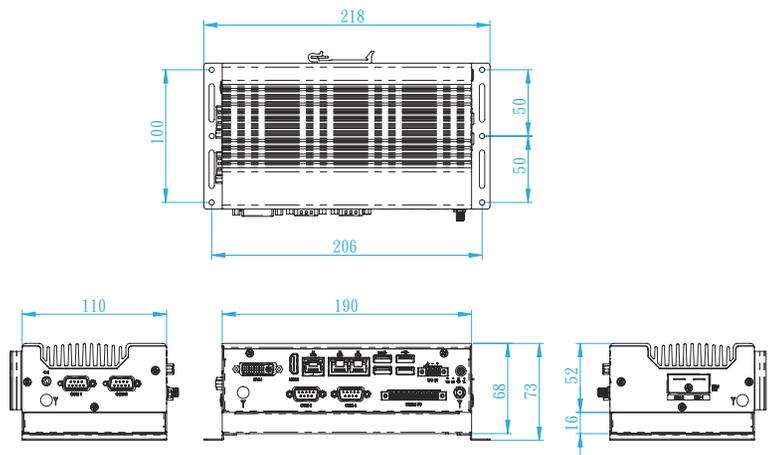
Features

- 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: 4x RS232/422/485 serial ports
  AGS102: 2x RS232/422/485 and 2x RS232 serial ports
- Rugged and fanless design

Specifications

System Mainboard	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 Black power button with Blue LED 1x 3-pin DC-in terminal block for 9V-36V 1x Antenna hole for WLAN module 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 for WLAN module 1x Line-out
Right Panel External I/O	1x SIM card slot
Expansion Slots	1x Full-size Mini PCIe socket (USB 2.0 + PCIe + SATA) 1x 2230 M.2 E-key socket for WLAN & BT (USB 2.0 + PCIe) 1x 3042 M.2 B-key socket for WWAN & SSD (USB 2.0 + SATA)
Storage	1x mSATA socket (Mini-PCIe) 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 mount (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 kg
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	Operatiing: 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

AGS102T-I50M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x7-E3950, 4x COM, w/o power adaptor, memory, storage
AGS102T-I40M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x5-E3940, 4x COM, w/o power adaptor, memory, storage
AGS102T-I30M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x5-E3930, 4x COM, w/o power adaptor, memory, storage
AGS102T-420M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Pentium® Processor N4200, 4x COM, w/o power adaptor, memory, storage
AGS102T-335M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Celeron® Processor N3350, 4x COM, w/o power adaptor, memory, storage
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

AGS101T

IoT Gateway Edge Computing System
Intel® Atom® x6212RE/x6414RE Processors
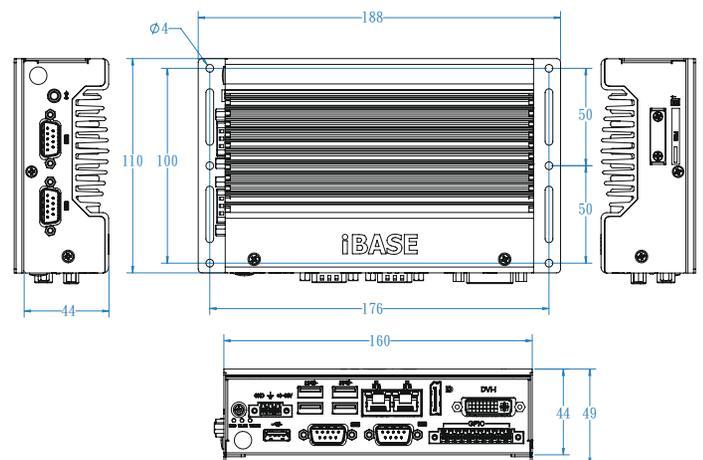
Features

- 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 ports supports 5G module
- 3x 2.5G Ethernet ports
- 2x RS232/422/485, 2x full-size Mini PCIe, 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	1x DVI-1 & 1x HDMI 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 PCIe socket (USB 2.0) 1x Full-size Mini PCIe socket (USB 2.0 + SATA) 1x M.2 B-key socket (USB 3.0 + PCIe)
Storage	1x mSATA socket (Mini-PCIe) 1x 2.5" SSD
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	DIN-rail mounting (DIN-rail mount kit included) Desktop or wall mount (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	1.05 kg
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	Operatiing: 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
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire type compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

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.

iBASE 43

AGS100T

IoT Gateway Edge Computing System
Intel® Atom® x7/x5, Pentium® & Celeron® Processors

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
- 2x RS232/422/485 serial ports
- Rugged and fanless design

Specifications

System Mainboard	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 Black power button with Blue 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 port for COM#1/COM#2 1x Antenna hole for WLAN module 1x Line-out
Right Panel External I/O	1x SIM card slot
Expansion Slots	1x Full-size Mini PCIe socket (USB 2.0 + PCIe + SATA) 1x 2230 M.2 E-key socket for WLAN & BT (USB 2.0 + PCIe) 1x 3042 M.2 B-key socket for WWAN & SSD (USB 2.0 + SATA)
Storage	1x mSATA socket (Mini-PCIe) 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 mount (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 kg
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	Operatiing: 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 / UL

Ordering Information

AGS100T-I50M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x7-E3950, 2x COM, w/o power adaptor, memory, storage
AGS100T-I40M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x5-E3940, 2x COM, w/o power adaptor, memory, storage
AGS100T-I30M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Atom® Processor x5-E3930, 2x COM, w/o power adaptor, memory, storage
AGS100T-420M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Pentium® Processor N4200, 2x COM, w/o power adaptor, memory, storage
AGS100T-335M	Fanless DIN-rail System supports TPM2.0 w/ Intel® Celeron® Processor N3350, 2x COM, w/o power adaptor, memory, storage
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

ACS413

Advanced Compact System
13th Gen Intel® Core™ i7/i5/i3/U300E Processors

NEW **Fanless**

Preliminary
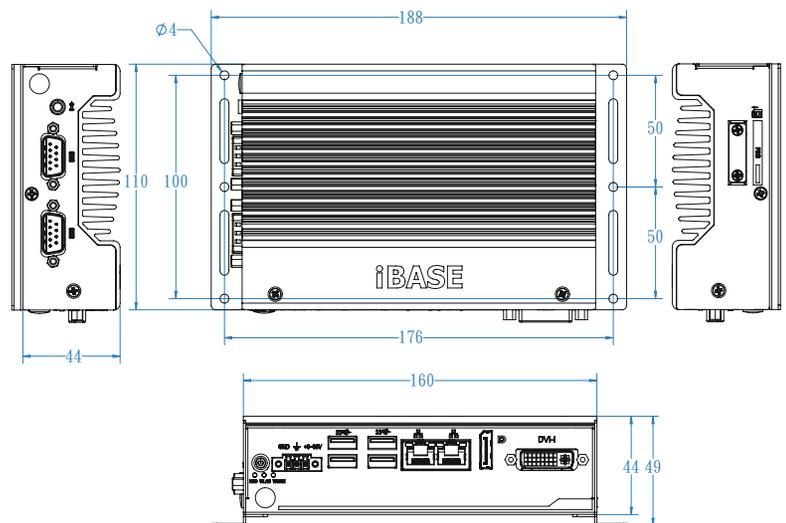
Features

- Compact Expandable System for MBE330 proprietary board
- 13th Gen Intel® Core™ i7/i5/i3/U300E Processors
- Supports dual-channel DDR5-5200 SO-DIMM
- 2x USB Type-C (DP Alternate Mode), Up to 60W per port
- Removable drive bay for 2.5 inch HDD/SSD
- 1x PCIe (x8) + 1x PCIe (x4) expansion slot
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- Supports TPM 2.0 hardware security
- Isolated COM 1 and COM2
- HDMI, 2x DP++, 2x USB-C (DP Alternate Mode) Supports up to 4x independent displays
- 6x USB 3.2
- 4x Internal M.2 sockets for 2x Storage, Wi-Fi/BT and 4G/5G communication with Dual Nano SIM slots

Specifications

System Mainboard	MBE330
CPU Type	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz)
System Speed	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz)
Memory	2x DDR5-4800 SO-DIMM, Max .96GB
Front Panel External I/O	4x antenna holes 2x Nano SIM slots
Rear Panel External I/O	6x USB 3.2 Gen.1 2x USB Type-C (DP Alternate mode) PD Up to 60W per port 2x isolated COM 3x 2.5GbE 2x DP++ 1.4 1x HDMI 2.0 1x Audio combo jack 3-pin bare-wire DC-In, 24V 1x remote power switch connector 1x power button 1x Clear CMOS button
Expansion Slots	2x M.2 2280 M-key sockets 1x M.2 2030 E-key socket [supports USB 2.0 & PCIe x1] (for Wi-Fi/BT module) 1x M.2 3052 B-key socket [supports USB 2.0/3.0 & PCIe x1] (for 4G/5G) 2x PCIe (x4)
Storage	2x M.2 M-key (2280)
Construction	Aluminum & steel
Chassis Color	Black/Gray
Mounting Type	VESA 100 x 100 mm, wall mount, optional DIN-rail kit
Dimensions	275mm (W) x 140mm (D) x 117mm (H) 10.83" (W) x 5.51" (D) x 4.6" (H)
Weight	3.5 kg

Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F) *with airflow -10°C ~ 50°C (14°F ~ 122°F) without airflow
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

ACS413-U3	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)
ACS413-i3	Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)
ACS413-i5	Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)
ACS413-i7	Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)

ACS313

Advanced Compact System
13th Gen Intel® Core™ i7/i5/i3/U300E Processors

NEW | **Fanless**

Features

- Compact Expandable System for MBE330 proprietary board
- 13th Gen Intel® Core™ i7/i5/i3/U300E Processors
- Supports dual-channel DDR5-4800 SO-DIMM
- 2x USB Type-C (DP Alternate Mode), supports up to 60W per port
- Removable drive bay for 2.5 inch HDD/SSD
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- Supports TPM 2.0 hardware security
- Isolated COM 1 and COM2
- HDMI, 2x DP++, 2x USB-C (DP Alternate Mode) supports up to 4x independent displays
- 6x USB 3.2
- 4x internal M.2 sockets for 2x storage, Wi-Fi/BT, and 4G/5G communication with Dual Nano SIM slots

Specifications

System Mainboard	MBE330
CPU Type	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz)
System Speed	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz)
Memory	2x DDR5-4800 SO-DIMM, Max. 96GB
Front Panel External I/O	4x antenna holes 2x Nano SIM slots
Rear Panel External I/O	6x USB 3.2 Gen.1 2x USB Type-C (DP Alternate Mode) with PD, up to 60W per port 2x isolated COM 3x 2.5GbE 2x DP++ 1.4 1x HDMI 2.0 1x audio combo Jack 3-pin bare-wire DC-In, 24V 1x remote power switch connector 1x power button 1x Clear CMOS button
Expansion Slots	2x M.2 2280 M-key sockets 1x M.2 2030 E-key socket [supports USB 2.0 & PCIe x1] (for Wi-Fi/BT module) 1x M.2 3052 B-key socket [supports USB 2.0/3.0 & PCIe x1] (for 4G/5G)
Storage	2x M.2 M-key (2280)
Construction	Aluminum & steel
Chassis Color	Black/Gray
Mounting Type	VESA 100 x 100 mm, wall mount, optional DIN-rail kit
Dimensions	275mm (W) x 140mm (D) x 70mm (H) 10.83" (W) x 5.51" (D) x 2.76" (H)
Weight	2.8 kg

Operating Temperature	-10°C ~ 60°C (14°F ~ 140°F) *with airflow -10°C ~ 50°C (14°F ~ 122°F) without airflow
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

ACS313-U3	Intel® Raptor Lake U300E Processor (Five-Core up to 4.3GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)
ACS313-i3	Intel® Core™ i3-1315UE Processor (Six-Core up to 4.5GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)
ACS313-i5	Intel® Core™ i5-1345URE Processor (Ten-Core up to 4.6GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)
ACS313-i7	Intel® Core™ i7-1365UE Processor (Ten-Core up to 4.9GHz) onboard, w/o memory / storage / O.S. / AC adaptor, Supports VESA 100x100mm and desktop / wall mount brackets (RoHS2)

iBASE

ACS200

Features

- Intel® Atom® x7000E Series / N-series / Core™ 3 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 mount
- Extended operating temperature Max. from -30°C to 60°C

Specifications

System Mainboard	MBP-210-N97/ MBP-210-N150/ MBP-210-N305/ MBP-210-N355/ MBP-210-7835
CPU Type	Intel® Atom™ N97 Processor (4 Cores) up to 3.6G Intel® Atom™ N150 Processor (4 Cores) up to 3.6G Intel® Core™ i3 N305 Processor (8 Cores) up to 3.8G Intel® Core™ 3 N355 Processor (8 Cores) up to 3.9G Intel® Atom™ X7835RE Processor (8 Cores) up to 3.6G
System Speed	N97/N150 and X7835RE- up to 3.6GHz, i3-N305 up to 3.8GHz, N355 up to 3.9GHz
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	1.65 kg
Operating Temperature	N97, N305 and N305: -20°C~50°C (-4°F~122°F) N150: -20°C~70°C (-4°F~158°F) *with airflow x7835RE: -30°C~60°C (-22°F~140°F) *with airflow
Storage Temperature	-30~80°C (-22°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-N97-M	Intel® Atom™ N97 Processor, w/o DDR5 and SSD, USB-C PD 60W, w/o power adaptor
ACS200-N150-M	Intel® Atom™ N97 Processor, w/o DDR5 and SSD, USB-C PD 60W, w/o power adaptor
ACS200-N305-M	Intel® Core™ i3 N305 Processor, w/o DDR5 and SSD, USB-C PD 60W, w/o power adaptor
ACS200-N355-M	Intel® Core™ 3 N355 Processor, w/o DDR5 and SSD, USB-C PD 60W, w/o power adaptor
ACS200-7835-M	Intel® Atom™ x7835RE Processor, w/o DDR5 and 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

ACS100

Advanced Compact System
Intel® Atom® N150 / N97 / Core™ 3 N355 Processors
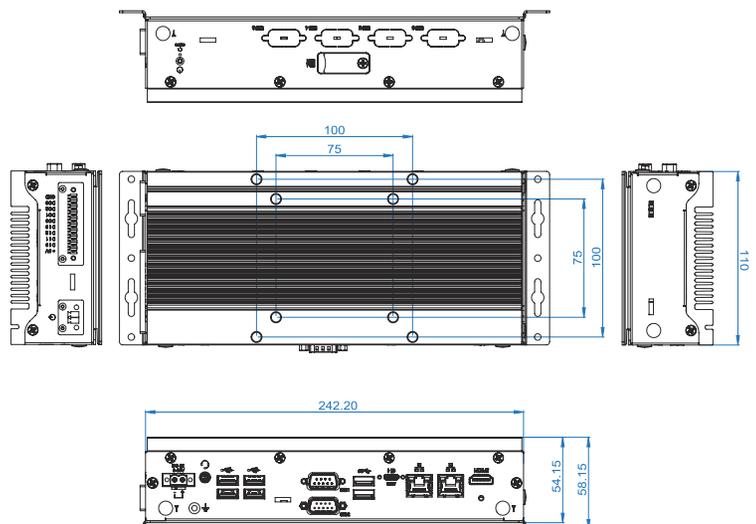
Features

