2026 — 2027 Edition

Edge AI Platforms

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)

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

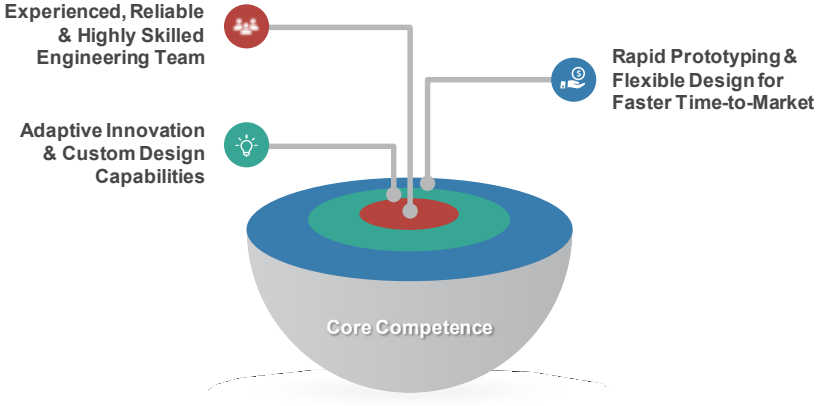
Design and Manufacturing of Robust Computing Platforms

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.

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.



IBASE Edge AI Product Overview

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
24	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

EC3000

Edge AI Computer
NVIDIA® Jetson Orin NX / Nano Series

Features

- NVIDIA® Jetson Orin NX and Nano series module
- 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

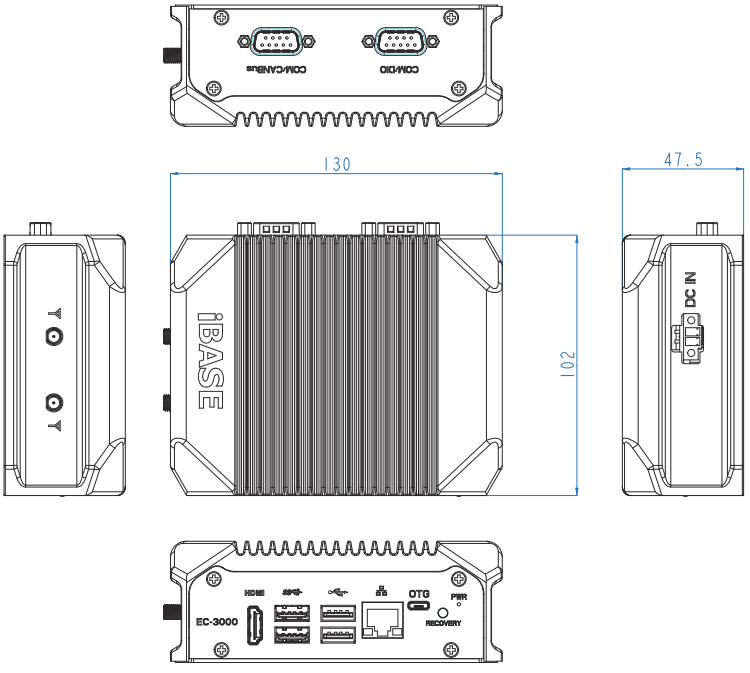
Specifications

System Mainboard	NVIDIA® Jetson Orin NX™ 16 GB/ 8 GB NVIDIA® Jetson Orin Nano™ 8 GB/ 4GB Module Compatibility with carrier board
CPU Type	6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3000-NX16/ EC3000-NX8: 2.0 GHz EC3000-NANO8/ EC3000-NANO4: 1.5 GHz
Memory	NVIDIA® Jetson Orin NX: 16GB/8GB 128-bit LPDDR5 102.4 GB/s NVIDIA® Jetson Orin Nano: 8GB 128-bit LPDDR5 102 GB/s NVIDIA® Jetson Orin Nano: 4GB 64-bit LPDDR5 51 GB/s
AI Inference Computing Power	NX 16GB delivery up to 100 TOPS NX 8GB delivery up to 70 TOPS Nano 8GB delivery up to 40 TOPS Nano 4GB delivery up to 20 TOPS
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 12V~24V DC INput with 2-pins terminal block
Expansion Slot	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 3042/3052 B-key (M.2 2242 B + M Key Storage) (default 128 GB) 1x M.2 E-Key 2230
Power Requirement	12V~24V DC
Power Supply	60W
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
Operating System	JetPack 6.1

Ordering Information

EC3000-NX8	NVIDIA® Jetson Orin NX 8GB, 1x HDMI, 1x GbE, 5x 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-NX16	NVIDIA® Jetson Orin NX 16GB, 1x HDMI, 1x GbE, 5x 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, 5x 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, 5x 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



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.

EC3020

Edge AI Computer
NVIDIA® Jetson Orin NX / Nano Series

Features

- NVIDIA® Jetson Orin NX™ and Nano™ Series module
- 1x HDMI 4Kp60 for Orin NX™, 1x HDMI 4Kp30 for Orin Nano™
- 2x GbE LAN
- 1x Micro USB (supports OS flash)
- 2x USB 3.2 Gen2 Type-A
- 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™ 16 GB/ 8 GB NVIDIA® Jetson Orin Nano™ 8 GM Module Compatibility with carrier board
CPU Type	Jetson Orin NX™ 16 GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 Jetson Orin NX™ 8 GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 Jetson Orin Nano™ 8 GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3020-NX16/ NX8: 2.0 GHz EC3000-NANO8: 1.7 GHz
Memory	NVIDIA® Jetson Orin NX™: 16GB/ 8GB 128-bit LPDDR5 102.4 GB/s NVIDIA® Jetson Orin Nano™: 8GB 128-bit LPDDR5 102 GB/s
AI Inference Computing Power	NX 16GB delivery up to 157 TOPS NX 8GB delivery up to 117 TOPS Nano 8GB delivery up to 67 TOPS
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 Slot	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 (AF), 5G Daughter Board
Storage	1x M.2 2280 M-Key for SSD (Default NVMe 256 GB)
Power Requirement	DC 12~24V
Power Supply	90W
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	Orin NX super mode: -25°C~40°C (-13°F~104°F) Orin NX normal/ Nano normal/ Nano super mode: -25°C~60°C (-13°F~140°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Relative Humidity	5%~95% (non-condensing)
Vibration	Operating: 1 grms / 3~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE/FCC
Operating System	Ubuntu 22.04 JetPack 6.2

Ordering Information

EC3020-NX16	NVIDIA® Jetson Orin™ NX 16 GB, 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, -15°C ~+55°C operating temperature, with power adapter, with RTC battery
EC3020-NX8	NVIDIA® Jetson Orin™ NX 8 GB, 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, -15°C ~+55°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, -15°C ~+55°C operating temperature, with power adapter, with RTC battery

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EC3100

Edge AI Computer

NVIDIA® Jetson Orin NX/Nano Series

TAIWAN EXCELLENCE 2026

IoT Evolution EDGE 2024 COMPUTING EXCELLENCE

Features

- NVIDIA® Jetson Orin NX and Nano Series module
- 2x GbE LAN (1 for OOB)
- 1x USB Type-C supports Recovery Mode and OTG
- 2x USB 3.2 Type-A, 2x USB 2.0 Type-A
- 1x DB9 for RS-232 COM port, 1x 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

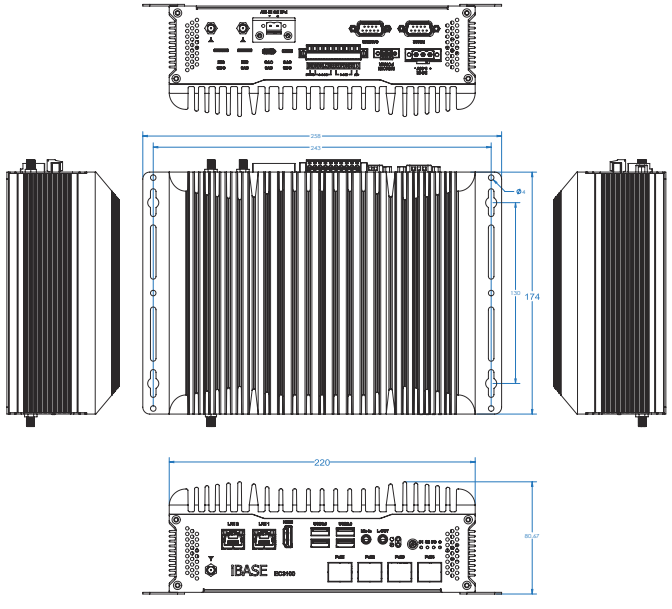
Specifications

System Mainboard	NVIDIA® Jetson Orin NX 16GB or 8GB/Orin Nano 8GB or 4GB SOM + Carrier Board
CPU Type	8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3/6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
System Speed	EC3100-NX16 / EC3100-NX8: 2.0 GHz EC3100-NANO8 / EC3100-NANO4: 1.5 GHz
Memory	NVIDIA® Jetson Orin NX: 8GB 128-bit LPDDR5 102.4 GB/s NVIDIA® Jetson Orin Nano: 8GB 128-bit LPDDR5 34 GB/s
AI Inference Computing Power	NX 16GB delivery up to 157 TOPS NX 8GB delivery up to 117 TOPS Nano 8GB delivery up to 67 TOPS Nano 4GB delivery up to 34 TOPS
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 RS-232 COM port DB9 connector 1x CANBus DB9 connector 2x Antenna holes
Expansion Slot	1x M.2 3052 B-Key (Optional 4G/5G module) 1x M.2 2230 E-Key (Optional WiFi/BT module) 1x M.2 3042 B-Key (Optional OOB 4G module) 1x M.2 2280 M-Key NVMe1 x SIM Card Slot 1x SIM socket for 4G/5G 1x SIM socket for OOB 3G/4G
Storage	128GB NVMe
Power Requirement	9V~36V DC
Power Supply	160W
Construction	SGCC
Chassis Color	Black & Red
Mounting Type	Wall mount
Dimensions	220mm (W) x 174mm (D) x 80mm (H)
Weight	3.0 kg (6.61 lbs)
Operating Temperature	-20°C~50°C (-4°F~122°F)(Target)
Storage Temperature	-40°C~80°C (-40°F~176°F)
Relative Humidity	10%~90% at 45°C (non-condensing)
Vibration	Operatiing: 1 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE, FCC
Operating System	Ubuntu 22.04 JetPack 6.2