- Intel® Atom® N150 / N97 / Core™ 3 N355 Processors (formerly Alder Lake N / Amston Lake/ Twin Lake)
- Rich I/O supports 2x 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 a Nano SIM slot
- Supports TPM 2.0 hardware security
- 19V~24V DC power input
- VESA 75x75 and 100x100mm wall mount
- Extended operating temperature Max. from -20°C to 70°C

Specifications

System Mainboard	MBP-210-N97/ MBP-210-N150 / MBP-210-N355
CPU Type	Intel® Core™ 3 N355 Processor (8 Cores) Intel® Atom™ N150 Processor (4 Cores) Intel® Atom™ N97 Processor (4 Cores)
System Speed	N150 and N97 up to 3.6GHz, N355 up to 3.9GHz
Memory	1x DDR5-4800 SO-DIMM, Max. 16GB
Front Panel External I/O	1x Power button 1x Clear CMOS button 4x USB 2.0 1x Nano SIM slot 1x Digital I/O (4-in/4-out), 5V and GND 3x Antenna holes
Rear Panel External I/O	2x USB 3.2 1x HDMI 2x DB9 for COM#1 (RS232/422/485), COM#2 RS232 Only 2x LAN 1x DC-in connector for 19V ~ 24V 1x 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	167mm (W) x 110mm (D) x 54.15mm (H) 6.58" (W) x 4.3" (D) x 2.13" (H)
Weight	1.25 kg
Operating Temperature	N97, N355 : -20°C~40°C (-4°F~104°F) N150: -20°C~70°C (-4°F~158°F) *with airflow
Storage Temperature	-30~70°C (-22°F~158°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

ACS100-N355	Intel® Core™ i3-N355 Processor, 8GB DDR5 SO-DIMM, 128GB SSD, USB-C PD 60W, w/ 120W power adaptor
ACS100-N150	Intel® Atom™ N150 Processor, 8GB DDR5 SO-DIMM, 128GB SSD, USB-C PD 60W, w/ 120W power adaptor
ACS100-N97	Intel® Atom™ N97 Processor, 8GB DDR5 SO-DIMM, 128GB SSD, USB-C PD 60W, w/ 120W power adaptor

Dimensions and Drawing

ARS200

Advanced Ruggedized Waterproof Outdoor Computer
14th/13th Gen Intel® Core™ U-series Processors
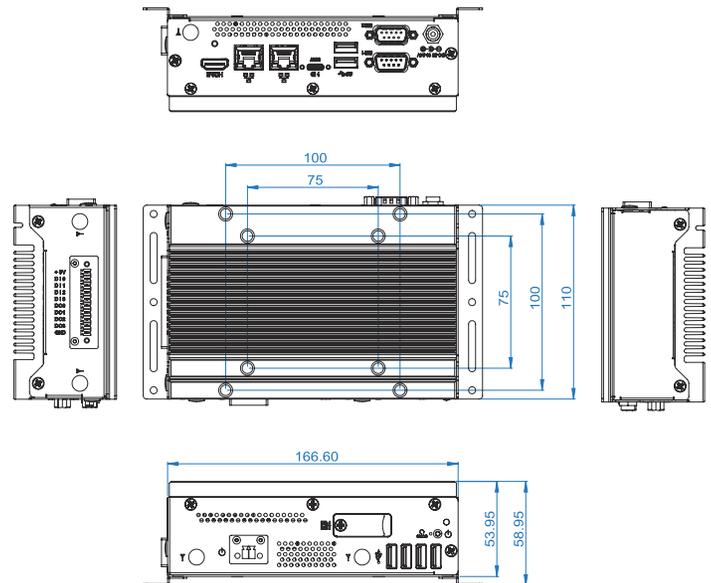
Features

- +12V~+24V DC wide-range power input
- Fanless system with for IBASE ARS200 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 mount & TPM 2.0
- Wide-range operating temperature from -20°C to 70°C
- Waterproof, fanless design with IP65 rating

Specifications

System Mainboard	ARS200-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 Note: Total 7x output include, 1x DC-Power
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 & PCIe)
Construction	Aluminum and steel
Chassis Color	Silver and Black
Mounting Type	Desktop or wall mount (wall mount kit included) Side mounting
Dimensions	319mm (W) x 230mm (D) x94mm (H) 12.56" (W) x 9.06" (D) x 3.70" (H)
Weight	4.25 kg (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 Operatiing: 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

ARS200	**ARS200-1:** 2x HDMI; 2x USB; 1x G-Lan; 1x RS232; 1x DC-IN **ARS200-2:** 2x HDMI; 1x USB; 2x G-Lan; 1x RS232; 1x DC-IN **ARS200-3:** 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

AMS210

Automatic Control System
9th/8th Gen Intel® Core™ Processors
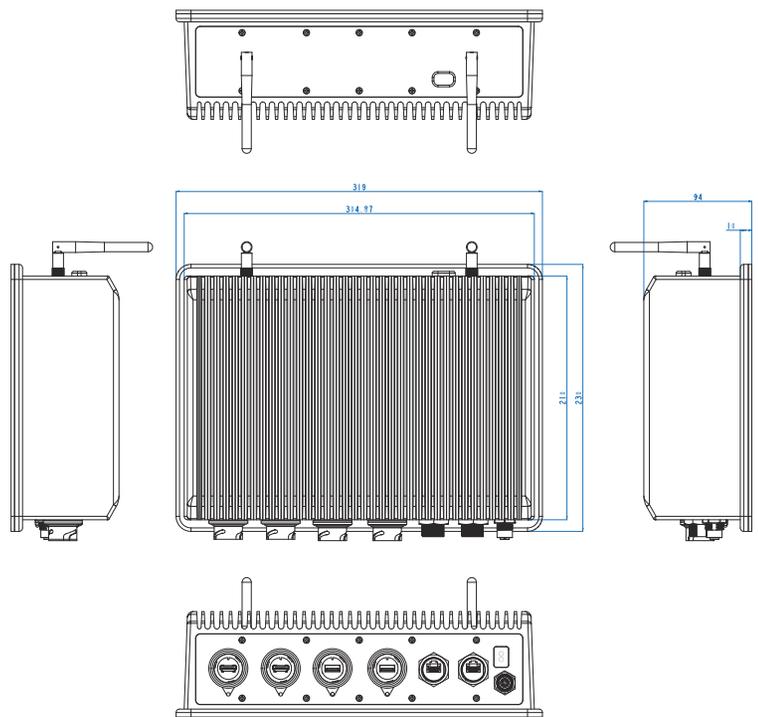
Features

- 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 PCIe(x16) + 1x PCIe(x4) ABP-IP702: 1x PCI + 1x PCIe(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	5.9 kg
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

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
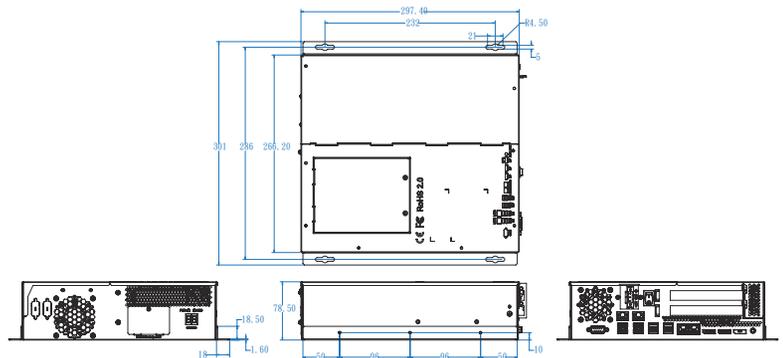
Dimensions and Drawing

AMS322

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 PCIe (x4) expansion slot via IP302 Riser card
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- TPM 2.0

IP302 Riser card

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 & PCIe) 1x M.2 3052 B-key (USB 2.0 & 3.0) 2x PCIe (x4) slot
Storage	1x 2.5" HDD/SSD (external-accessible)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (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	3.5 kg
Operating Temperature	-10℃ ~ 60℃ (14°F~140°F) *with airflow -10℃ ~ 50℃ (14°F to 122°F) without airflow
Storage Temperature	-20℃ ~ 80℃ (-4°F to 176°F)
Relative Humidity	5~90% @ 45℃, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operatiling: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

AMS322-i7M	Fanless System with MBE320-i7, w/ Intel® Core™ i7-1185G7E Processor, 2x COM, 1x IP302 Riser card for 2x PCIe (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 PCIe (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 PCIe (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

AMS320

Compact Expandable Fanless System
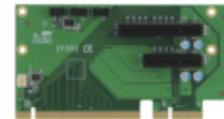### 11th Gen Intel® Core™ i7/i5/i3 Processors

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

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 & PCIe) 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 mount (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	2.75 kg
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

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

AMS312

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 PCIe (x8) + 1x PCIe (x4) expansion slot via IP302 riser card
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
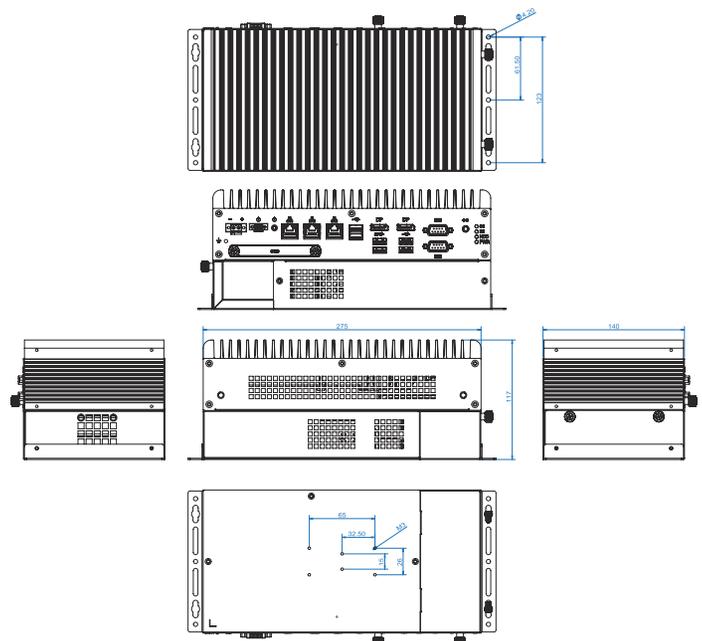- TPM 2.0

IP302 Riser card

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 & PCIe) 1x M.2 3052 B-key (USB 2.0 & 3.0) 1x PCIe (x8) slot 1x PCIe (x4) slot
Storage	1x 2.5" HDD/SSD (external-accessible) 1x M.2 2280 M-key (SATA & PCIe(4x))
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (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	3.5 kg
Operating Temperature	-10℃ ~ 60℃ (14°F~140°F) *with airflow -10℃ ~ 50℃ (14°F to 122°F) without airflow
Storage Temperature	-20℃ ~ 80℃ (-4°F to 176°F)
Relative Humidity	5~90% @ 45℃, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operatiing: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, Support vPro & iAMT 11.0, desktop or wall mount brackets (RoHS2), 1x PCIe (x8) + 1x PCIe (x4) expansion slots, via IP302 riser card
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

AMS310

Compact Expandable Fanless System
10th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)
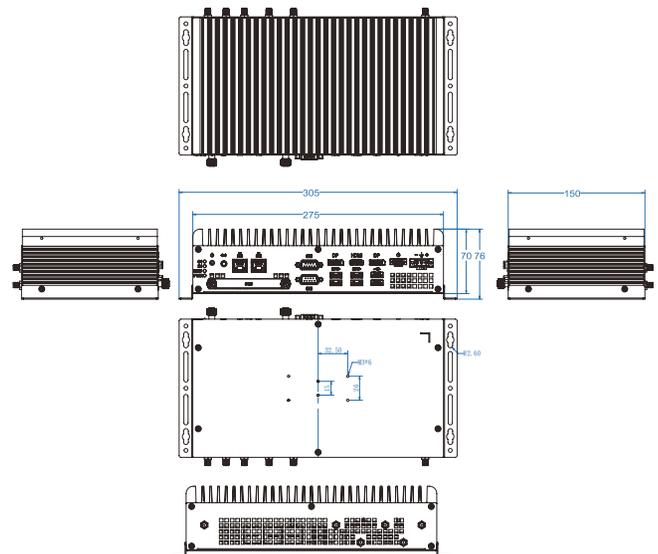
Features

- 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

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, 2x USB 2.0 ports (1x software programmable) 1x Red HDD LED, 1x green power LED, 2x Error LED by programming 1x 2-pin 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 2230 E-key (USB 2.0 & PCIe) 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 & PCIe(4x))
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (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	2.75 kg
Operating Temperature	-10℃ ~ 60℃ (14°F~140°F) *with airflow -10℃ ~ 50℃ (14°F to 122°F) without airflow
Storage Temperature	-20℃ ~ 80℃ (-4°F to 176°F)
Relative Humidity	5~90% @ 45℃, (non-condensing)
Vibration	Non-Operating: 1.0 grms / 5~500Hz / random operation Operatiing: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, Supports adaptor with vPro & iAMT 11.0, desktop or wall mount brackets (RoHS2)
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

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.