Ordering Information

EC3100-NX16	NVIDIA® Jetson Orin NX 16GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-Key, 1x M.2 E-Key, 1x M.2 M-Key, with power adaptor, with RTC battery
EC3100-NX8	NVIDIA® Jetson Orin NX 8GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-Key, 1x M.2 E-Key, 1x M.2 M-Key, with power adaptor, with RTC battery
EC3100-NANO8	NVIDIA® Jetson Orin Nano 8GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-Key, 1x M.2 E-Key, 1x M.2 M-Key, with power adaptor, with RTC battery
EC3100-NANO4	NVIDIA® Jetson Orin Nano 4GB, 1x HDMI, 2x GbE, 5x USB, 2x M.2 B-Key, 1x M.2 E-Key, 1x M.2 M-Key, with power adaptor, with RTC battery

Dimensions and Drawing



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EC3500

Edge AI Computer
NVIDIA® Jetson™ AGX Orin™ Series

Features

- NVIDIA® Jetson™ AGX Orin™ Series module
- 64GB eMMC, 1x MicroSD slot
- 2x LAN, 10G and 1G
- 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 20.04 OS

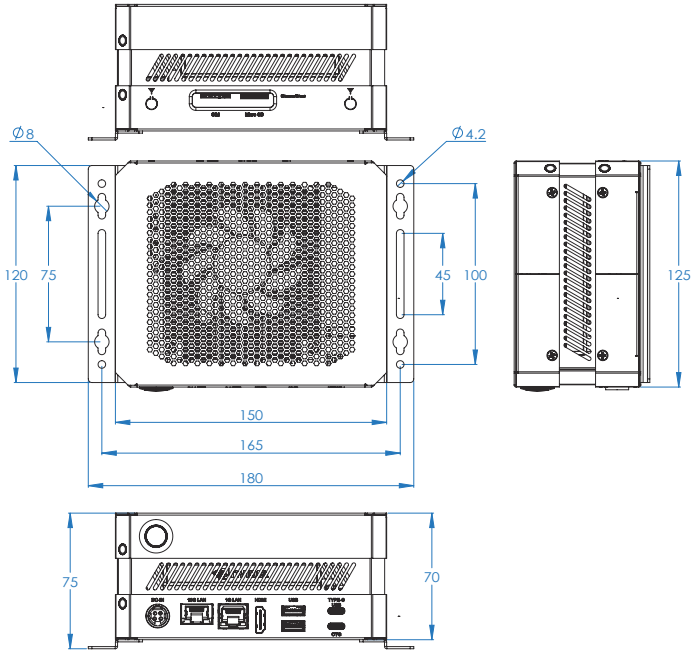
Specifications

System Mainboard	NVIDIA® Jetson™ AGX Orin™ 32GB/64GB SOM + Carrier Board
CPU Type	8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 / 12-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3
System Speed	2.2 GHz
Memory	32/64 GB 256-bit LPDDR5 204.8 GB/s
AI Inference Computing Power	NVIDIA Jetson AGX Orin 64GB module delivers up to 275 TOPS
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 Slot	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
Power Requirement	9V~36V DC
Power Supply	32GB : 52.25 W/ 64 GB: 72.25 W
Construction	SGCC
Chassis Color	Black & Red
Mounting Type	DIN rail, wall mount
Dimensions	150mm (W) x 120mm (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
Operating System	Ubuntu 22.04 JetPack 6.2

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



ISR215F

Edge AI Computer
NXP i.MX 8M Plus - ARM Cortex-A53 Quad-Core Processor

Features

- NXP Cortex™-A53, i.MX 8M Plus Quad-core 1.6GHz Processor
- Up to 2.3 TOPS NPU
- Embedded I/O for COM, USB, HDMI, Ethernet
- Supports M.2 B-Key(3052) for 5G module and NFC functions
- Supports M.2 E-Key(2230)/ m-PCIe for WiFi, BT, 4G, LCD and camera functions
- Wide-range operating temperature(-40°C~70°C)
- Ruggedized and fanless design

Specifications

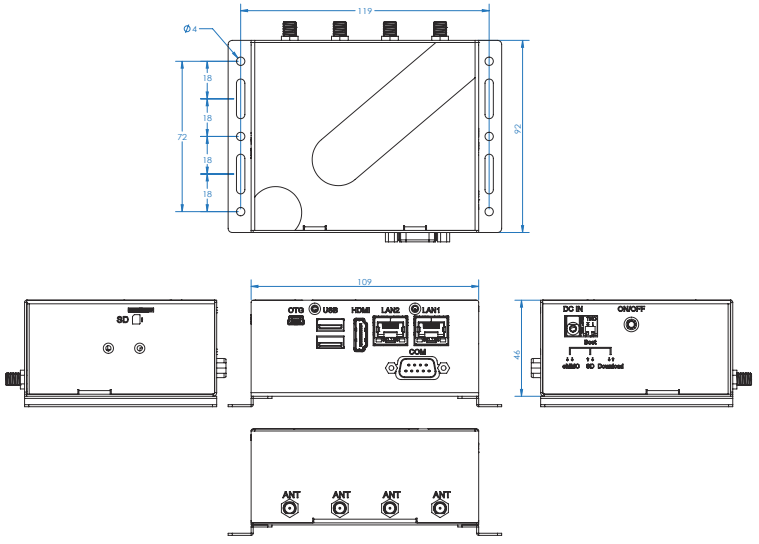
System Mainboard	IBR215-01 2.5" SBC
CPU Type	NXP Cortex™-A53, i.MX 8M Plus Quad-core
System Speed	1.8 GHz (Commercial Grade)/ 1.6 GHz (Industrial Grade)
Memory	3GB LPDDR4 on board (option: 4/8GB)
AI Inference Computing Power	NPU delivering up to 2.3 TOPS of AI performance
Front Panel External I/O	1x HDMI 2x USB 3.0 Type-A 2x RJ45 GbE LAN 1x Mini-USB OTG 1x RS-232/422/485 (IO board) Side I/O: 1x On/Off button 1x 12V~24V DC-IN jack 1x SD socket (UHS-I SDR-104, 104MB/s max) 1x Boot select switches (boot from eMMC or SD)
Rear Panel External I/O	4x Antenna holes (reserved)
Expansion Slot	1x M.2 3052 B-Key with SIM socket (for 5G module) 2x I2C / 4x GPIO 6-pin header 1x Audio Line-in and Line-out 6-pin header 1x DC power in 4-pin header 1x mPCIe (IO board, for 4G/LTE USB interface module) 1x M.2 E-Key (IO board, UART and SDIO for WiFi/BT modules) The following features are also available on IO board but not externally: 2x USB 3.0 in 2x 10-pin header 1x LVDS 2ch with Backlight control 1x Cap touch IF 2x MIPI-CSI for cameras 2x CAN-FD 1x 5V DC
Storage	16GB eMMC on board (option: up to 256GB)
Power Requirement	12V~24V DC-IN
Power Supply	60W
Construction	SGCC
Chassis Color	Black
Mounting Type	Wall mount, DIN rail
Dimensions	119mm (W) x 92mm (D) x 46mm (H)
Weight	0.5 kg (1.1 lbs)

Operating Temperature	-40°C~70°C (-40°F~158°F)
Storage Temperature	-40°C~70°C (-40°F~158°F)
Relative Humidity	0% to 90% RH at 60° C (non-condensing)
Vibration	Non-operating: 3 Hz to 500 Hz, 15 mins
Shock	Non-operating: 1G, 15 mins (x-, y-, z-axis)
Certification	CE / FCC Class-B
Operating System	Yocto 5.0 Android 14 Debian 12 Support for other OS available upon request

Ordering Information

ISR215-Y	ARM-based IOT Gateway, NXP i.MX 8M Plus - ARM Cortex-A53 Quad-core 1.6GHz processor, 3GB LPDDR4, 16GB eMMC
ISR215F-Y	ARM-based IOT Gateway, NXP i.MX 8M Plus - ARM Cortex-A53 Quad-core 1.6GHz processor, 3GB LPDDR4, 16GB eMMC and Expansion IO board

Dimensions and Drawing



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ISR500

Edge AI Computer

MediaTek Genio 700 (MT8390) or MediaTek Genio 510 (MT8370) Processor

Features

- MediaTek Genio 700 (MT8390) 2.2GHz or MediaTek Genio 510 (MT8370) 2.0GHz processor
- Onboard 4GB LPDDR4 with 4000MT/s
- Embedded I/O for COM, USB, HDMI, Ethernet
- Supports M.2 E-Key (2230) for WiFi6 2T2R + BT 5.2
- Ruggedized and fanless design

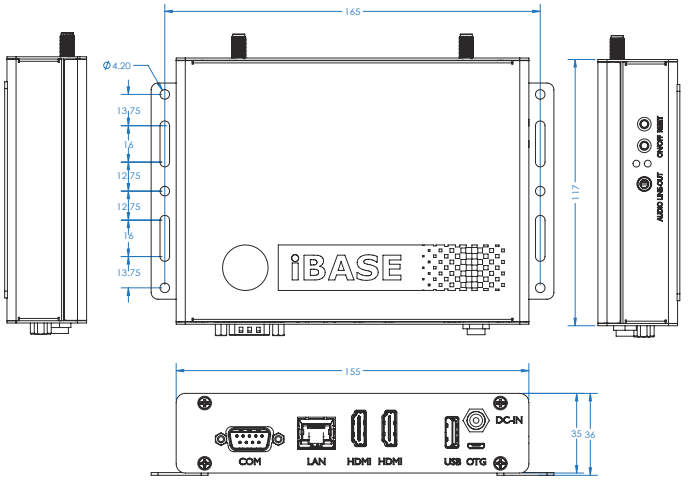
Specifications

System Mainboard	IBR500 3.5-inch SBC
CPU Type	MediaTek Genio 700 (MT8390) : 2x A78 2.2GHz L2 256KB, 6x A55 2.0GHz L2 128KB, shared 2MB L3 cache MediaTek Genio 510 (MT8370) : 2x A78 2.0GHz L2 256KB, 4x A55 2.0GHz L2 128KB, shared 2MB L3 cache
System Speed	Up to 2.2GHz
Memory	Onboard 4GB LPDDR4 with 4000MT/s (default)
AI Inference Computing Power	Genio 510 3.2TOPS Genio 700 4TOPS
Front Panel External I/O	1x RS-232 DB9 connector 1x RJ45 GbE LAN 1x HDMI (4K60) + 1x HDMI (4K30) 1x USB 3.1 Type-A 1x DC IN power jack EIAJ with screw lock 1x Micro USB 2.0 (with OTG support) + 1x PWR On/Off Switch 1x Reset Switch 1x Phone Out Jack
Rear Panel External I/O	2x Antenna holes
Expansion Slot	1x M.2 E-Key (2230) w/ SDIO, UART (for Wireless & BT)
Storage	64GB~128GB eMMC 5.1 Flash for O.S. and 8MB SPI NOR Flash for board information
Power Requirement	12V DC IN
Power Supply	50W
Construction	Aluminum & steel
Chassis Color	Black & Silver
Mounting Type	Desktop or wall mount (wall mount kit included)
Dimensions	155mm (W) x 110mm (D) x 35mm (H)
Weight	TBD
Operating Temperature	-10°C to 50°C (14°F~122°F)
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-operating: 1.0 grms / 5~500Hz / random operation 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
Operating System	Android 14 ready Support for other OS available upon request

Ordering Information

ISR500-1	MediaTek Genio 700 / MT8390: 2x A78 2.2GHz L2 256KB, 6x A55 2.0GHz L2 128KB, shared 2MB L3 cache, 8GB LPDDR4, 64~128GB eMMC
ISR500-2	MediaTek Genio 510 / MT8370: 2x A78 2.2GHz L2 256KB, 4x A55 2.0GHz L2 128KB, shared 2MB L3 cache, 4GB LPDDR4, 64GB eMMC
50W power adaptor	50W (12V @5.0A) power adaptor
Optional Accessories	WiFi / Bluetooth module & antenna kit M.2 WiFi/BT module: A024MDWiFi0045000P or A024M-DWiFi0046000P Antenna kit: A055RFAS67H-600000P+A055BTC0000010000P

Dimensions and Drawing



CMI211-1005

Edge AI Computer
Intel® Core™ Ultra 9/7/5 200 U/H Series

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) [Gen4.0]; 3x M.2 (E-Key @2230 and 2x M-Key @2280 & 2242)

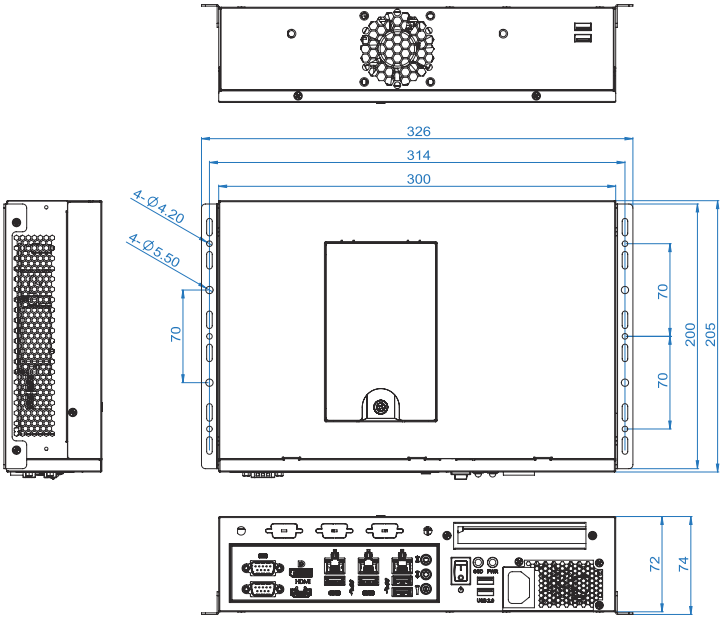
Specifications

System Mainboard	MI1005AF
CPU Type	Intel® Core™ Ultra 200H series mobile Processors
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
AI Inference Computing Power	36 pTOPS
Front Panel External I/O	2x USB 2.0 ports 2x Antenna holes
Rear Panel External 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 COM1/COM2 (COM1 with RS-232/422/485, select from BIOS) 1x DP + 1 x HDMI 2x (USB Type-C + USB3.2 Type-A + RJ45 connector) 1x (Dual USB3.2 Type-A + RJ45 connector) 1x triple type jack for Audio connector 2x Antenna holes
Expansion Slot	1x PCIe (x4)[Gen5] expansion slot 1x E-Key E2230, 2x M-Key (M2280 & M2242)
Storage	2x M.2 (M2280 & M2242) M-Key socket for SSD (PCIe Gen4 signal) 1x 2.5 removable device bay for SSD
Power Requirement	ATX power supply
Power Supply	Industrial 250W ATX power supply Input voltage: 100V ~ 240V Input frequency: 47Hz ~ 63Hz Compatible with IEC62368-1/EN62368-1
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
Operating Temperature	0°C~45°C (32°F~113°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	5% ~ 90% @45C (non-condensing)
Vibration	Non-operating : 1.0 grms / 5~500Hz / random Operating : 0.25 grms / 5~500Hz / random
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE / LVD / FCC Class B
Operating System	Windows 11

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)

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.

ASB200-962U

Edge AI Computer

Intel® Core™ Ultra 100U Series

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)
- Supports operating temperature from -10°C to +55°C
- Optional VESA mount bracket

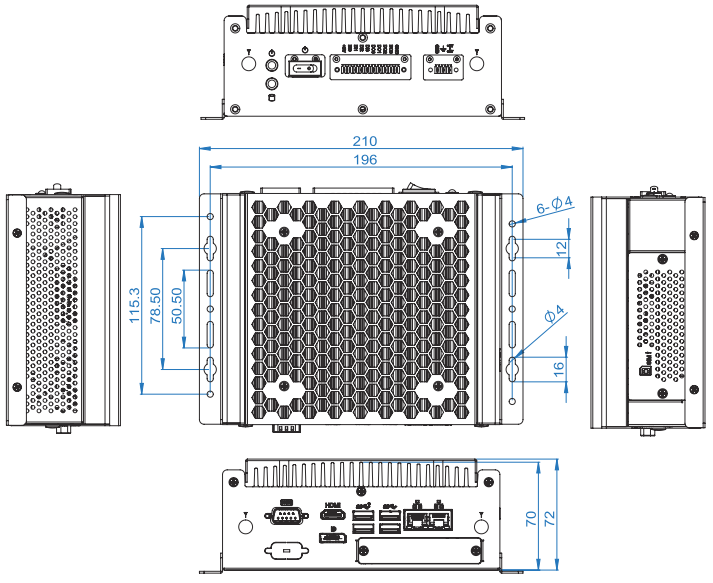
Specifications

System Mainboard	IB962AF-165U/ IB962AF-135U
CPU Type	Intel® Core™ Ultra 100U Series Mobile Processors
System Speed	Up to 4.9GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 96GB
AI Inference Computing Power	12 pTOPS
Front Panel External I/O	3x USB 3.2 1x USB 2.0 1x DisplayPort 1x HDMI 1x DB9 for COM1 (RS-232/422/485) 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 Slot	3x M.2 sockets (B-Key/ E-Key and M-Key)
Storage	1x M.2 (M2280), (supports NVMe) 1x 2.5" HDD or SSD
Power Requirement	24V DC IN
Power Supply	90W power adaptor
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	Desktop & wall mount bracket Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08 (W) x 5.9 (D) x 2.83 (H)
Weight	1.5kg
Operating Temperature	-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
Operating System	Windows 11

Ordering Information

ASB200-962U-7M	Fanless chassis with IB962AF-165U, Intel® Core™ Ultra7 CPU(TDP@15W), w/ 1x COM, 2x DDR5 memory slot, desktop stand & mounting bracket, w/o memory/ 90W power adaptor and VESA mount bracket
ASB200-962U-5M	Fanless chassis with IB962AF-135U, Intel® Core™ Ultra5 CPU(TDP@15W), w/ 1x COM, 2x DDR5 memory slot, desktop stand & mounting bracket, w/o memory/ 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire-type compatible with IEC62368-1/EN62368-1 [PN: A005PS090W0100710P]
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R] WiFi antenna kit [PN: A024MDWiFi0042400P (Intel® 9260) + SC2WiFi----A10M00R (WiFi Kit)]