AMS300S / AMS302S

Compact Expandable Fanless System
LGA1151 Intel® Gen 7th/6th Core™ i7/i5/i3 Desktop Processors (35W TDP)

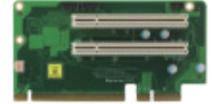**Extended Lifetime**

AMS300S

AMS302S

Features

- Fanless system with IBASE MB300S board
- LGA1151 Intel® Core™ i7/i5/i3 Processors (35W TDP)
- Front removable drive bay for HDD/SSD (supports RAID 0/1)
- Over/Under/Reverse voltage protection
- Supports DIN-rail mount & wall mount
- iSMART, iAMT (11.6)
- 1x PCIe (x8) + 1x PCIe (x4) expansion slot (For AMS302)


IP302 Riser card

IP303 Riser card

IP304 Riser card

Specifications

System Mainboard	MB300S with Intel® Q170 PCH
CPU Type	LGA1151 7th/6th Gen Intel® Core™ i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 3.4GHz
Memory	2x DDR4 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 PCIe sockets (full-size) 1x PCIe (x8) slot + 1x PCIe (x4) slot [For AMS302]
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 mount (wall mount kit included)
Dimensions	AMS300S: 275mm (W) x 140mm (D) x 70mm (H) 10.83" (W) x 5.51" (D) x 2.76" (H) AMS302S : 275mm (W) x 140mm (D) x 117mm (H) 10.83"(W) x 5.51" (D) x 4.61" (H)
Weight	2.7 kg for AMS300S; 3.3 kg for AMS302S
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 Operatiing: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

AMS300MS	Fanless System with MB300S, 2x COM Optional Intel® Core™ i7/i5/i3 desktop Processor, DDR4 memory, 2.5"64GB MLC industrial-grade SSD, Power adaptor
AMS302MS	Fanless System with MB300S, 2x COM Optional Intel® Core™ i7/i5/i3 desktop Processor, DDR4 memory, 2.5"64GB MLC industrial-grade SSD, Power adaptor 1x PCIe (x8) + 1x PCIe (x4) expansion slots
AMS302MS-PCI	Fanless System with MB300S, 2x COM, w/ IP304, Optional Intel® Core™ i7/i5/i3 desktop Processor, DDR4 memory, 2.5"64GB MLC industrial-grade SSD, Power adaptor, 2x PCIe expansion slots
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)

Dimensions and Drawing

AMS300S

AMS302S

AMI242

Compact Expandable Fanless System
14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)
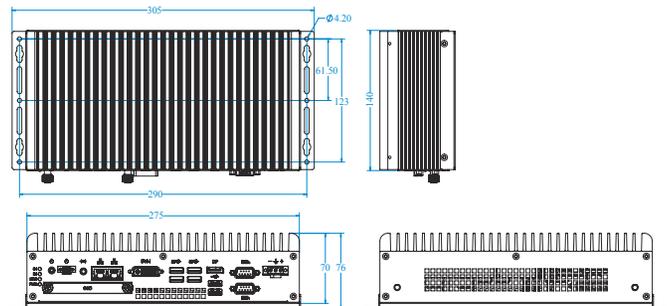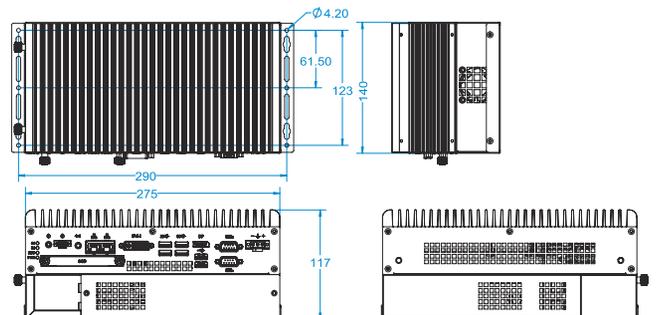
USB 2.0 & COM ports from IP218

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 PCIe(16x) expansion slot
- Supports Over/Under/Reverse voltage protection
- Dual SIM slots support WWAN redundancy, iAMT (16.1), TPM (2.0)
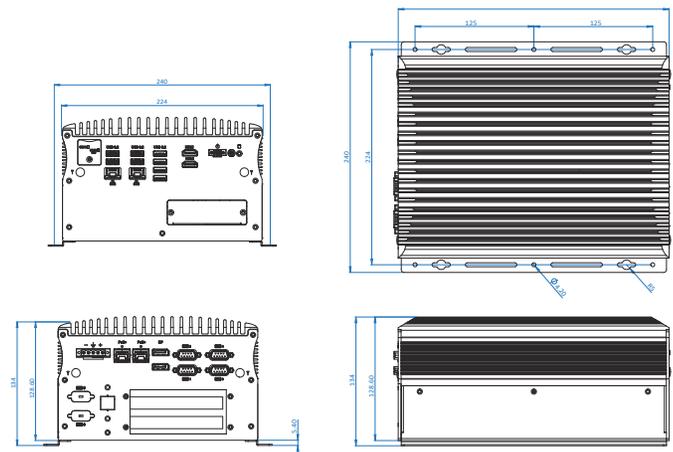- 2x 2.5" Storage (supports RAID 0/1)

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 PCIe (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)0 x 285mm(D) x 129mm(H)
Weight	4.9 kg
Operating Temperature	-20 ℃ ~ 70 ℃ (-4°F~158°F) [with 35W CPU and DDR5 memory]
Storage Temperature	-20℃ ~ 80℃ (-4°F~176°F)
Relative Humidity	5%~90%@45℃ (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), w/ 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), w/ mounting brackets, 1x expansion slot (IP218 riser card) (RoHS2)
330W Power Adaptor (optional)	330W (24V@13.75A) power kit compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

AMI241

Compact Expandable Fanless System

14th/13th Intel® Core™ i9/i7/i5/i3 desktop processors (35W TDP)

Features

- Fanless system with iBASE MBE240 proprietary board
- 14th/13th Intel® Core™ i9/i7/i5/i3 desktop processors (35W TDP)
- Support DDR5-5600 memory, up to Max.64GB Non-ECC
- 2x Intel® 2.5G LAN, 2x Intel® GbE (Support 802.3 at PoE+)
- 3x M.2 sockets (M-key/B-key/E-key)
- Supports 1x PCIe(16x) expansion slot
- Supports Over/Under/Reverse voltage protection
- Dual SIM slots support WWAN redundancy, iAMT (16.1), dTPM(2.0)
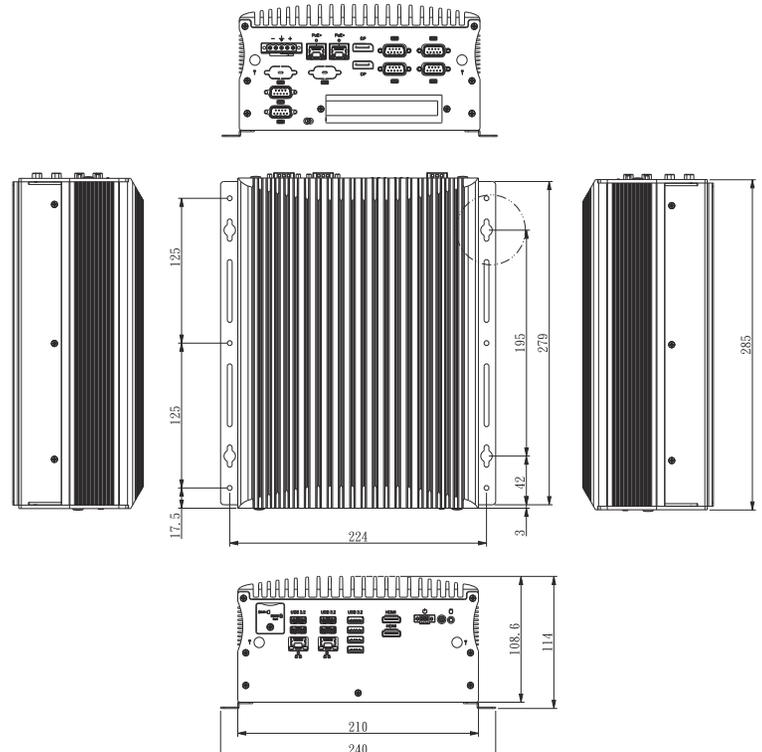- 2x 2.5" Storage (support RAID 0/1)

Specifications

System Mainboard	MBE240AF with Intel® Q670E PCH
CPU Type	14th/13th/12th Intel® Core™ i9/i7/i5/i3 desktop processors (35W TDP)
System Speed	Up to 5.0GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB , Non-ECC
Front Panel External I/O	2x RS232/422/485 COM ports 4x RS232 COM ports 2x DisplayPort 2x RJ-45 GbE ports (supports 802.3at PoE+) 1x 5-pins DC-in terminal block type for +24V 2x Antenna holes 1x Expansion slots
Rear Panel External I/O	2x HDMI 8x USB 3.2 ports 2x Antenna holes 2x RJ-45 2.5G port 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 PCIe (16x) expansion slot 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
Power Requirement	+24V DC-in
Construction	Aluminum @ Gray
Chassis Color	Silver & Gray
Mounting	Desktop & wall mount
Weight	4.9 kg
Dimensions	210mm(W) x 285mm(D) x 109mm(H)
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 Non-operating: 40G/11 ms Duration
Certification	CE, FCC & LVD
Operating System	Windows 10 /11, Ubuntu

Ordering Information

AMI241AFM	(AMI) Aluminum Chassis with MBE240AF (Q670E PCH), Fanless Design, w/o CPU /memory/Storage, with riser card IP214. Supporting 6x COM, iAMT16.1, mounting brackets, (RoHS2)
330W Power Adaptor (optional)	330W (24V@13.75A) power kit compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

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.

iBASE 57

AMI240

Compact Expandable Fanless System
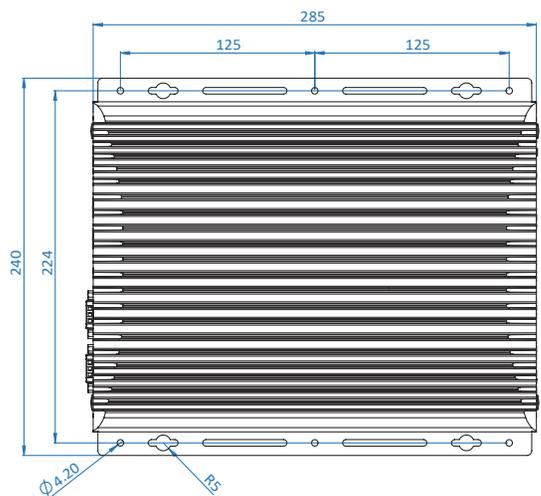### 14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors (35W TDP)

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

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

Ordering Information

AMI240AFM	(AMI) Aluminum Chassis with MBE240AF (Q670E PCH), Fanless Design , w/o CPU /memory/Storage, Supporting 4x COM, iAMT16.1, mounting brackets,(RoHS2)
270W Power Adaptor Kit (optional)	270W (24V@11.25A) power adaptor kit compatible with IEC62368-1/ EN62368-1

Dimensions and Drawing

AMI232

Compact Expandable Fanless System
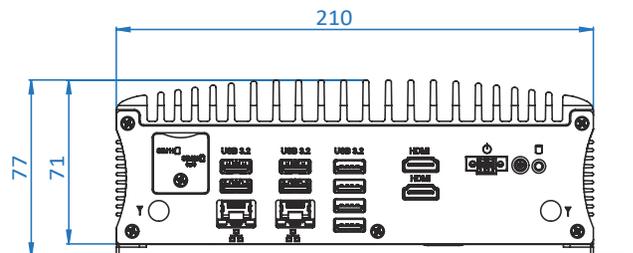### 9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)

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)
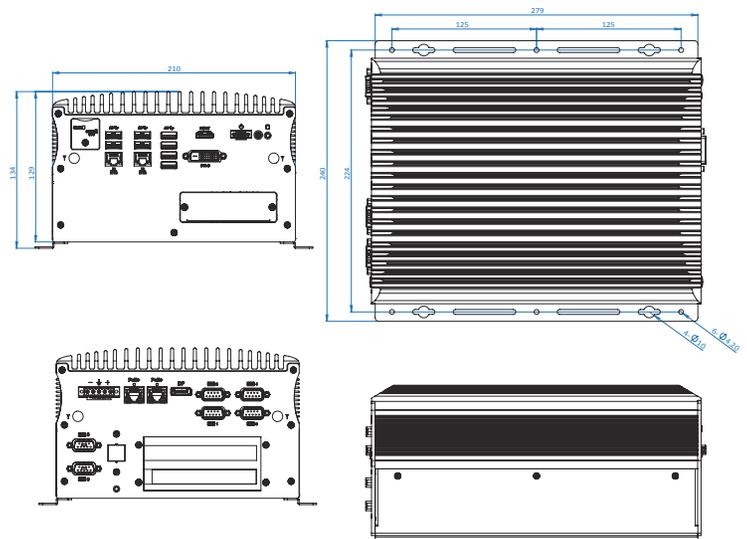- 2x Flexible PCIe / PCI expansion slot
- 2x 2.5" storage (supports RAID 0/1)

Specifications

System Mainboard	MB230AF with Intel® Q370 PCH
CPU Type	9th/8th Gen Intel® Core™ i7/i5/i3 desktop processors
System Speed	Up to 4.0 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 PCIe / PCI expansion slot 1x M.2 (B-key supports USB 2.0 for 4G/LTE) 1x M.2 (E-key supports PCIe + USB 2.0 for CNVi) 1x M.2 (M-key supports PCIe(4x) + SATA for NVMe SSD)
Storage	2x 2.5" HDD/SSD 1x M.2 (M-key supports PCIe(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℃ ~ 70℃ (-4℉~158℉) (for 35W CPU)
Storage Temperature	-20℃~80℃ (-4℉~176℉)
Relative Humidity	5~90% @60℃, (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating: 20G / 11ms Non-operating: 40G / 11ms
Certification	CE/ FCC Class A/ LVD

Ordering Information

AMI232AFM (Supports Sierra module)	(AMI) Aluminum Chassis with MB230AF (Q370 PCH), Fanless Design, w/o CPU /memory/Storage/power adaptor. Supports 6x COM(from IP211/ IP212), 4x COM (from IP213), mounting brackets, optional riser card
AMI232-217M	(AMI) Aluminum Chassis with MB230AF (Q370 PCH), riser card(IP217). Fanless Design, w/o CPU/memory/ Storage/ power adaptor. Supports 4x COM, mounting brackets
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

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.

iBASE   59

AMI231

Compact Expandable Fanless System
9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)

iSMART | Fanless | IP40 | 15 years Life Time | IEC 62368-1 EN 62368-1

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

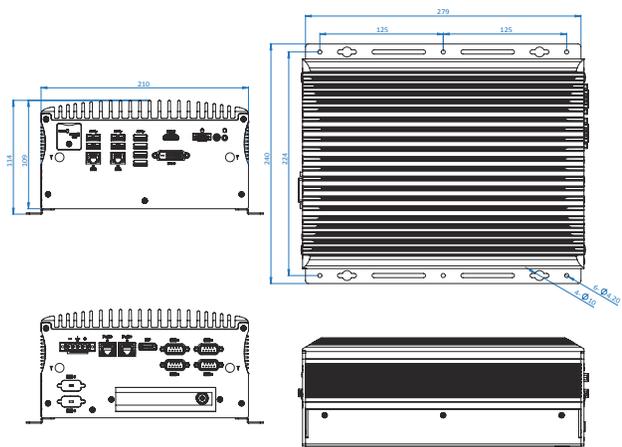● 2x 2.5" storage (supports RAID 0/1)

Specifications

System Mainboard	MB230AF with Intel® Q370 PCH
CPU Type	9th/8th Gen Intel® Core™ i7/i5/i3 desktop processors
System Speed	Up to 4.0 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 PCIe / PCI expansion slot 1x M.2 (B-key supports USB 2.0 for 4G/LTE) 1x M.2 (E-key supports PCIe + USB 2.0 for CNVi) 1x M.2 (M-key supports PCIe(4x) + SATA for NVMe SSD)
Storage	2x 2.5" HDD/SSD 1x M.2 (M-key supports PCIe(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℃ ~ 70℃ (-4°F~158°F) (for 35W CPU)
Storage Temperature	-20℃~80℃ (-4°F~176°F)
Relative Humidity	5~90% @60℃, (non-condensing)
Vibration	Operating : 3Grms / 5~500Hz

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

Ordering Information

AMI231AFM (Supports Sierra module)	(AMI) Aluminum Chassis with MB230AF (Q370 PCH), Fanless Design, w/o CPU /memory/Storage/power adaptor. Supports 6x COM(from IP214/ IP215), mounting brackets, 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

iBASE

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.