Dimensions and Drawing



ASB210-962H

Edge AI Computer

Intel® Core™ Ultra 100H Series

TAIWAN EXCELLENCE 2026

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

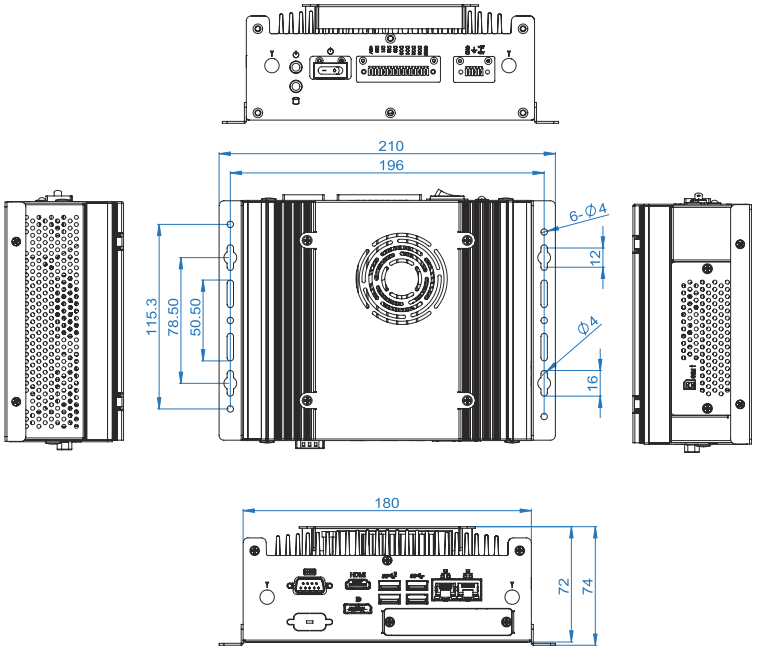
Specifications

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
AI Inference Computing Power	12 pTOPS
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 COM1 (RS-232/422/485) 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 Slot	3x M.2 sockets (B-Key/ E-Key and M-Key)
Storage	1x M.2 (M2280), supports NVMe 1x 2.5" HDD or SSD
Power Requirement	24V DC IN
Power Supply	180W power adaptor
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
Operating System	Windows 11

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, IIntel® 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 [PN: A005PS180W0100800P]
Optional Accessories	VESA mount kit [PN: SC2ASB2----0A1200R] WiFi antenna kit [PN: A024MDWiFi0042400P (Intel® 9260) + SC2WiFi----A10M00R (WiFi 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.

ASB210-953-AI

Edge AI Computer
11th Gen Intel® Core™ U-Series & Hailo-8 M.2 AI Acceleration Module

Features

- With Hailo-8™ accelerator card module supporting up to 26 Tera-Operations-Per-Second (TOPS)
- System with IBASE IB953 3.5" Single Board Computer (TDP-up 28W)
- Onboard 11th Gen Intel® Core™ U-Series Processor
- Supports 2x M.2 sockets (B-Key/E-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

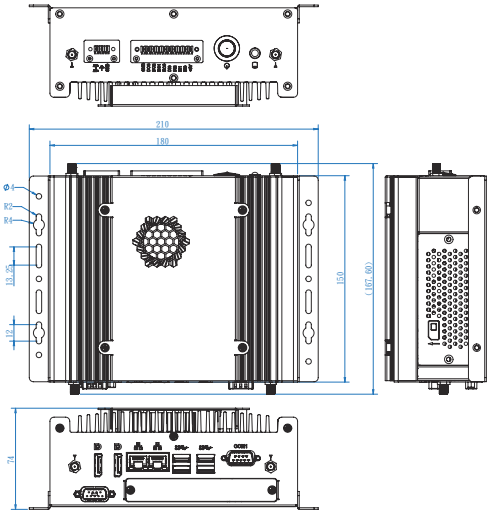
Specifications

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
AI Inference Computing Power	Hailo-8™ Accelerator Card module, up to 26 TOPS
Front Panel External I/O	3x USB 3.1 1x USB 2.0 2x DisplayPort 1x DB9 for COM1 (RS-232/422/485) 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) 1x M.2 M-Key for Hailo-8™ Accelerator Card module
Storage	1x 2.5" HDD or SSD
Power Requirement	12V~24V DC IN
Power Supply	90W power adaptor
Construction	Aluminum & steel 1x System fan
Chassis Color	Black
Mounting Type	Desktop or wall mount (wall mount kit included) Optional VESA mount kit
Dimensions	180mm (W) x 150mm (D) x 72mm (H) 7.08 (W) x 5.9 (D) x 2.83 (H)
Weight	1.5kg
Operating Temperature	0°C~45°C (32°F~113°F) *with airflow 0.9m/s
Storage Temperature	-20°C ~80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3Grms / 5~500Hz
Shock	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE/LVD/FCC Class-B
Operating System	Windows 10, Linux (Ubuntu 18.04 / 20.04)

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
ASB210-953-i7M-AI	Chassis with IB953AF-i7, Intel® i7-1185G7E CPU (TDP-up to 28W), w/ system fan, 1x COM, 1x Hailo AI accelerator, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB210-953-i5M-AI	Chassis with IB953AF-i5, Intel® i5-1145G7E CPU (TDP-up to 28W), w/ system fan, 1x COM, 1x Hailo AI accelerator, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
ASB210-953-i3M-AI	Chassis with IB953AF-i3, Intel® i3-1115G4E CPU (TDP-up to 28W), w/ system fan, 1x COM, 1x Hailo AI accelerator, desktop stand & mounting bracket, w/o memory/ SSD/ 90W power adaptor and VESA mount bracket
90W power adaptor (optional)	90W (24V@3.75A) power adaptor, bare wire type compatible with IEC62368-1/EN62368-1 [PN: A005PS090W0100700P]
Optional Accessories	VESA mount kit [PN: SC2ASB20A1200R] WiFi antenna kit [PN: A024MDWiFi0042400P (Intel® 9260)+ SC2WiFiA10M00R (WiFi Kit)]

Dimensions and Drawing



AMI242

Edge AI Computer

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™ desktop processors
- Supports DDR5-5600 memory, up to 64GB Max. (ECC is optional)
- 2x Intel® 2.5G LAN, 2x Intel® GbE (Supports 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)

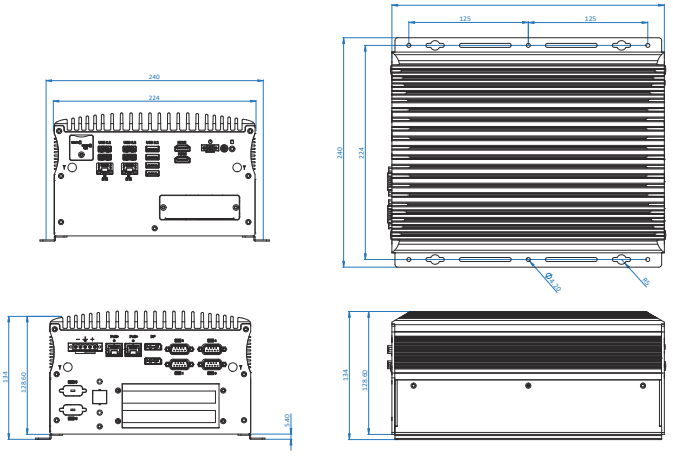
Specifications

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
AI Inference Computing Power	11 pTOPS
Front Panel External I/O	2x RS-232/422/485 ports for COM1~COM2 2x RS-232 ports for COM3~COM4 2x RS-232 ports for COM5~COM6 (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 Slot	1x PCIe (16x) expansion slot for Gen5 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
Power Requirement	24V DC IN
Power Supply	330W power adaptor
Construction	Aluminum @ Gray
Chassis Color	Silver & Gray
Mounting Type	Desktop & wall mount
Dimensions	210mm(W)0 x 285mm(D) x 129mm(H)
Weight	4.9 kg
Operating Temperature	-20 °C ~ 70 °C (-4°F~158°F) [with 35W CPU and DDR5 memory]
Storage Temperature	-20°C ~ 80°C (-4°F~176°F)
Relative Humidity	5%~90%@45°C (non-condensing)
Vibration	Operating: 3.0 Grms / 5~500Hz
Shock	Operating: 20G/11 ms Duration
Certification	CE EN55032 FCC Class A / LVD
Operating System	Windows 11

Ordering Information

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

Dimensions and Drawing



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.

MAF801

Edge AI Computer

Edge AI Computer Powered by 14th/13th/12th Gen Intel® Core™ Desktop Processer with PCIe Graphics Card Support

MAF801-F3

MAF801-F1

Features

- Supports 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 Processors, 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

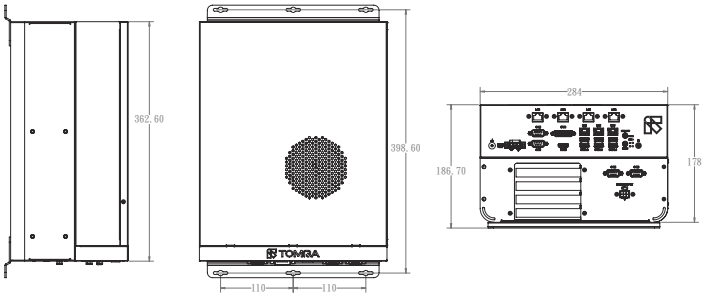
System Mainboard	MBA801 with Intel® R680E PCH
CPU Type	14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 desktop processors (35W/65W TDP)
System Speed	Up to 6GHz
Memory	2x DDR5-5600 SO-DIMM, Max. 64GB
AI Inference Computing Power	By CPU and PCIe card performance
Front Panel External I/O	1x HDMI, 1x DVI-I 6x USB 3.x 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 Slot	1x PCI-Express (x16) 1x PCI-Express (x4) 2x M.2 2280 B-Key + M-Key
Storage	2x 2.5" HDD/SSD (external-access) 1x M.2 2080 M-Key (NVMe)
Power Requirement	24V DC for System Power Input 12V DC for Additional Power
Power Supply	N/A
Construction	Aluminum & Steel
Chassis Color	Silver & Black
Mounting Type	N/A
Dimensions	MAF801-F1: 284mm (W) x 362mm (D) x 80mm (H) MAF801-F3: 284mm (W) x 362mm (D) x 178mm (H)
Weight	TBD
Operating Temperature	-10°C to 50°C (14°F to 122°F)
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Non-operating: 1.0 grms / 5~500Hz / random operation Operating:0.25 grms / 5~500Hz / random operation
Shock	Operating: 20 g / 11 ms Non-operating: 40 g / 11 ms
Certification	CE / FCC Class-B (TBD)
Operating System	Windows 11, Ubuntu 22.04

Ordering Information

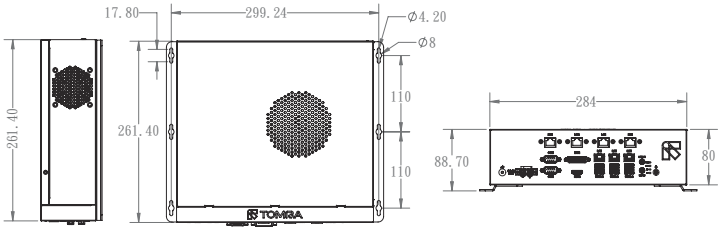
MAF801-F1	Expandable edge AI system with MBA801 (R680E PCH w/o CPU/Memory/storage/power supply)
MAF801-F3	Expandable edge AI system with MBA801 and PCIe expansion card (R680E PCH w/o CPU/Memory/storage/power supply)
180W power adaptor (optional)	180W (24V @7.5A) power adaptor, bare wire type, Compatible with IEC62368-1/EN62368-1

Dimensions and Drawing

MAF801-F3



MAF801-F1



SI-624-AI

Edge AI Computer

14th/13th Gen Intel® Core™ Processor & NVIDIA Ampere Architecture MXM GPU Card

TAIWAN EXCELLENCE 2024

BEST IN SHOW Embedded WINNER

IoT Evolution EDGE COMPUTING 2024 EXCELLENCE

Features

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 14th/13th Gen Intel® Core™ i7/i5/i3 / Pentium® / Celeron® QC/DC processors
- 4x DDR4-3200 U-DIMM, Max. 128GB, ECC compatible
- NVIDIA Ampere Architecture MXM GPU cards (Type A/B, up to 115W)
- 1x HDMI 1.4 for console, 4x DisplayPort
- 1x M.2 E-Key (2230) for WiFi, Bluetooth or capture card options
- 1x M.2 B-Key (3052) for 5G options
- 2x M.2 NVMe SSD drive bay
- Supports OOB function via I210 LAN port (option)
- Supports TPM 2.0
- Compact and rugged design

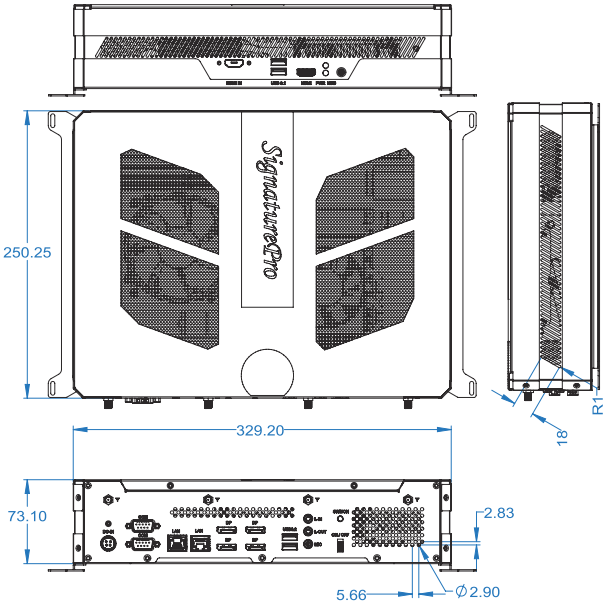
Specifications

System Mainboard	MBD624
CPU Type	14th/13th Gen Intel® Core™ processors
System Speed	Up to Max. 5.0/3.8 GHz
Memory	4x DDR4-3200 U-DIMM, Max. 128GB, ECC compatible
AI Inference Computing Power	NVIDIA Ampere Architecture MXM GPU card/ up to 5,888 CUDA cores / 17.66 TFLOPS peak FP32 performance / 184 Tensor Cores
Front Panel External I/O	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 Slot	1x M.2 (M-Key, type:2280, supports NVMe with PCIe(x4) Gen4 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)
Power Requirement	+19V DC
Power Supply	330W power adaptor
Construction	SGCC
Chassis Color	Black and white
Mounting Type	Standard system bracket
Dimensions	329.2mm(W) x 250.25mm(D) x73.1mm(H) 12.96(W) x 9.85(D) x 2.87(H)
Weight	3.8 kg (8.38 lbs)
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	Operating : 20G / 11ms Non-operating : 40G / 11ms
Certification	CE, FCC class-B, UL & CCC
Operating System	Windows10 / Linux

Ordering Information

SI-624-AI	Industrial AI computer with MBD624 with 14th/13th 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



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

Edge AI Computer

14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors with PCIe Graphics Card Support

Features

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

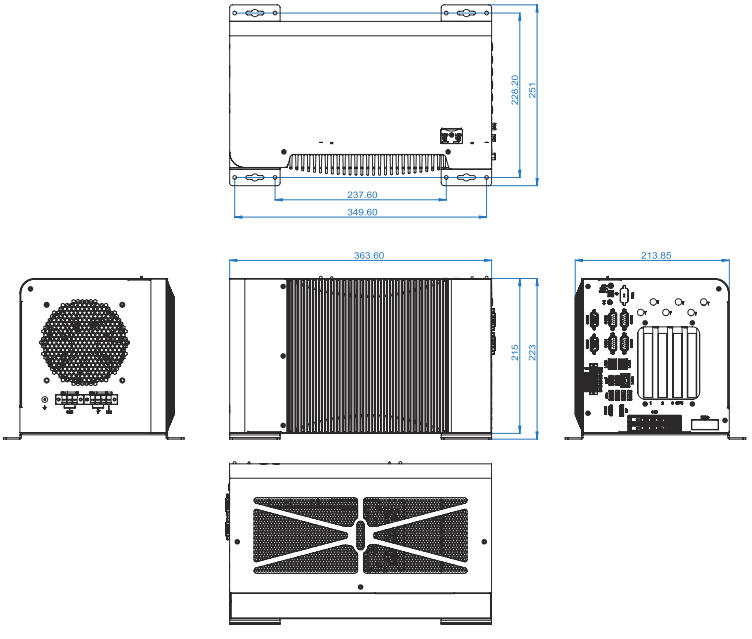
Specifications

System Mainboard	MBA-100 with Intel® R680E PCH
CPU Type	14th/13th Gen Intel® Core™ i9/i7/i5/i3 Desktop Processors
System Speed	Up to 5.0 GHz
Memory	2x DDR5-4800/5600 SO-DIMM, Max. 64GB
AI Inference Computing Power	NVIDIA Ada Lovelace Architecture PCIe GPU card/ up to 18176 CUDA Cores / up to 91.1 TFLOPS (FP32) / 568 Tensor Cores
Front Panel External I/O	1x DisplayPort + 1x HDMI + 1x VGA (optional) 3x RJ45 2.5G Ethernet ports 2x USB 3.2 Gen2, 4x USB 3.2 Gen1 2x DB9M connectors for COM11 / COM2 (RS-232/422/485) 2x DB9M connectors for COM13 / COM4 (RS-232 only) Isolated 8-in & 8-out digital I/O ports (optional) 1x Line-out & MIC-in 6x antenna holes for WLAN & WWAN module 1x 2-pin terminal block for remote power 1x power button with LED, 3x LED indicators (storage, WLAN, WWAN)
Rear Panel External I/O	1x 4-pin terminal block for 8V~48V power input 1x 3-pin terminal block for ignition control
Expansion Slot	1x PCIe(x16) Gen4 slot + 2x PCIe(x4) Gen4 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 Gen1) 1x M.2 2280 M-Key socket for NVMe SSD (PCIe x4 [Gen4]) 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 [Gen4]) [optional]
Power Requirement	1000W power adaptor
Power Supply	8V~48V
Construction	Aluminum & steel
Chassis Color	Silver & Gray
Mounting Type	Wall mounting
Dimensions	213.8mm (W) x 363.6mm (D) x 215mm (H) 8.4 (W) x 14.3 (D) x 8.46 (H)
Weight	TBD
Operating Temperature	-20°C ~ 60°C (-4°F~140°F) *with airflow
Storage Temperature	-40°C ~ 70°C (-40°F to 158°F)
Relative Humidity	5~90% @ 45°C, (non-condensing)
Vibration	Operating/Non-operating (SSD): 2,26 Grms (5~500 Hz) / MIL-STD-810G
Shock	Operating: Sawtooth: 20G, 11msec (Z-axis) / MIL-STD-810H Non-operating: Sawtooth: 40G, 11 msec (Z-axis) / MIL-STD-810H
Certification	CE (EN 62368 / EN55032 / EN55035) & LVD FCC Class A
Operating System	Windows 11