AMI230

Compact Expandable Fanless System
9th/8th Gen Intel® Core™ i7/i5/i3 Desktop Processors (35W TDP)

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
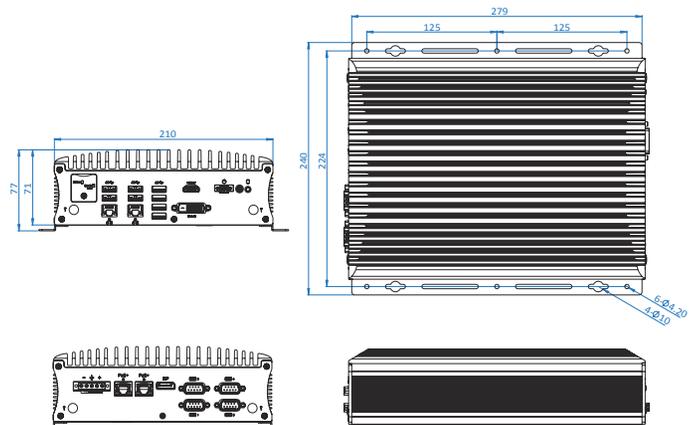- iSMART, iAMT (11.6), TPM (2.0)

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 PCIe + USB 2.0 for CNVi) 1x M.2 (M-key supports PCIe(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	4 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

AMI230AFM (Supports Sierra module)	(AMI) Aluminum Chassis with MB230AF (Q370 PCH), Fanless Design, w/o CPU /memory/Storage/power adaptor. Supports mounting brackets
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

AMI220 / AMI222

Compact Expandable Fanless System
7th/6th Gen Intel® Core™ i7/i5/i3 Desktop Processors
(35W TDP)

iSMART | Fanless | IP40 | IEC 62368-1 EN 62368-1

Extended Lifetime

AMI220

AMI222

Features

- Fanless system with IBASE MB220AFS-1 or MB220EFS-1 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)

IP211 Riser card

IP212 Riser card

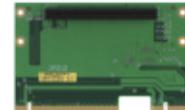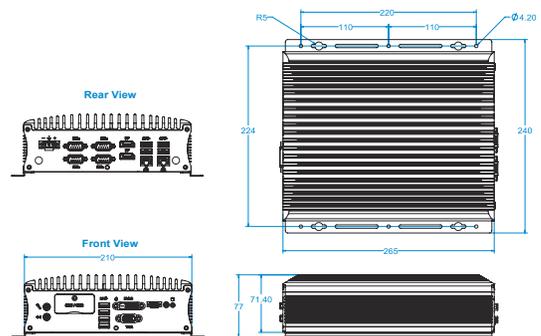IP213 Riser card

Specifications

System Mainboard	MB220AFS-1 with Intel® Q170 PCH MB220EFS-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 DDR4 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 [For AMI222 series]
Rear Panel External I/O	1x RS232/RS422/485 port for COM#1 3x RS232 port for COM#2 ~ COM#4 2x extra RS232 port for COM#5 ~ COM#6 [For AMI222 + IP211 or IP212 riser card] 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 [AMI222 series]
Expansion Slots	2x Mini PCIe sockets
Storage	1x 2.5" HDD/SSD (Internal) 2nd 2.5" HDD/SSD (External-accessible) 2x mSATA (AMI220AFS or AMI222AFS) 1x mSATA (AMI220EFS or AMI222EFS) RAID 0,1,5,10 support (AMI220AFS or AMI222AFS only)
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting	Desktop or wall mount (wall mount kit included)
Dimensions	AMI220 series: 210mm (W) x 265mm (D) x 77mm (H) 8.27" (W) x 10.43" (D) x 3.03" (H) AMI222 series: 210mm (W) x 265mm (D) x 128.6mm (H) 8.27" (W) x 10.43" (D) x 5.06" (H)
Weight	3.6 kg [AMI220 series] 4.3 kg [AMI222 series]
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

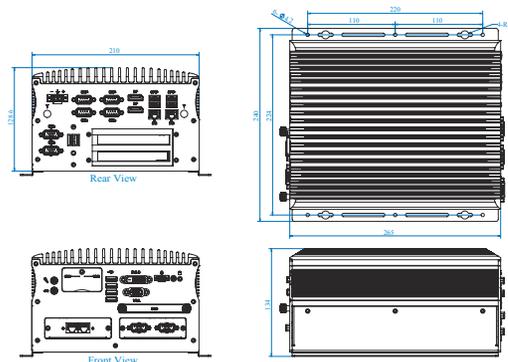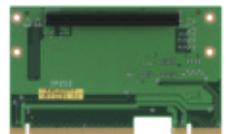|	
AMI220AFSM	Fanless barebone system with MB220AFS-1, 4x COM, Optional Intel® Core™ i7/i5/i3 CPU, DDR4 memory, 2.5 MLC industrial-grade SSD, power adaptor
AMI220EFSM	Fanless barebone system with MB220EFS-1, 4x COM, Optional Intel® Core™ i7/i5/i3 CPU, DDR4 memory, 2.5 MLC industrial-grade SSD, power adaptor
AMI222AFSM	Fanless box system with MB220AFS-1, 4x COM or 6 x COM [with riser card], Optional Intel® Core™ i7/i5/i3 CPU, DDR4 memory, 2.5 MLC industrial-grade SSD, power adaptor
AMI222EFSM	Fanless box system with MB220EFS-1, 4x COM or 6 x COM [with riser card], Optional Intel® Core™ i7/i5/i3 CPU, DDR4 memory, 2.5 MLC industrial-grade SSD, power adaptor
IP211 Kit (optional)	IP211 riser card w/ COM cables for AMI222 series
IP212 Kit (optional)	IP212 riser card w/ COM cables for AMI222 series
IP213 (optional)	IP213 for AMI222 series
150W power adaptor (optional)	150W (12V @12.5A) power adaptor, bare wire type Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

AMI220

AMI222

iBASE

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.

Card Model		Compatible System		Expansion Slot
IP214 143.4mm x 67.8mm		 AMI231	 AMI241	16x PCIe [Gen.3/Gen.4]
IP215 143.4mm x 67.8mm		 AMI231	 AMI241	PCI

Card Model		Compatible System		Slot #1 (Lower Side)	Slot # 2 (Upper Side)
IP211 143.4mm x 87.78mm		 AMI232	 AMI242	PCIe(8x) [Gen.3/Gen.4]	PCIe(1x) [Gen.3/Gen.4]
IP212 143.4mm x 87.78mm		 AMI232	 AMI242	N/A	PCIe(16x) [Gen.3/Gen.4]
IP213 143.4mm x 87.78mm		 AMI232	 AMI242	PCIe(16x) [Gen.3/Gen.4]	PCI
IP217 143.4mm x 87.78mm		 AMI232	 AMI242	PCIe(8x) [Gen.3/Gen.4]	PCIe(16x) with (8x) signal [Gen.3/Gen.4]
IP218 143.4mm x 87.78mm		 AMI242		N/A	PCIe(16x) [Gen.5]
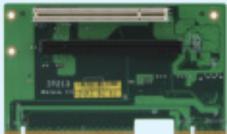
CMB108

Expandable System
14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 DT processors (TDP 65W)

Features

- Supports Intel® Core™ 200E series and 14th/13th/12th Gen Intel® Core™ DT processors (TDP 65W)
- Supports discrete GPU cards with reserved expansion slots
- Multiple expansion slots:
  1x PCIe(x16) [PCIe Gen.5], 1x PCIe(x4) [PCIe Gen. 4], 1x PCIe(x4) [PCIe 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	Intel® Core™ 200E series and 14th/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 1x Audio port for [Line-in / Line-out / Mic-in]
Rear Panel External I/O	Pluggable cooling-fan
Expansion Slots	1x PCIe(x16) [Gen.5], 1x PCIe(x4) [Gen.4], 1x PCIe(x4) [Gen.3]
Storage	4x 2.5" SATA (supports RAID 0/1)+ 2x M.2 M-key (2280)
Construction	SECC
Chassis Color	Black
Mounting Type	Desktop & wall mount
Dimensions	325mm(W) x 350.0mm(D) x 156.0mm(H)
Weight	Depends on the configuration of power supply and motherboard related components
Operating Temperature	0℃~45℃ (32℉~113℉) (for 65W CPU) @60℃, non-condensing
Storage Temperature	-20℃~80℃ (-4℉~176℉), @60℃, non-condensing
Relative Humidity	10~95%, non-condensing @60℃
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 MB998 Series MicroATX motherboards w/o CPU, memory, storage, supports Intel® Core™ 200E series and i9/i7/i5/i3 / Pentium® / Celeron® processors, up to 5.6GHz

Dimensions and Drawing

CMI300-1001

Mini-ITX System
Slim System with IBASE MI1001AF Mini-ITX Motherboard
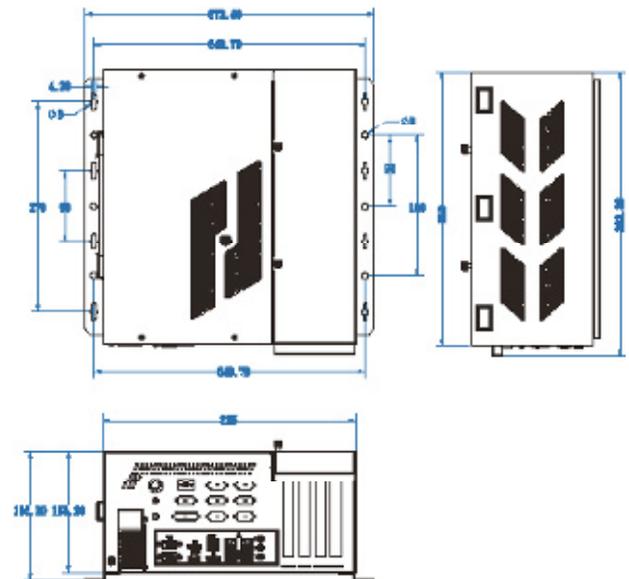
Features

- LGA1700 for 14th/13th/12th Gen Intel® Core™ desktop processor
- 2x DDR5-5600 SO-DIMM, Max.64GB
- Supports DP, HDMI, 2x COM ports and 4x USB 3.2
- 2x Intel® 2.5G LAN & 2x Intel® 10G LAN
- Supports M.2 SSD and WiFi/BT
- Supports Digital I/O, iAMT(16.1), TPM (2.0)
- +24V DC input
- Supports Windows 11

intel ai

Specifications

System Mainboard	MI1001AF-10G
CPU Type	14th/13th/12th Gen Intel® Core™ DT processors
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 mount 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 ℃ ~ 45 ℃ (32°F~113°F)
Storage Temperature	-20℃ ~ 80℃ (-4°F~176°F)
Relative Humidity	5% ~ 90% @45℃ (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

CMI300-1001M	(CMI) Embedded system with MI1001AF-10G & CPU cooler, w/o CPU/memory/SSD/Power adaptor supports, iAMT (16.1), mounting brackets (RoHS2)
230W power adaptor (optional)	230W(24V@9.58A) power adaptor, 4pin DC-jack Compatible with IEC62368-1/ EN62368-1

Dimensions and Drawing

CMI300-997

Mini-ITX System
Slim System with IBASE MI997AF Mini-ITX Motherboard
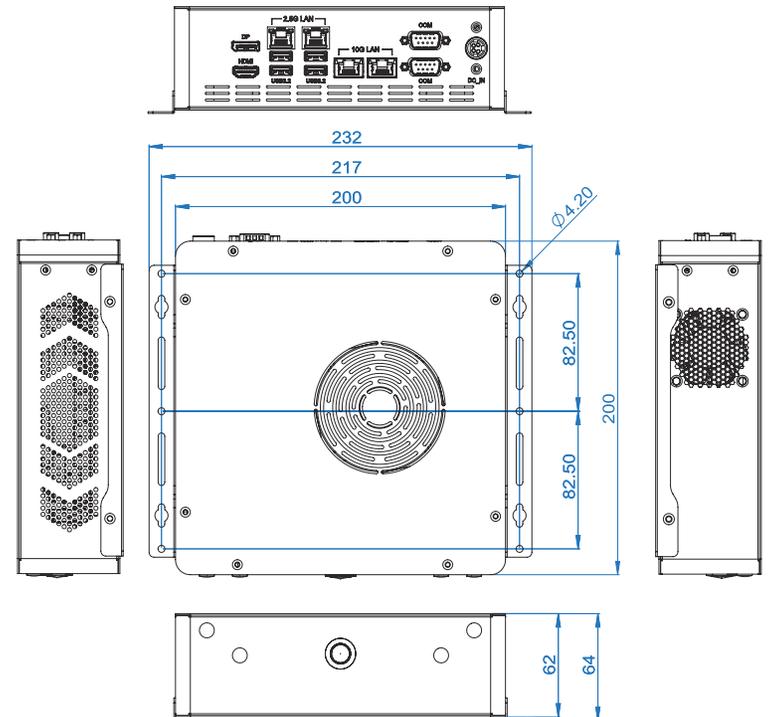
Features

- 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
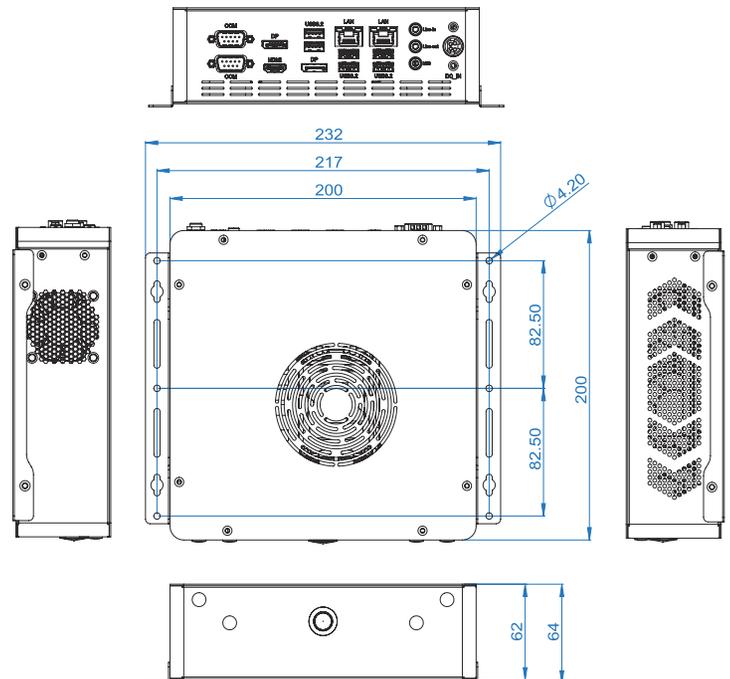- Dimensions: 200(W) x 200(D) x 62(H) mm

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)
230W power adaptor (optional)	230W(24V@9.58A) power adaptor, 4pin DC-jack Compatible with IEC62368-1/ EN62368-1

Dimensions and Drawing

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.