Ordering Information

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

Dimensions and Drawing



MPT-3100V-AI

Edge AI Transportation System

ITxPT & E-Mark Certified
with Intel® Atom® x7000RE Series & WWAN Redundancy

TAIWAN EXCELLENCE SILVER AWARD 2026

BEST IN SHOW AWARD Embedded WINNER

ITXPT

E/e-mark

Features

- Robust M12 & FAKRA connectors with rich I/O interface
- Dual SIM sockets support WWAN redundancy
- Rich I/O interfaces for wireless, SSD, GPS, WWAN and add-on card expansion
- 9V-36V DC INput with ignition power control
- E-Fuse power protection and supercapacitor-based battery design
- Wide-range voltage GPIO interface
- Wide-range operating temperature from -40°C to 70°C
- Built in Hailo-8 AI accelerator chip (MPT-3100V-AI)
- Optional isolated CANbus thru Mini PCIe card
- Removable 2.5 device bay for SSD storage

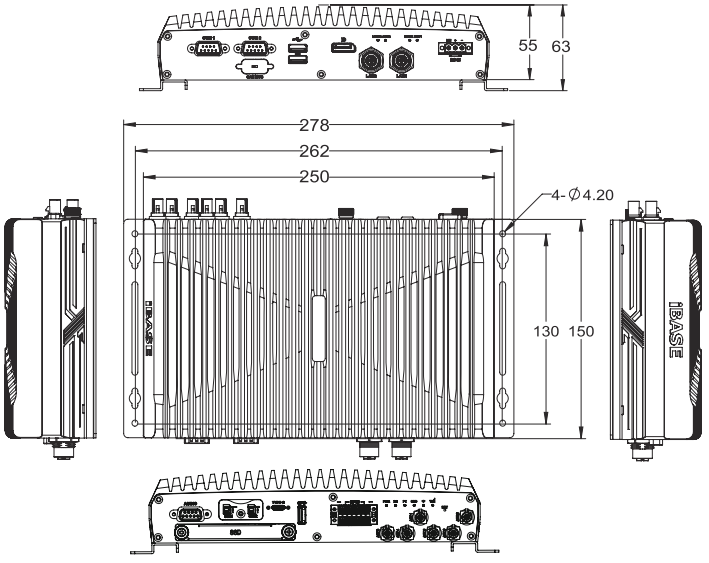
Specifications

System Mainboard	MBT-3101V
CPU Type	Intel® Atom® x7433RE Processor
System Speed	Up to 2.7GHz
Memory	1x DDR5-4800 SO-DIMM socket Up to 16GB
AI Inference Computing Power	On board Hailo-8™ Accelerator, up to 26 TOPS
Front Panel External I/O	1x USB 3.2 Gen2 stack Type-A connector 2x external accessible SIM socket 1x USB Type-C connector with screw-lock 1x Removable 2.5 SSD device bay 1x DB9 female connector for Line-out & MIC-in 1x reset button 1x 14-pin terminal block 6-in & 6-out digital I/O with 24V input and output 2x FAKRA I-code plug Beige color connector for WiFi / Bluetooth 1x FAKRA C-code plug Blue color connector for GPS 2x FAKRA D-code plug Violet color connector for 4G/5G 4x light-pipe for status LED Indicators
Rear Panel External I/O	2x M12 X-code 8P female for GbE LAN1/LAN2 1x terminal block 3-pin for DC INput 1x VGA connector for graphic output (optional) 1x DisplayPort output 1x DB9F connector for 2x CAN FD bus connection (works with extra CAN module) 2x DB9M for COM1 / COM2 2x USB 2.0 Type-A connector 2x light-pipes for LAN status LED Indicators
Expansion Slot	1x M.2 2230 E-Key socket for WLAN & BT connection (PCIe + USB 2.0 + SMBus) 1x M.2 3042/52 B-Key socket for WWAN (4G/5G) connection (USB3 .2 Gen1 + SMBus) 1x M.2 2280 M-Key socket for SSD device (SATA III) 1x Mini PCIe full-sized socket for MVB/CAN FD module (PCIe + USB 2.0 + SMBus) 1x Mini-PCIe half-size socket for GPS module (USB 2.0 only)
Storage	1x M.2 2280 M-Key socket for SSD (SATA III signal) 1x 2,5 removable device bay for SSD
Power Requirement	In-vehicle battery (84W)
Power Supply	DC INput 9V ~ 36V
Construction	Aluminum
Chassis Color	Black
Mounting Type	Wall mount
Dimensions	250 (W) x 150 (D) x 55 (H) mm 9.84 (W) x 5.9 (D) x 2.16 (H)
Weight	2.5 kg (5.5 lbs)
Operating Temperature	-40°C ~70°C (-40°F~158°F) (w/o Fan & SSD) -20°C ~55°C (-4°F~131°F) (w/ PCIe card)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Relative Humidity	10 ~ 95% RH @45°C (non-condensing)
Vibration	Operating/Non-operating (SSD): 2,26 Grms (5~500 Hz) / MIL-STD-810Gcomposite wheeled condition (Z-axis only)
Shock	Operating: Sawtooth: 20G, 11msec (Z-axis) /MIL-STD-810G Non-operating: Sawtooth: 40G, 11 msec (Z-axis) / MIL-STD- 810G
Certification	ITXPT, E-Mark-24 CE (EN 62368-1 / EN55032 / EN55035), FCC Class-A
Operating System	Windows 11

Ordering Information

MPT-3100V	MPT-3100V with MBT-3101, Intel® Atom® x7433RE Processor w/ 1x 8GB DDR5-4800, 1x SSD bay, No PSU, No storage (RoHS)
MPT-3100V-AI	MPT-3100V with MBT-3101, Intel® Atom® x7433RE Processor w/ 1x 8GB DDR5-4800, w/ Hailo AI accelerator, 1x SSD bay, No PSU, No storage (RoHS)

Dimensions and Drawing



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INA8505

Edge AI Server

Intel® Xeon® D Processor & up to 4x 25 GbE Ports

Features

- Intel® Xeon® D-2700 Processor
- 4x DDR4 DIMMs, Max. 256GB RDIMM or Max. 512GB LRDIMM
- 4x 25GbE SFP28 ports on board
- 2x 2.5 SATA/NVMe hot-swappable HDD/SSD
- Optional for one card:
  1x PCIe (x16) Gen4 single-slot for double FHFL interfaces, passive cooling, up to 120W
  For two cards:
  1x PCIe (x16) Gen4 single-slot +1x PCIe (x8) Gen4 FHFL interfaces, passive cooling, up to 75W each
- Optional IPMI 2.0 module
- GPS time synchronization
- Supports SyncE and PTP IEEE 1588

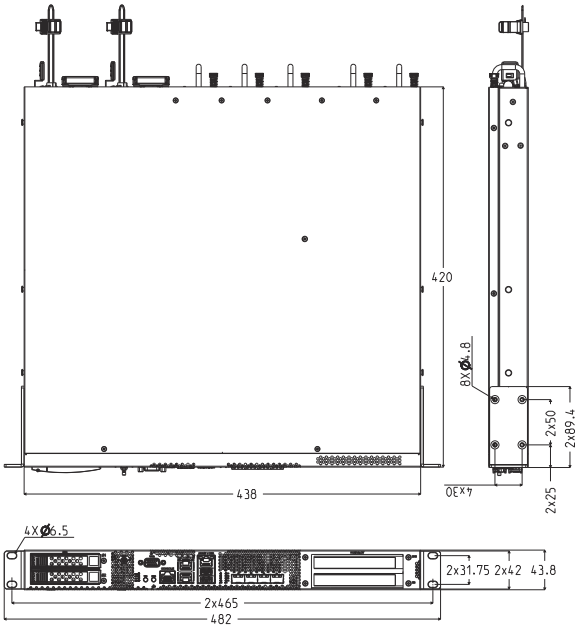
Specifications

System Mainboard	MBN8505
CPU Type	Intel® Xeon® D-2700 Processor
System Speed	up to 3.50 GHz
Memory	4x DDR4 DIMMs, Max. 256GB RDIMM or 512GB LRDIMM, up to 3200MHz
AI Inference Computing Power	NVIDIA L4 Tensor card
Front Panel External I/O	1x LED, 1x Power switch, 1x MGMT, 1x RJ45 console, 1x VGA, 1x RS422, 2x USB3.0, 2x PCIe expansion slot, 2x 2.5 Hot Swappable SATA/NVMe SSD, 4x 25GbE SFP28
Rear Panel External I/O	1x AC Intel (2 AC 100~240V) 1x Swappable system fan (1+4 hot-swappable 40x40x28 mm fans)
Expansion Slot	1x PCIe x16 Expansion slot (optional by SKU) 1x PCIe x8 Expansion slot (optional by SKU)
Storage	1x 16GB/32GB/64GB eMMC 2x M.2 (M-Key); supports SATA & PCIe 2x 2.5 SATA/ NVMe/ hot-swappable HDD/SSD
Power Requirement	1+1 AC 100~240V @ 50~60 Hz full range 550W CRPS Redundant Power
Power Supply	Full-range 550W CRPS 1+1 redundant power supply
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	N/A
Dimensions	438(W) x 420(D) x 43.8(H) mm 17.24 (W) x16.54 (D) x 1.72 (H)
Weight	15 kg (33.06 lbs) (estimated)
Operating Temperature	0°C ~ 50°C (32°F ~ 104°F)
Storage Temperature	-20°C ~ 70°C (-4°F ~ 158°F)
Relative Humidity	5% ~ 90%
Vibration	Operating: 0.25 Grms (3~500Hz) Z-axis, duration 60 mins Non-operating: 1.0 Grms (3~500Hz) Z-axis, duration 60 mins
Shock	Operating :20G/11 ms, Z/Y/Z axis, each axis 3 times Non-operating: 40G/ 11ms, Z/Y/Z axis, each axis 3 times
Certification	CE/FCC
Operating System	Windows 11, Linux (6.5/ 11/ 22.04)