CMI300-997

Desk mount / VESA mount

100
100

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)

CMI300-988

Features

- AMD Ryzen™ Embedded V1000 Series processor
- 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
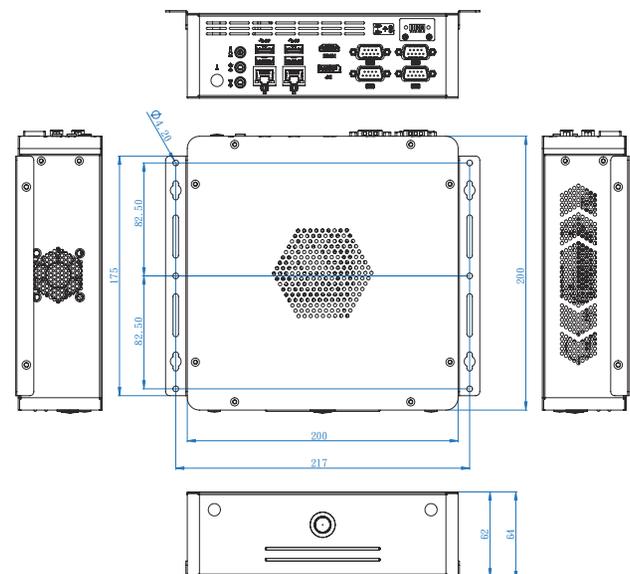- 1x Mini PCIe socket, 1x M.2 (M-key)

Specifications

System Mainboard	MI988F
CPU Type	AMD Ryzen™ Embedded V1000 Series processor
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 PCIe 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	1.8 kg
Operating Temperature	0℃~45℃ (32°F~113°F)
Storage Temperature	-20℃~80℃ (-4°F~176°F)
Relative Humidity	5%~90%@45℃ (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

iBASE

CMI212-999

Mini-ITX System
Expandable System with IBASE MI999AFE-Q Motherboard

PCIe (x8) PCIe (x8)

Features

- 10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile processors
- 2x DDR4 SO-DIMM, Max. 64GB, supports ECC
- Supports 1x DVI-D, 1x HDMI and 1x DisplayPort
- Dual Intel® Gigabit LAN
- 6x USB 3.2 , 2x USB 2.0, 2x COM
- Supports 1x PCIe (x16) ; 2x M.2 (E-key @2230 and 1x M-key @2280)
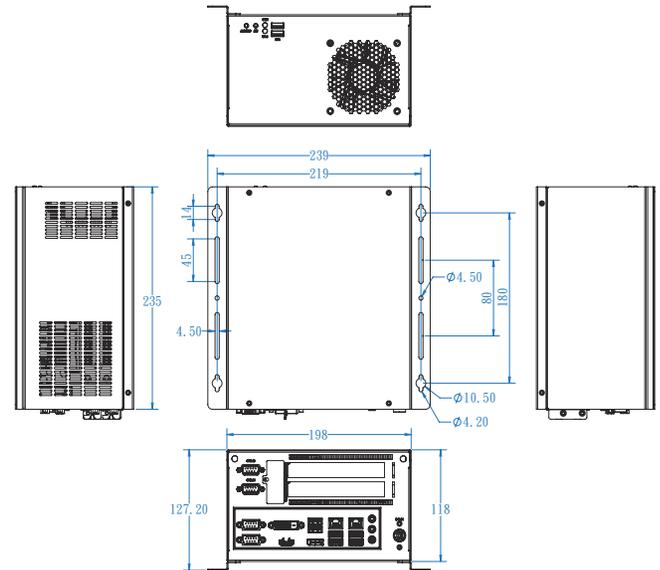
IP404 Riser card

Ordering Information

CMI212-999AFM	Chassis with MI999AFE-Q + IP404 riser card, w/o CPU, HDD, memory, w/ 330W power adaptor, 2.5" SSD holder, 2x PCIe (x16) expansion slots (with PCIe (x8) signal) (RoHS2)

Specifications

System	System Mainboard	MI999AFE-Q
	Processor	10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop processors
	PCH	MI999AFE-Q: Intel® Q470E
	System Speed	Up to 4.7 GHz
	Memory	2x DDR4-2933/2666 SO-DIMM, Max. 64GB
I/O Interface	Front-side Panel I/O	1x Power LED indicator, 1x Storage LED indicator 1x power button, 1x reset button 2x USB 2.0 ports
	Rear-side Panel I/O	1x DC-jack for power input 2x RS232 ports via pin header 2x Antenna holes 2x DB9 for COM#1/COM#2 1x DVI-D + 1 x HDMI 1x (DP + Dual USB3.2 Type-A) 2x (Dual USB3.2 Type-A + RJ45 connector) 1x triple type jack for Audio connector
Storage Interface	SATA	1x 2.5" Storage drive bay
	M.2	1x M.2 M-key M2280
Expansion Slots	PCIe Expansion	2x PCIe (x16) expansion slots (2x PCIe (x8) signal)
	M.2	1x E-key E2230, 1x M-key M2280
	Add-on card Max. Size	111mm(W) x 168mm(D) x 18mm(H)
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
Mechanical	Construction	SECC
	Chassis Color	Black
	Mounting Type	Wall mount & Desktop
	Dimensions	198mm (W) x 235mm (D) x 118mm (H) 7.80" (W) x 9.25" (D) x 4.65" (H)
	Weight	3.2 kg
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

Dimensions and Drawing

CMI212-990

PCIe (x8) PCIe (x8)

Features

- 6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile processors
- 2x DDR4 SO-DIMM, Max. 64GB, supports ECC
- Supports 1x DVI-D, 1x HDMI and 1x DisplayPort
- Dual Intel® Gigabit LAN
- 6x USB 3.0 , 2x USB 2.0, 2x COM
- Supports 1x PCIe (x16) ; 2x M.2 (E-key @2230 and 1x M-key @2280)
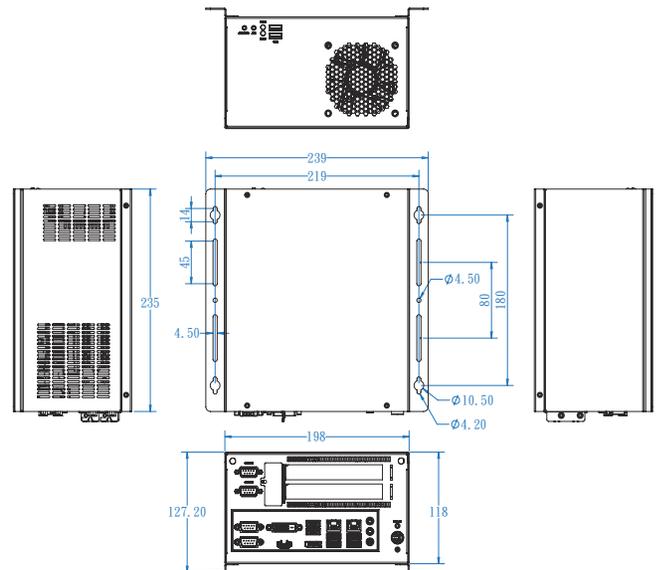
IP404 Riser card

Specifications

System	System Mainboard	MI990VF/MI990EF
	Processor	6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile processors
	PCH	MI990VF: Intel® CM236 MI990EF: Intel® HM170
	System Speed	Up to 3.7 GHz
	Memory	2x DDR4-2133 SO-DIMM, Max. 32GB
I/O Interface	Front-side Panel I/O	1x Power LED indicator, 1x Storage LED indicator 1x power button, 1x reset button 2 x USB 2.0 ports
	Rear-side Panel I/O	1x DC-jack for power input 2x RS232 ports via pin header 2x Antenna holes 2x DB9 for COM#1/COM#2 1x DVI-D + 1 x HDMI 1x (DP + Dual USB3.2 Type-A) 2x (Dual USB3.2 Type-A + RJ45 connector) 1x 3-in-1 audio jack
Storage Interface	SATA	1x 2.5" Storage drive bay
	M.2	1x M.2 M-key M2280, 1x mSATA
Expansion Slots	PCIe Expansion	2x PCIe (x16) expansion slots (2x PCIe (x8) signal)
	M.2	1x M-key M2280
	Add-on card Max. Size	111mm(W) x 185mm(D) x 17mm(H)
Power Supply	AC Adaptor	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	SECC
	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	3 kg
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)

Ordering Information

CMI212-990-6820M	Chassis with MI990VF-6820 + IP404 riser card, w/ o HDD, memory, w/ 150W power adaptor, 2.5" SSD holder, 2x PCIe (x16) expansion slots (with PCIe (x8) signal) (RoHS2)
CMI212-990-6440M	Chassis with MI990VF-6440 + IP404 riser card, w/ o HDD, memory, w/ 150W power adaptor, 2.5" SSD holder, 2x PCIe (x16) expansion slots (with PCIe (x8) signal) (RoHS2)
CMI212-990-6100M	Chassis with MI990EF-6100 + IP404 riser card, w/ o HDD, memory, w/ 150W power adaptor, 2.5" SSD holder, 2x PCIe (x16) expansion slots (with PCIe (x8) signal) (RoHS2)

Dimensions and Drawing

iBASE

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.

CMI211-1005

Mini-ITX System
Expandable System with IBASE MI1005AF Motherboard

PCIe (x4)

IP201 Riser card

Preliminary

Features

- Intel® Core™ Ultra 200H series mobile onboard processors, up to 65W
- 2x DDR5 cSO-DIMM, Max. 96GB, Non-ECC
- supports 2x Type-C, 1x HDMI and 1x DisplayPort(DP++)
- LAN 1: Intel® I226LM, supports 2.5G and iAMT
  LAN 2 / LAN 3: Intel® I226V, supports 2.5G only
- 4x USB 3.2 , 2x USB Type-C, 4x USB 2.0, 2x COM
- Supports 1x PCIe (x4) [Gen.4.0]; 3x M.2 (E-key @2230 and 2x M-key @2280 & 2242)

Ordering Information

CMI211-1005AFM	Barebone system with MI1005AF+ IP201 riser card, w/o SSD, memory, w/ 250W PSU, 2.5" storage holder, 1x PCIe (x4) expansion slot (RoHS2)

Specifications

System	System Mainboard	MI1005AF
	Processor	Intel® Core™ Ultra 200H series mobile Processors
	PCH	N/A
	System Speed	Up to 5.4 GHz (Core™ Ultra 9 285H)
	Memory	2x DDR5 SO-DIMM sockets, Up to DDR5-6400 cSO-DIMM memory module, Max. 96GB
I/O Interface	Front-side Panel I/O	2x USB 2.0 ports 2x Antenna holes
	Rear-side Panel I/O	1x AC-inlet 1x Power switch (rocker switch) 1x Power LED indicator 1x Storage LED indicator 2x USB2.0 ports 2x DB9 for COM#1/COM#2 (COM#1 with RS232/422/485, select from BIOS) 1x DP + 1x HDMI 2x (USB Type-C + USB3.2 Type-A + RJ45 connector) 1x (Dual USB3.2 Type-A + RJ45 connector) 1x 3-in-1 audio jack 2x Antenna holes
Storage Interface	SATA	1x 2.5" Storage drive bay
	M.2	2x M.2 (M2280 & M2242)
Expansion Slots	PCIe Expansion	1x PCIe (x4)[Gen.4.0] expansion slot
	M.2	1x E-key E2230, 2x M-key (M2280 & M2242)
	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	3.2 kg
Environmental	Operating Temperature	0℃~45℃ (32°F~113°F)
	Storage Temperature	-20℃~80℃ (-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

Dimensions and Drawing

326
314
300
4- Ø 4.20
4- Ø 5.50
70
70
70
200
205
72
74

CMI211-999

Mini-ITX System
Expandable System with IBASE MI999AF/MI999EF Motherboard

Features

- 10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile processors
- 2x DDR4 SO-DIMM, Max. 64GB, supports ECC
- Supports 1x DVI-D, 1x HDMI and 1x DisplayPort
- Dual Intel® Gigabit LAN
- 6x USB 3.2, 2x USB 2.0, 2x COM
- Supports 1x PCIe (x16); 2x M.2 (E-key @2230 and 1x M-key @2280)

IP119 Riser card

Specifications

|		
System	System Mainboard	MI999AF/ MI999EF
	Processor	10th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop processors
	PCH	MI999AF: Intel® W480E MI999EF: Intel® H420E
	System Speed	Up to 4.7 GHz
	Memory	2x DDR4-3200 SO-DIMM, Max. 96GB
I/O Interface	Front-side Panel I/O	2x USB 2.0 ports 2x Antenna holes
	Rear-side Panel I/O	1x AC-inlet 1x Power switch (rocker switch) 1x Power LED indicator 1x Storage LED indicator 2x DB9 for COM#1/COM#2 1x DVI-D + 1 x HDMI 1x (DP + Dual USB3.2 Type-A) 2x (Dual USB3.2 Type-A + RJ45 connector) 1x 3-in-1 audio jack
Storage Interface	SATA	1x 2.5" Storage drive bay
	M.2	1x M.2 M-key M2280
Expansion Slots	PCIe Expansion	1x PCIe (x16) expansion slot
	M.2	1x E-key E2230, 1 x M-key M2280
	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	3.2 kg
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)

Ordering Information

CMI211-999AFM	Chassis with MI999AFE-W (W480E) + IP119 riser card, w/o HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCIe (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 PCIe (x16) expansion slot (RoHS2)