Ordering Information

INA8505	INA8505 Enterprise 1U Edge Server, MBN8505 Intel® Xeon® D-2700 Processor, 4x DDR4 DIMMs, 4x 25 GbE SFP28 ports, 550W CRPS 1+1 Redundant PSU, CPU cooler, optional IPMI, 1x PCIe x16 slot, 1x PCIe x8 slot, 2x 2.5 SDD Tray, Barebone without RAM/HDD/SSD

Dimensions and Drawing



ES1001

Edge AI Server
AMD Ryzen™ Embedded 7000 Series Processors

Preliminary

Features

- AMD Ryzen™ Embedded 7000 Processors with B650 chipset
- Dual-Channel DDR5 5200, UDIMM 4 slots, Max. 128GB, ECC support
- Triple display: DP/HDMI/DVI-D and Dual GbE LAN
- 1x 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)
- Support RAID 0, 1
- TPM 2.0

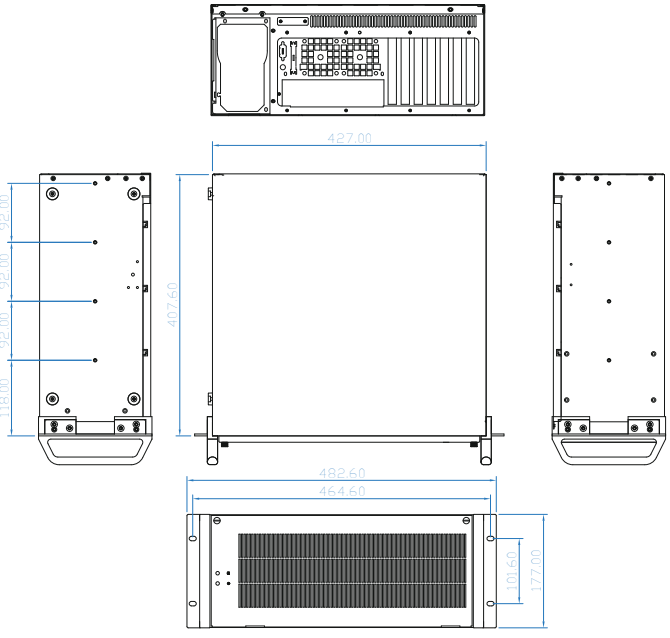
Specifications

System Mainboard	AMD Ryzen™ Embedded 7000 series ATX Motherboard
CPU Type	AMD Ryzen™ Embedded 7000 Processors
System Speed	Max. 4.7GHz
Memory	Dual-Channel DDR5 5200, UDIMM 4 slots, Max. 128GB, ECC support
AI Inference Computing Power	Integrated AMD Ryzen™ 7000 Series APU with Zen 4 CPU and RDNA™ 3 GPU architecture / 12 RDNA3 compute units / up to 8.6 TFLOPS FP32 peak performance / support 1x Gen5 PCIe (x16)
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 (RS-232/422/485) (jumperless selection) COM 2 (RS-232) 4x COM via pin header (RS-232)
Expansion Slot	1x PCIe x16 (Gen5) / 1x PCIe x4 (Gen5) 1x PCIe x4 (Gen4) / 1x PCIe x1 (Gen3) 1x PCI
Storage	4x SATA 6Gb/s 2x M.2 2280 M-Key (PCIe x2 Gen4, supports NVMe)
Power Requirement	1x ATX standard 24-pins type & 8-pin type (+12V only)
Power Supply	1x ATX standard 850W PSU
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
Operating System	Windows 11 Windows Server 2022 Ubuntu 22.04

Ordering Information

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

Dimensions and Drawing



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ES1002

Edge AI Server

AMD EPYC™ Embedded 8004 Series Processors

Preliminary

Features

- AMD EYPC™ Siena 8004 Series
- 6x DDR5 4800 up to 576GB (Supports ECC)
- 5x PCIe (x16) slots
- 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)

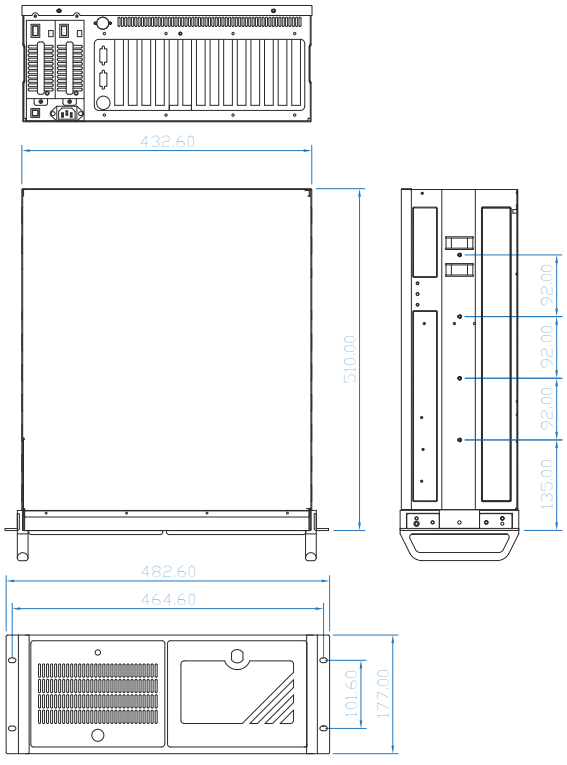
Specifications

System Mainboard	MBB1002 with AMD EYPC™ Siena 8004 Series CPU
CPU Type	AMD EYPC™ 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
AI Inference Computing Power	AMD EPYC™ 8004 Series (Siena) processor with Zen 4c architecture / scalable performance up to 64 cores and 128 threads. / supports 5x Gen5 PCIe (x16)
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 Slot	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) 1x NVME 22110/2280 (PCIe Gen5) 2x NVME MCIO (x4)
Power Requirement	1x 24-pin SSI power connector, 3x 8-pin SSI 12V power connector
Power Supply	1x ATX standard 1200W PSU
Construction	Aluminum & steel
Chassis Color	Black
Mounting Type	N/A
Dimensions	483 mm (W) x 510 mm (D) x 177 mm (H) 19 (W) x 20.1 (D) x 7 (H)
Weight	TBD
Operating Temperature	-10°C to 60°C (14°F~140°F) *with 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
Operating System	Windows Server 2022 Windows Server 2025 Ubuntu 22.04

Ordering Information

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

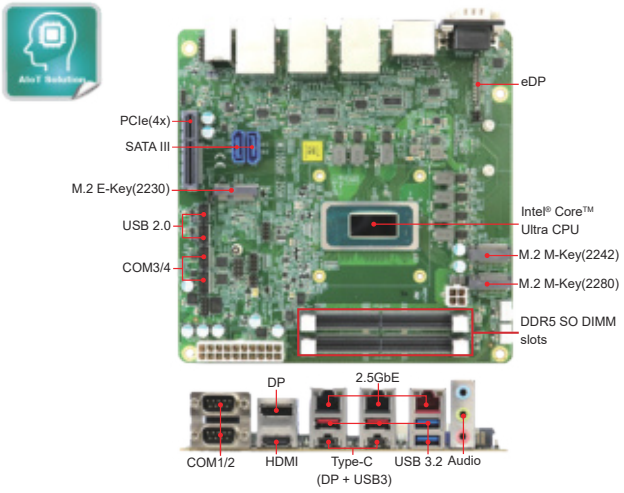
Dimensions and Drawing



MI1005

AI Edge Board

Mini-ITX Motherboard
with Intel® Core™ Ultra 200H/200U Series Mobile Processors



Features

- Intel® BGA2049 Core™ Ultra 9/7/5 200 U/H series mobile onboard processors, up to 65W
- 2x DDR5 cSO-DIMM, Max. 96GB, Non-ECC
- Supports eDP(1.4b), 2x Type-C, HDMI (2.1) and DisplayPort(1.4a) (DP++)
- LAN1: Intel® I226LM, supports 2.5G and iAMT, LAN2 / LAN3: Intel® I226V, supports 2.5G only
- 4x USB 3.2 (Type A), 2x USB Type-C, 4x USB 2.0, 4x COM, 2x SATA III
- 1x PCIe (x4) [Gen4.0]; 3x M.2 (E-Key @2230 and 2x M-Key @2280 & 2242)
- Watchdog timer, Digital I/O, iAMT (19.0) , fTPM (2.0)