Dimensions and Drawing
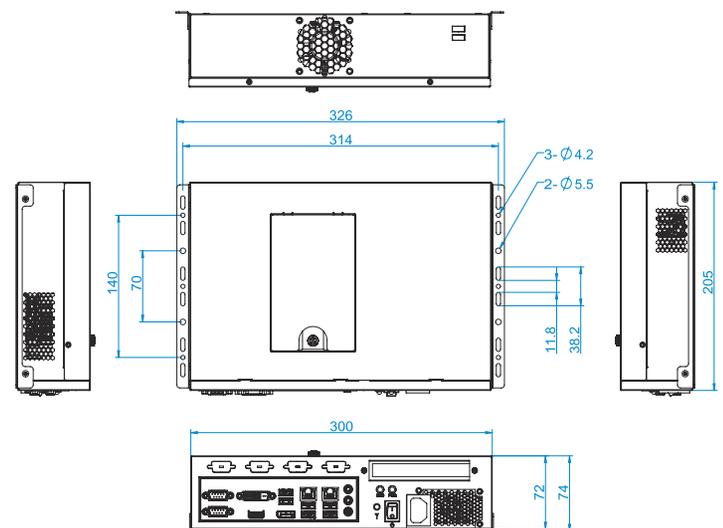
iBASE

CMI211-992/ 990

Mini-ITX System
Expandable System with IBASE MI992VF/MI990VF/MI990EF Motherboard

PCIe (x16)

Features

- Mini-ITX system supports IBASE MI992/MI990 Mini-ITX motherboards
- 2x DDR4 SO-DIMM, Max. 32GB, supports ECC
- Supports 1x DVI-D, 1x HDMI and 1x DisplayPort
- Dual Intel® Gigabit LAN
- 6x USB 3.0 , 2x USB 2.0, 2x COM
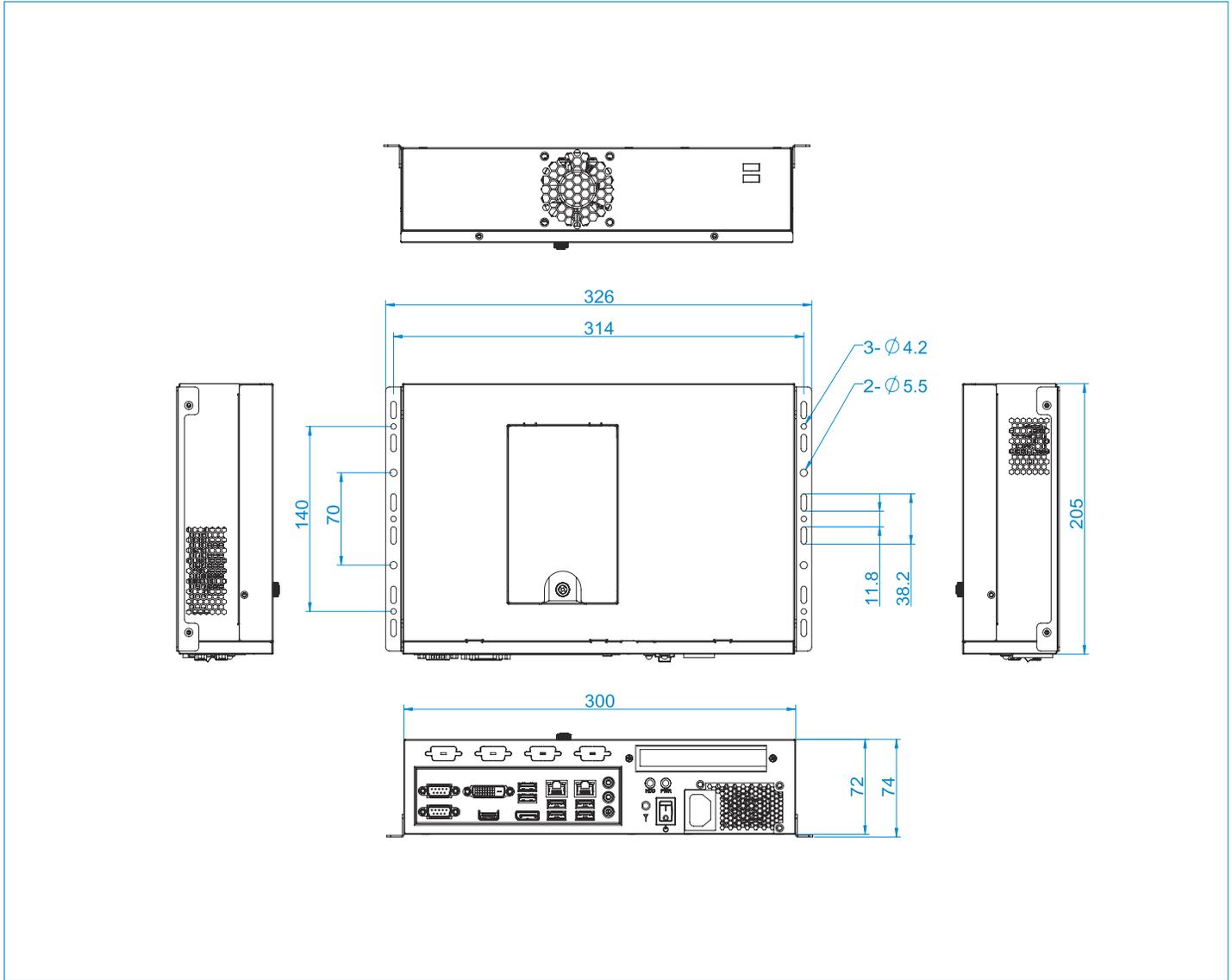- Supports 1x PCIe (x16) ; 1x M.2 (M-key @2280); 2x mini PCIe

IP119 Riser card

Specifications

	Model	CMI211-992VF-7820	CMI211-990
System	System Mainboard	MI992VF	MI990VF/MI990EF
	Processor	7th Gen Intel® Core™ i7-7820EQ Processors	6th Gen Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® mobile processors
	PCH	Intel® CM238	MI990VF: Intel® CM236 MI990EF: Intel® HM170
	System Speed	Up to 3.7 GHz	Up to 3.7 GHz
	Memory	2x DDR4-2400 SO-DIMM, Max. 32GB	2x DDR4-2133 SO-DIMM, Max. 32GB
I/O Interface	Front-side Panel I/O	2x USB 2.0 ports	
	Rear side Panel I/O	1x AC-inlet 1x Power switch (rocker switch) 1x Power LED indicator 1x Storage LED indicator 1x Antenna hole 2x DB9 for COM#1/COM#2 1x DVI-D + 1 x HDMI 1x (DP + Dual USB3.0 Type-A) 2x (Dual USB3.0 Type-A + RJ45 connector) 1x 3-in-1 audio jack	
Storage Interface	SATA	1x 2.5" Storage drive bay	
	mSATA / M.2	1x M.2 M-key M2280/1 x mSATA	
Expansion Slots	PCIe Expansion	1x PCIe (x16) expansion slot	
	M.2	1x M-key M2280	1x M-key M2280
	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	2.91 kg	2.8 kg
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)	

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.

iBASE   73

CMI211-992/ 990

Dimensions and Drawing

Ordering Information

CMI211-992VF-7820M	Chassis with MI992VF-7820 + IP119 riser card, w/o CPU, HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCIe (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 PCIe (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 PCIe (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 PCIe (x16) expansion slot (RoHS2)

iBASE

CMI211-991AFM / CMI212-991AFM

Mini-ITX System
Expandable System with IBASE MI991AFS Mini-ITX Motherboard

IEC 62368-1 / EN 62368-1

PCIe (x8)

PCIe (x16)

Extended Lifetime

CMI211-991AFM

CMI212-991AFM

Features

- 7th/6th Gen LGA1151 Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop processors
- 2x DDR4 SO-DIMM, Max. 32GB & Dual Intel® Gigabit LAN
- Supports 1x DVI-D, 1x HDMI and 1x DisplayPort & iSMART
- 2x M.2 (E-key @2230 and 1x M-key @2280)
- I/O ports for 6x USB 3.2, 2x USB 2.0, 2x COM [CMI211-991] or 4xCOM [CMI212-991]
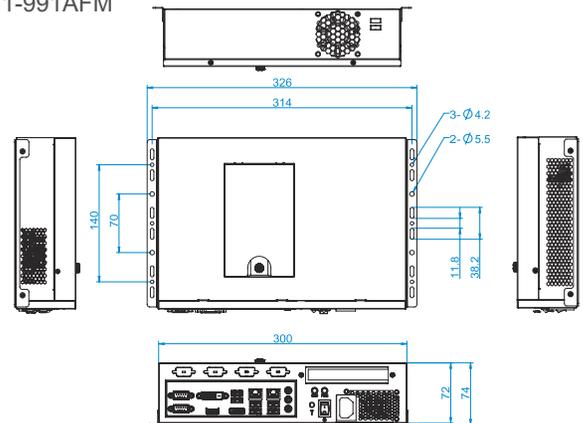- Supports 1x PCIe (x16) for CMI211-991 or 2x PCIe (x8) for CMI212-991

IP119 Riser card

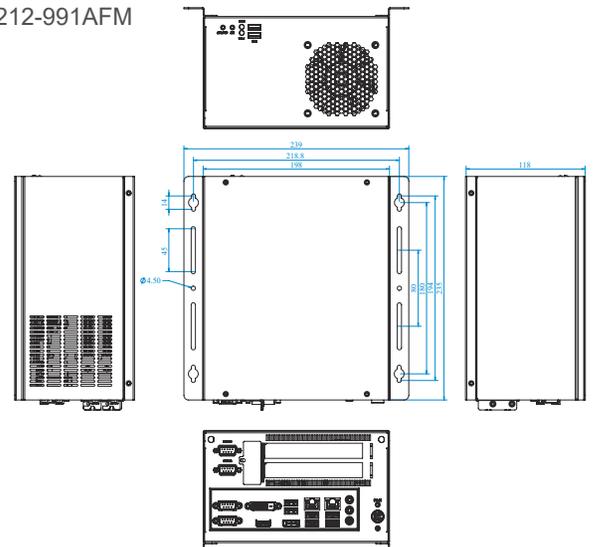IP404 Riser card

Ordering Information

CMI211-991AFM	Chassis with MI991AFS + CPU cooler + IP119 riser card, w/o CPU, HDD, memory, w/ 250W PSU, 2.5" HDD holder, 1x PCIe (x16) expansion slos (RoHS2)
CMI212-991AFM	Chassis with MI991AFS + CPU cooler + IP404 riser card + 150W power adaptor, w/o CPU, HDD, memory, w/ 2.5" HDD holder, 2x PCIe expansion slots (RoHS2)

Specifications

System	System Mainboard	MI991AFS
	Processor	7th/6th Gen LGA1151 Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® desktop processors
	PCH	Q170
	System Speed	Up to 4.0 GHz
	Memory	2x DDR4 SO-DIMM, Max. 32GB
I/O Interface	Front-side Panel I/O	CMI211-991: 2x USB 2.0 ports CMI212-991: 2x USB 2.0 ports , Power button, Reset button, Power & Storage LED indicators
	Rear-side Panel I/O	2x DB9 for COM#1/COM#2 1x DVI-D + 1x HDMI + 1x DP 6x USB3.1 ports 2x RJ45 for dual GbE ports 1x triple type jack for Audio connector *For CMI211-991: 1x AC-inlet , Power On/Off switch, Power & Storage LED indicators **For CMI212-991: 1x DC-jack for power input, 2x DB9 for COM#1/COM#2
Storage Interface	SATA	1x 2.5" storage device drive bay 1x mSATA socket
	M.2	N/A
Expansion Slots	PCIe Expansion	CMI211-991: 1x PCIe (x16) expansion slot via IP119 riser card CMI212-991: 2x PCIe (x16) [PCIe (x8) signal only] expansion slots via IP404 riser card
	M.2	N/A
	Add-on card Max. Size	111mm(W) x 168mm(D) x 18mm(H)
Power Supply	ATX Power	CMI211-991: Build-in Industrial 250W ATX power supply Input voltage: 100V ~ 240V Compatible with IEC62368-1/EN62368-1
	AC Adaptor	CMI212-991: Default DC-in 150W power adaptor Input voltage: 100V ~ 240V / Output voltage: 12V Compatible with IEC62368-1/EN62368-1
Mechanical	Construction	SECC
	Chassis Color	Black
	Mounting Type	Wall mount & Desktop
	Dimensions	CMI211-991: 300mm (W) x 205mm (D) x 72mm (H) 11.81" (W) x 8.07" (D) x 2.83" (H) CMI212-991: 198mm (W) x 235mm (D) x 118mm (H) 7.8" (W) x 9.25" (D) x 4.65" (H)
	Weight	3.1 kg
Environmental	Operating Temperature	0°C~45°C (32°F~113°F)
	Storage Temperature	-20°C~80°C (-4°F~176°F)
	Humidity	5% ~ 90% @45°C (non-condensing)
	Vibration	Non-Operating : 1.0 grms / 5~500Hz / random Operating : 0.25 grms / 5~500Hz / random
	Certification	CMI211-991: CE / LVD / FCC Class B CMI212-991: CE / LVD / FCC Class A(Pre-scan only)

Dimensions and Drawing

CMI211-991AFM

CMI212-991AFM

iBASE

ASB210-966

Compact System with IBASE IB966 3.5" Single Board Computer

NEW

Wide-range power input

Preliminary

Features

- Compact system with IBASE IB966 3.5'' Single Board Computer (TDP @45W)
- Onboard Intel® Core™ Ultra 7 356H Processor (Panther Lake-H Platform)
- Supports 3x M.2 sockets (1x E-key and 2x M-key)
- 12V(-10%) ~ 24V(+10%) DC-in power input
- 2x DDR5 cSO-DIMM, up to DDR5-6400, Max.128GB (Non-ECC)
- 2x USB 3.2, 1x USB Type-C, 1x USB 2.0, 2x Intel® 2.5G LAN
- 1x COM ports, External GPIO
- 1x HDMI, 1x DisplayPort, TPM (2.0)
- Optional VESA mount bracket

Specifications

System Mainboard	IB966AF-356H
CPU Type	Intel® Core™ Ultra 7 356H Processor
System Speed	Up to 3.3GHz
Memory	2x DDR5-6400 cSO-DIMM, Max.128GB
Front Panel External I/O	2x USB 3.2 1x USB 2.0 1x USB Type-C 1x DisplayPort 1x HDMI 1x DB9 for COM#1 (RS232/422/485) 2x 2.5G LAN 2x Antenna holes
Rear Panel External I/O	1x Power button 1x Digital I/O (4-in/4-out) 2x Antenna holes 1x Storage LED 1x 3-pin DC-in terminal block for 12V(-10%) ~ 24V(+10%)
Expansion Slots	3x M.2 sockets (1x E-key and 2x M-key)
Storage	1x M.2 M-key 2280, 1x M.2 M-key 2242, 1x 2.5" 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	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: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class-B

Ordering Information

ASB210-966HM	Barebone system with IB966AF-356, onboard Intel® Core Ultra 356H CPU , 2x DDR5 SO-DIMM memory slot, 1x 2.5" SSD slot, desktop stand & mounting bracket, without Memory module / SSD/ Power adaptor
Optional 90W power adaptor	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]

iBASE

ASB210-962H

SBC System
Edge AI Computer with IBASE IB962 3.5" Single Board Computer

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. 96GB
- Dual 2.5G LAN, 3x USB 3.2, 3x USB 2.0, 1x COM
- Supports 2.5" SSD & M.2 NVMe storage devices
- Supports HDMI & DP, External GPIO, TPM(2.0)
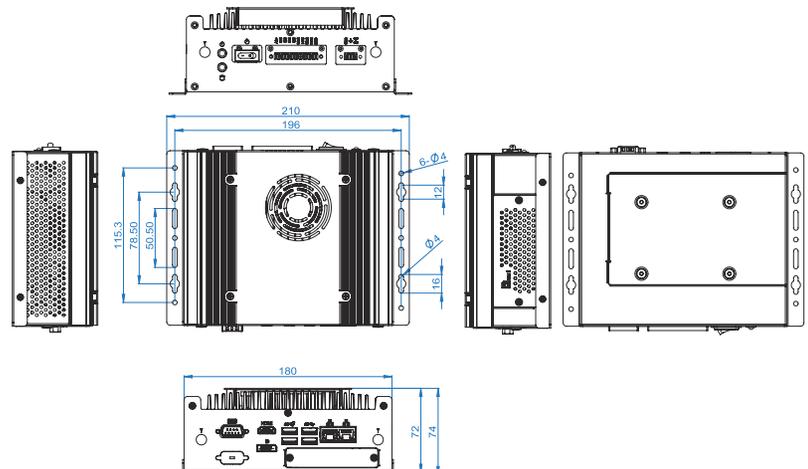- Optional VESA mount bracket

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. 96GB
Front Panel External I/O	3x USB 3.2 1x USB 2.0 2x USB 2.0 ports via cable 1x DisplayPort 1x HDMI 1x DB9 for COM#1 (RS232/422/485) 2x 2.5G LAN 2x Antenna holes for WiFi 1x DB9 port (reserved)
Rear Panel External I/O	1x Power button 1x Digital I/O (4-in/4-out) 2x Antenna holes for WiFi 1x HDD LED 1x Power 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	-10°C ~ 50°C (14°F~122°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 / 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 / power adaptor and VESA mount bracket
180W power adaptor (optional)	180W (24V@7.5A) power adaptor, bare wire-type compatible with IEC62368-1/EN62368-1
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R]

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	24MB	18MB
Cores/Threads	16/22	14/18
Memory Speed (DDR5)	5600	5600
TDP	28W	28W

Dimensions and Drawing

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.

iBASE   77

ASB210-953

SBC System
Edge AI Computer with IBASE IB953 3.5" Single Board Computer

Features

- Edge AI Computer 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)
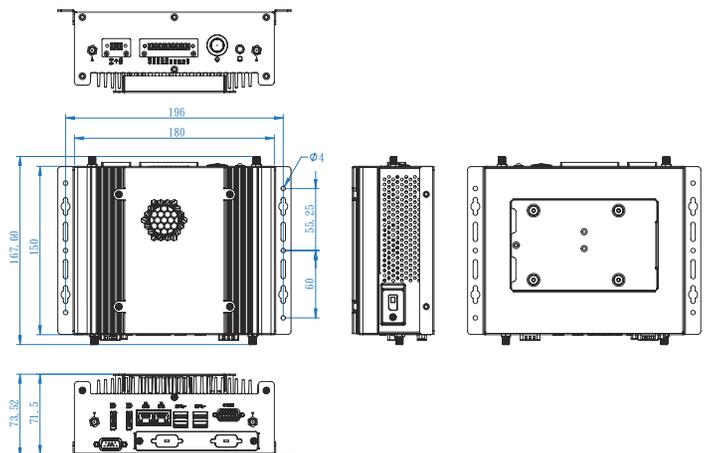- Optional VESA mount bracket

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, PCIe(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	1.5 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

ASB210-953-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
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R]

Dimensions and Drawing

ASB201-839

3.5" SBC System
Fanless System with IBASE IB839 3.5" Single Board Computer

Preliminary

Features

- Fanless system with IBASE IB839 3.5'' Single Board Computer
- Onboard Intel® Processor N150
- 2x DisplayPort, dTPM, supports Wi-Fi 7
- Supports 3x M.2 sockets (B-key/ E-key and M-key)
- 12V(-10%) ~ 24V(+10%) DC-in power input
- 1x DDR5-4800 SO-DIMM, Max.16GB
- 2x USB 3.2, 2x Intel® 2.5G LAN, 1x COM ports

Specifications

System Mainboard	IB839F
CPU Type	Intel® Processor N150
System Speed	Up to 3.60 GHz
Memory	1x DDR5-4800 SO-DIMM, Max.16GB
Front Panel External I/O	2x USB 3.2 2x DisplayPort 1x DB9 for COM#1 (RS232/422/485) 2x 2.5G LAN 2x Antenna holes(reserve)
Rear Panel External I/O	1x Power button 1x Audio Jack for Line-out / Line-in / Mic-in 1x Storage LED 1x 3-pin DC-in terminal block for 12V(-10%) ~ 24V(+10%)
Expansion Slots	3x M.2 sockets (B-key/ E-key and M-key)
Storage	1x M.2 M-key 2280 (SATA type)
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included)
Dimensions	180mm (W) x 150mm (D) x 46.5mm (H) 7.06" (W) x 5.91" (D) x 1.83" (H)
Weight	1.3 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: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class-B

Ordering Information

ASB201-839-N150M	Fanless chassis with IB839F-N150, Intel® Processor N150 CPU, 1x COM, 1x DDR5 memory slot, 1x M.2 storage, desktop stand & mounting bracket, w/o memory/ power adaptor
60W power adaptor (optional)	60W (12V@5A) power adaptor, bare wire type compatible with IEC62368-1/EN62368-1
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R]

ASB200-962U

3.5" SBC System

Edge AI Computer with IBASE IB962 3.5" Single Board Computer

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. 96GB
- Dual 2.5G LAN, 3x USB 3.2, 3x USB 2.0, 1x COM
- Supports 2.5" SSD & M.2 NVMe storage devices
- Supports HDMI & DP, External GPIO, TPM(2.0)
- Optional VESA mount bracket
- Supports operating temperature from -10°C to 55°C

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. 96GB
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	1.5 kg
Operating Temperature	-10°C ~ +55°C (14°F~131°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
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R]

Recommended Processor List

Processor Number	Intel® Core™ Ultra 100 Series Processors – Intel® MTL 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	12MB	12MB
Cores/Threads	12/14	12/14
Memory Speed (DDR5)	5600	5600
TDP	15W	15W

Dimensions and Drawing

ASB200-953

3.5" SBC System
Fanless System with IBASE IB953 3.5" Single Board Computer
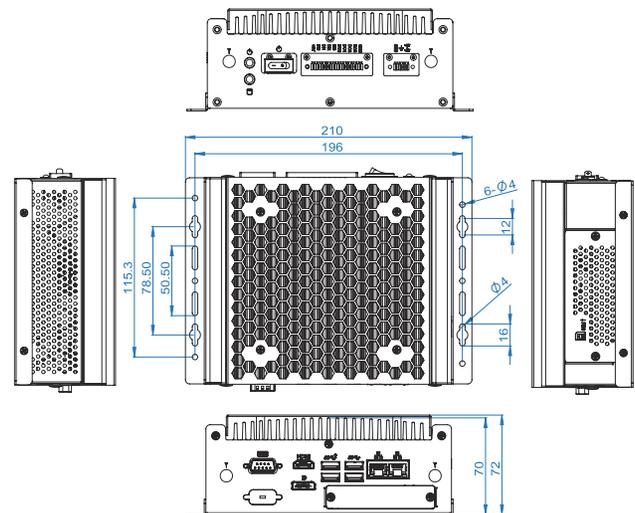
Features

- 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, PCIe(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	1.5 kg
Operating Temperature	0℃~45℃ (32℉~113℉) *with airflow 0.9m/s
Storage Temperature	-20℃ ~80℃ (-4℉~176℉)
Relative Humidity	5%~90%@45℃ (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
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R]

Dimensions and Drawing

ASB200-919

3.5" SBC System
Fanless System with IBASE IB919 3.5" Single Board Computer
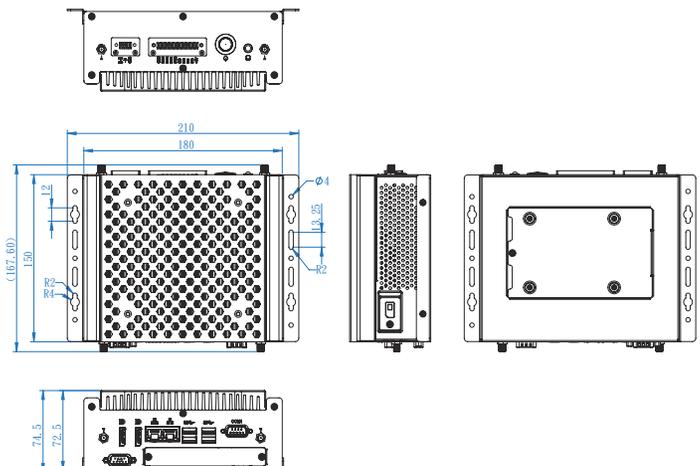
Features

- 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

Flexible Storage device   Storage   Easy maintenance
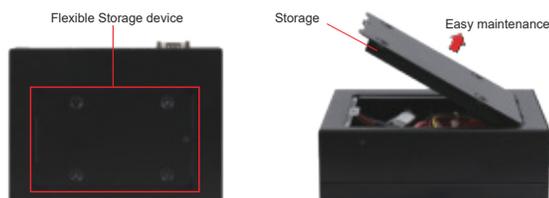
Specifications

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 DisplayPort 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	1.5 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: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Ordering Information

ASB200-919-i7M	Fanless chassis with IB919AF-8665, Intel® i7-8665UE 1.7GHz CPU, 1x COM, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-919-i5M	Fanless chassis with IB919AF-8365, Intel® i5-8365UE 1.6GHz CPU, 1x COM, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-919-i3M	Fanless chassis with IB919EF-8145, Intel® i3-8145UE 2.2GHz CPU, 1x COM, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-919-CELM	Fanless chassis with IB919EF-4305, Intel® Celeron® 4305UE 2.0GHz CPU, 1x COM, w/o memory/ Storage/ 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
Optional Accessories	WiFi antenna kit

Dimensions and Drawing
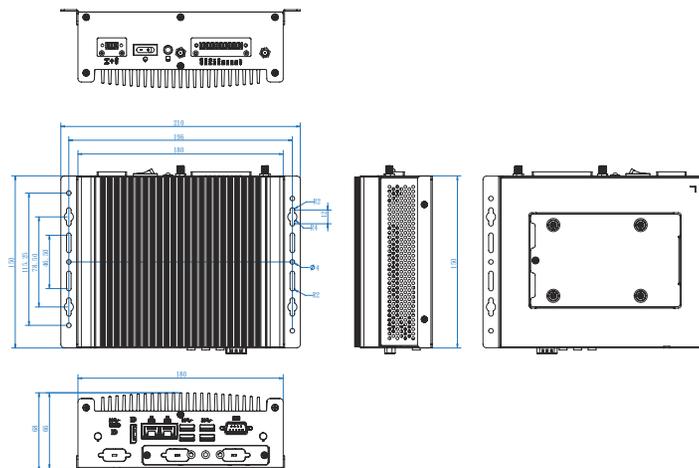
IBASE

ASB200-916

3.5" SBC System
Fanless System with IBASE IB916 3.5" Single Board Computer

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 PCIe (full-size)
- Supports 1x 2.5" SATA HDD
- 4x USB 3.0, DP/HDMI, 1x DisplayPort
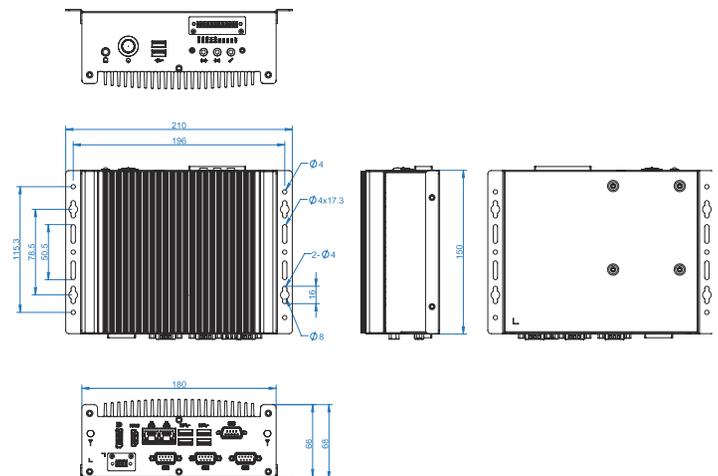- Wall mount kit included

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 PCIe 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	1.8 kg
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-i7M	Fanless chassis with IB916AF-7600, Intel® i7-7600U 2.8GHz CPU, 4x COM, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-916-i5M	Fanless chassis with IB916AF-7300, Intel® i5-7300U 2.6GHz CPU, 4x COM, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-916-i3M	Fanless chassis with IB916F-7100, Intel® i3-7100U 2.4GHz CPU, 4x COM, w/o memory/ Storage/ 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

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.

iBASE   83

ASB200-915

3.5" SBC System
Fanless System with IBASE IB915 3.5" Single Board Computer

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 PCIe (full-size)
- Supports 1x 2.5" SATA HDD
- 1x USB 3.1 port (Type-C), 4x USB 3.0 ports
- Wall mount kit included

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 PCIe 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	1.8 kg
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

Ordering Information

ASB200-915-i7M	Fanless chassis with IB915AF-6600, Intel® i7-6600U 2.6GHz CPU, 4x COM, supports iAMT11.0, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-915-i5M	Fanless chassis with IB915AF-6300, Intel® i5-6300U 2.4GHz CPU, 4x COM, supports iAMT11.0, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-915-i3M	Fanless chassis with IB915F-6100, Intel® i3-6100U 2.3GHz CPU, 4x COM, w/o memory/ Storage/ 90W power adaptor and VESA mount bracket
ASB200-915-i7-DCM	Fanless chassis with IB915AF-6600, Intel® i7-6600U 2.6GHz CPU, 4x COM, 1x90W power adaptor, supports iAMT11.0, w/o memory/ Storage/ VESA mount bracket
ASB200-915-i5-DCM	Fanless chassis with IB915AF-6300, Intel® i5-6300U 2.4GHz CPU, 4x COM, 1x 90W power adaptor, supports iAMT11.0, w/o memory/ Storage/ VESA mount bracket
ASB200-915-i3-DCM	Fanless chassis with IB915F-6100, Intel® i3-6100U 2.3GHz CPU, 4x COM, 1x 90W power adaptor, w/o memory/ Storage/ 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

ASB200-838

3.5" SBC System
Fanless system with IBASE IB838 3.5" Single Board Computer
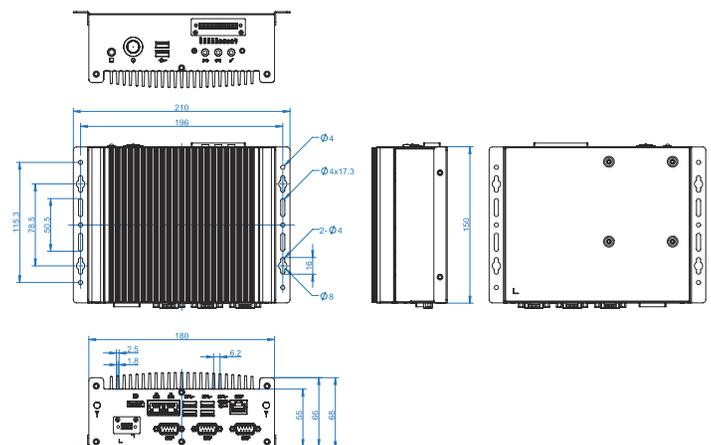
Features

- 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
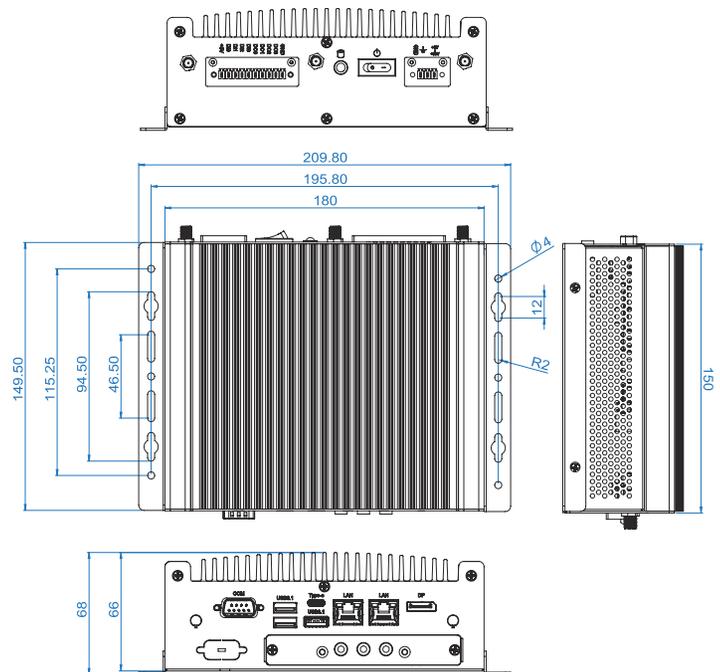- Wall mount kit included

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	1.8 kg
Operating Temperature	0℃~45℃ (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20℃ ~80℃ (-4°F~176°F)
Relative Humidity	5%~90%@45℃ (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

ASB100-PI900

2.5" PICO-ITX System
Palm-Sized Fanless System with IBASE PI900 2.5" PICO-ITX Board

NEW

Preliminary

Features

- Palm-Sized Fanless System with IBASE PI900 PICO ITX board (TDP 15W)
- Onboard Intel® Core™ Ultra 100U Processor
- 1x DDR5 SO-DIMM, Max. 48GB
- Supports HDMI, DP thru USB Type-C
- 3x USB 3.2, 2x USB2.0, 1x 2.5 GbE, 1x COM (RS232/422/485)
- Supports 2x M.2 sockets (E2230 and M2242)
- 12V DC-in power input
- Supports Wall mount, TPM (2.0)

Specifications

System Mainboard	IBASE PICO-ITX PI900F
CPU Type	Intel® Core™ Ultra 100U Processor
System Speed	Up to 4.80GHz
Memory	1x DDR5-5600 SO-DIMM, Max. 48GB
Front Panel External I/O	3x USB 3.2 1x HDMI 1x USB Type-C 1x 2.5 GbE
Rear Panel External I/O	1x DC-jack 2x Antenna holes 1x COM ports (RS232/422/485) 2x USB 2.0 1x ON/OFF Button
Expansion Slots	1x M.2 2230 (E-key) supports WiFi/ BT 1x M.2 2242 (M-key) supports NVMe/SATA SSD
Storage	1x M.2 M-key 2242
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mount or Desk mount
Dimensions	133mm (W) x 102.2mm (D) x 51.5mm (H) 5.24" (W) x 4.02" (D) x 2.03" (H)
Weight	1.2 kg
Operating Temperature	0°C~50°C (32°F~122°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

ASB100-PI900M-155U	Palm-Sized box PC with PI900F, Onboard Intel® Core™ Ultra 7 155U CPU, 1x COM & 3x USB 3.2, w/o memory/ SSD, Optional power adaptor w/ mounting bracket
50W power adaptor (optional)	50W (12V@4.16A) power adaptor, compatible with IEC62368-1/EN62368-1 [PN: A005PS050W0103000P]

IBASE

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.

ASB100-PI800

2.5" PICO-ITX System
Palm-Sized Fanless System with IBASE PI800 2.5" PICO-ITX Board
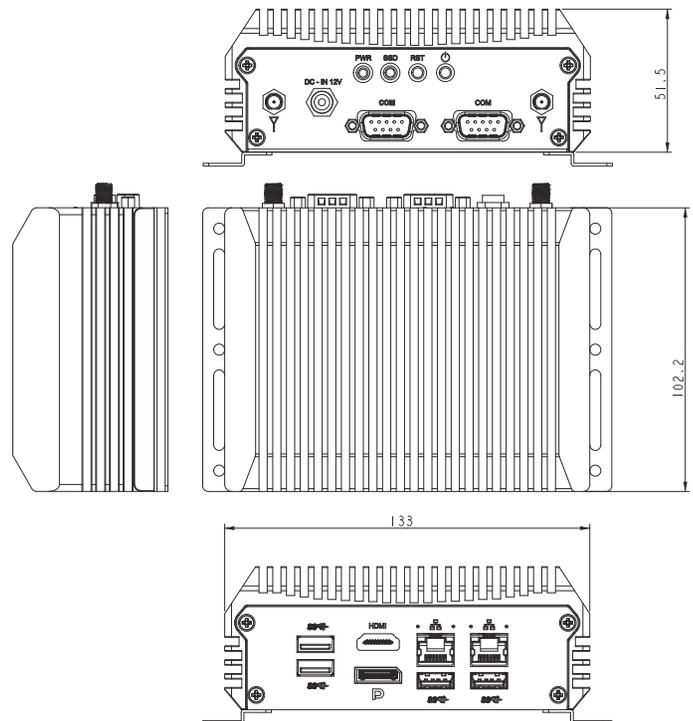
NEW **Fanless** **Preliminary**

Features

- Palm-Sized Fanless System with IBASE PI800 PICO ITX board (TDP 9W)
- Onboard Intel® Atom™ x7433RE Processor
- Supports 2x M.2 sockets (E2230 and M2242)
- 1x DDR5 SO-DIMM, Max. 16GB
- 4x USB 3.2, 2x 2.5 GbE, 2x COM (RS232/422/485)
- Supports HDMI, DisplayPort
- 12V DC-in power input
- Supports Wall mount, TPM (2.0)

IoT Evolution EDGE 2025 COMPUTING EXCELLENCE

Specifications

System Mainboard	IBASE PICO-ITX PI800F-7433RE
CPU Type	Intel® Atom® x7433RE Processor
System Speed	Up to 3.4GHz
Memory	1x DDR5-4800 SO-DIMM, Max. 16GB
Front Panel External I/O	4x USB 3.2 1x HDMI 1x DisplayPort 2x 2.5 GbE
Rear Panel External I/O	1x DC-jack 2x Antenna holes 2x COM ports (RS232/422/485) 2x LED indicators (storage / power) 1x Reset Button 1x ON/OFF Button
Expansion Slots	1x M.2 2230 (E-key) supports WiFi/ BT 1x M.2 2242 (M-key) supports PCIe(1x)/SATA SSD
Storage	1x M.2 M-key 2242
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mount or Desk mount
Dimensions	133mm (W) x 102.2mm (D) x 51.5mm (H) 5.24" (W) x 4.02" (D) x 2.03" (H)
Weight	1.0 kg
Operating Temperature	-20℃~50℃ (-4°F~122°F) *with airflow 0.9m/s
Storage Temperature	-20℃ ~80℃ (-4°F~176°F)
Relative Humidity	5%~90%@45℃ (non-condensing)
Vibration	Operating: 1Grms / 3~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class B

Dimensions and Drawing

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.

iBASE   87

CP100

2.5" PICO-ITX System
Palm-Sized Fanless System with with IBASE IB200 2.5" PICO-ITX Board

Features

- AMD Ryzen™ AMD Ryzen™ Embedded R2000 Series Processor with IBASE IB200, 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® I226IT 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 5.2" (D) x 2.02" (H)
Weight	0.9 kg
Operating Temperature	0℃~45℃ (32℉~113℉)
Storage Temperature	-10℃ ~ 80℃ (-14℉ ~ 176℉)
Relative Humidity	90% (non-condensing@60℃)
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

Note: The specification is subject to change without notice.

Dimensions and Drawing

iBASE
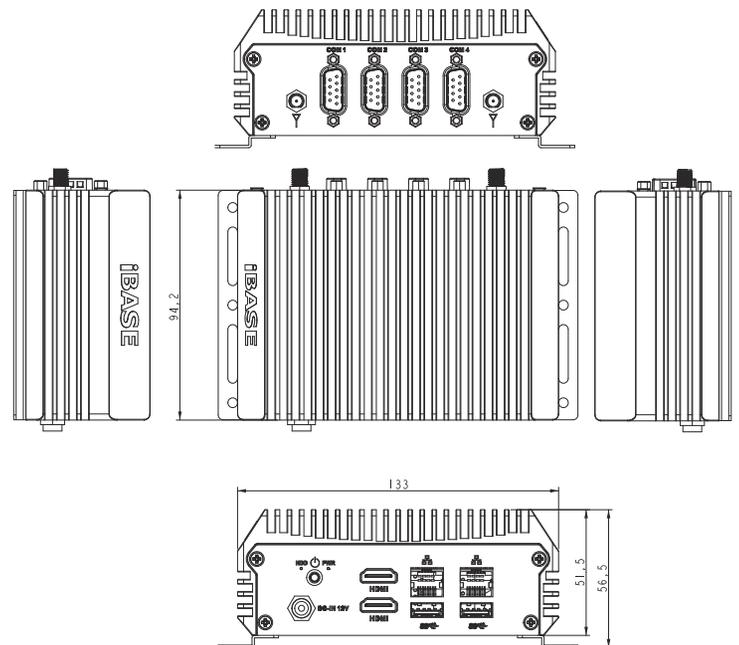
Embedded Function Cards

Riser Cards

IP245
Features
- 130mm x 60mm
- IT8893E chipset
- PCIe (x1) interface to 2x PCI slot

IP246
Features
- 130mm x 60mm
- IT8893E & PEX8603 chipset
- 1x PCIe (x1) to PCI + 1x PCIe (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
- PCIe (x16) interface to 2x PCIe (x8)

IP405
Features
- 139.25mm x 62.78mm
- PCIe (x16) interface to 2x PCIe (x8)

IP115
Features
- 139.7mm x 51.38mm
- 1x PCI interface to PCI

IP116-R
Features
- 139.7mm x 55.34mm
- 1x PCIe (x16) interface to PCIe (x16) slot

IP118
Features
- 119.63mm x 64.5mm
- 1x PCIe (x16) interface to PCIe (x16) slot

IP119
Features
- 123.96mm x 55.50mm
- 1x PCIe (x16) interface to PCIe (x16) slot

Embedded Function Cards

Riser Card

IP155
Features
- 139.7mm x 75.74mm
- ASM1083 chipset
- 1x PCIe (x1) interface to 2x PCI slot

IP201
Features
- 140mm x 55.60mm
- 1x PCIe (x4) interface to PCIe (x4)[Gen.5] 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 DC to DC converter
- 120W ATX power board

Function Card

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

iBASE

Mini PCIe Cards with Expansion

IBD182

Features:
- PCIe to 2x RS232
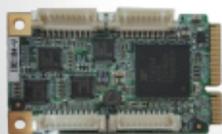- XR17V352 chipset
- 50.95mm x 30mm

IBD183

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

IBD184

Features:
- PCIe to 4x RS232
- XR17V354 chipset
- 50.95mm x 30mm

IBD185

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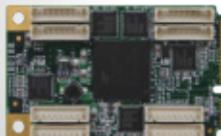- 16-in /16-out
- STM32F103V8 chipset
- 50.95mm x 30mm

IBD186

Features:
- PCIe to 2x RS232
  w/ isolation
- XR17V352 &
  2x LTM2882CY-3
  chipset
- 50.95mm x 30mm

IBD188

Features:
- PCIe to 8x RS232
- XR17V358 chipset
- 50.95mm x 30mm

IBD190

Features:
- PCIe to 1x GbE LAN
- 1x Intel® I211-AT chipset
- 50.95mm x 30mm

IBD192

Features:
- PCIe to 2x GbE LAN
- 2x Intel® I211-AT or
  2x Intel® I210-AT chipset
- 50.95mm x 30mm

IBD193

Features:
- PCIe to MRAM storage
- 1x MR2A16ACYS35 chipset
- 50.95mm x 30mm

IBD194

Features:
- USB to 2nd VGA Display
- Resolution up to 1920x
  1080 (Max.)
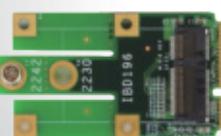- DisplayLink DL-165
  chipset
- 50.95 mm x 30 mm

IBD195

Features:
- PCIe to 2x CAN Bus
- Dual channel isolation
- 50.95mm x 30mm

IBD196

Features:
- Mini-PCIe to M.2 E key
- 54.5mm x 30mm

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