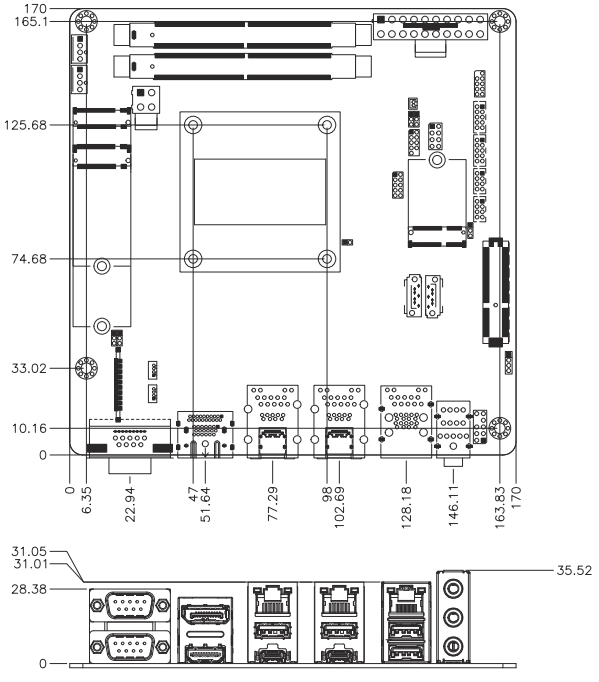
Specifications

Form Factor	Mini ITX board
Dimensions	170mm x 170mm (6.7x 6.7)
CPU Socket	BGA2049 CPU onboard
CPU Type	Intel® Core™ Ultra 9/7/5 200 U/H Mobile Processors (Arrow Lake – U/H)
PCH	N/A
Memory	2x DDR5 SO-DIMM sockets, Up to DDR5-6400 cSO-DIMM memory module, Max. 96GB
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	SATA III & NVMe
Graphics	Intel® Core™ Ultra 9/7/5 200 U/H Mobile Processors integrated graphics
Display	1x eDP + HDMI + 2x DisplayPort (1.4a) (DP++) + 2x Type-C
Image Capture Interface	24 pTOPS
Video Codec	N/A
I/O Chipset	Fintek F81966AB-I
External I/O	2x RS-232/422/485 for COM1-2 1x DisplayPort 1x HDMI 1x Intel® I226LM, supports 2.5G and iAMT for LAN1 2x Intel® I226V, supports 2.5G only for LAN 2 / LAN3 2x Type-C (DP+USB3) 2x USB 3.2 1x Built-in HD Audio controller + Realtek ALC888S w/5.1 channels
Internal I/O	2x SATA III 1x M.2 (E-Key, type:2230, USB 2.0 + PCIe(1x) Gen4) 2x M.2 (M-Key, type:2280 + 2242, PCIe(4x) Gen4) 2x USB 2.0 2x RS-232 Ports for COM3-4 1x eDP
Expansion IO	1x PCIe (x4) [Gen 4]
TPM	fTPM (2.0)
Others	Digital I/O (4-in/4-out), Watchdog timer, PDPC, CPU cooler
Power Consumption	TBD
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	10% ~ 90% (non-condensing)
OS Support	Windows 11
Certification	CE, FCC Class B

Ordering Information

MI1005AF-285H	Intel® Core™ Ultra 9 285H CPU onboard MiniITX board w/ eDP, HDMI, 2x DisplayPort, 2x Type-C (for DP & USB 3.2), 3x 2.5GbE, 2x SATA, iAMT (19.0), fTPM (2.0)
MI1005AF-255H	Intel® Core™ Ultra 7 255H CPU onboard MiniITX board w/ eDP, HDMI, 2x DisplayPort, 2x Type-C (for DP & USB 3.2), 3x 2.5GbE, 2x SATA, iAMT (19.0), fTPM (2.0)
MI1005AF-225H	Intel® Core™ Ultra 5 225H CPU onboard MiniITX board w/ eDP, HDMI, 2x DisplayPort, 2x Type-C (for DP & USB 3.2), 3x 2.5GbE, 2x SATA, iAMT (19.0), fTPM (2.0)

Dimensions and Drawing

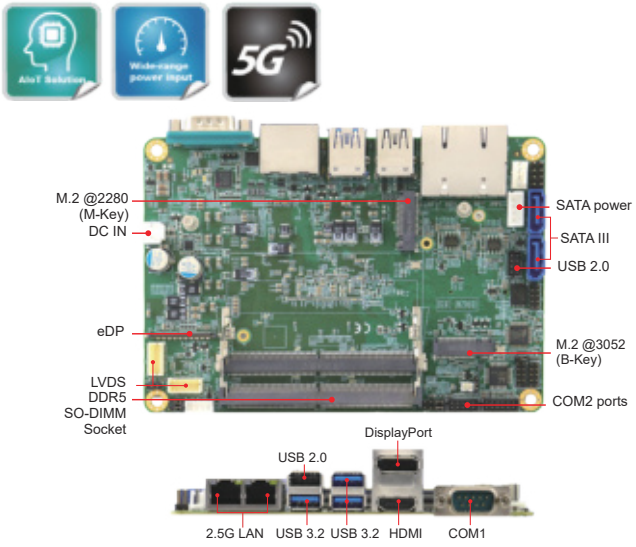


Remarks: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user's manual & datasheet download, visit www.ibase.com.tw.

IB962

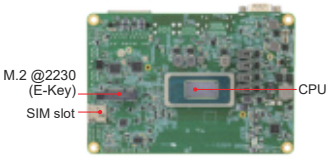
AI Edge Board

3.5" SBC with Intel® Core™ Ultra 7/5 100 Series Mobile Processor



Features

- Onboard Intel® Core™ Ultra 7/5 100 Series Mobile processors
- 2x DDR5 SO-DIMM, Max. 96GB
- Supports HDMI, DP++, LVDS and eDP
- 1x Intel® I226LM 2.5G LAN, 1x Intel® I226V 2.5G LAN
- 3x USB 3.2, 3x USB 2.0, 2x COM, 2x SATA III
- 3x M.2 slots (M-Key + E-Key + B-Key)
- Supports 5G, digital I/O (4-in/4-out), TPM & watchdog timer



IB962 with heatsink

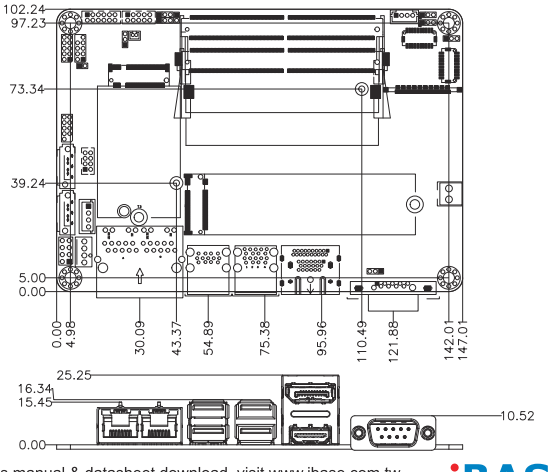
Specifications

Form Factor	3.5 SBC
Dimensions	102mm x 147mm (4 x 5.8)
CPU Socket	N/A
CPU Type	Intel® Core™ Ultra 7/5 100 Series Mobile processors
PCH	N/A
Memory	2x DDR5 SO-DIMM, 5600MT/s, Non-ECC, Max.96GB
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	M.2 (M2280 for NVMe)
Graphics	Intel® Core™ Ultra processor series built-in Iris Xe graphics
Display	HDMI, DisplayPort, eDP & LVDS
Image Capture Interface	36 pTOPS
Video Codec	N/A
I/O Chipset	Fintek F81804U-I on board
External I/O	3x USB 3.2 1x USB 2.0 1x DisplayPort 1x HDMI 1x RS-232/422/485 for COM1 2x 2.5G LAN (Intel® I226LM as 1st LAN, I226V as 2nd LAN) 1x Intel® Core™ Ultra processor built-in HD audio + ALC888S codec
Internal I/O	1x RS-232/422/485 for COM2 2x SATA III 3x M.2 sockets (B-Key/ E-Key and M-Key) 1x eDP 2x LVDS 1x USB 2.0
Expansion IO	1x M.2 (M-Key, Type:2280, supports NVMe with PCI-E(4x) signal only) 1x M.2 (E-Key, Type:2230, supports CNVi) 1x M.2 (B-Key, Type:3052, supports 5G/LTE
TPM	Discrete TPM
Others	Digital I/O (4-in/4-out); +12V~+24V DC IN
Power Consumption	Intel® Core™ Ultra 7 165H, Up to 5.0GHz w/2 x 32G DDR5-5600 memory module +12V: 6.83A
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	10% ~ 90% (non-condensing)
OS Support	Windows 10 Linux Ubuntu / Fedora
Certification	CE, FCC Class B

Ordering Information

IB962AF-165H	Intel® Core™ Ultra 7 165H onboard 3.5 SBC, w/ I226LM + I226V 2.5G LAN, VGA (HDMI +DP + eDP + LVDS), 2x SATA III, 2x COM, 3x M.2 (M2280/ E2230/ B3052), supports iAMT & dTPM, DC IN (12V~24V), optional heatsink, cable kit
IB962AF-165U	Intel® Core™ Ultra 7 165U onboard 3.5 SBC, w/ I226LM + I226V 2.5G LAN, VGA (HDMI +DP + eDP + LVDS), 2x SATA III, 2x COM, 3x M.2 (M2280/ E2230/ B3052), supports iAMT & dTPM, DC IN (12V~24V), optional heatsink, cable kit
IB962AF-155U	Intel® Core™ Ultra 7 155U onboard 3.5 SBC, w/ I226LM + I226V 2.5G LAN, VGA (HDMI +DP + eDP + LVDS), 2x SATA III, 2x COM, 3x M.2 (M2280/ E2230/ B3052), supports iAMT & dTPM, DC IN (12V~24V), optional heatsink, cable kit
IB962AF-135H	Intel® Core™ Ultra 5 135H onboard 3.5 SBC, w/ I226LM + I226V 2.5G LAN, VGA (HDMI +DP + eDP + LVDS), 2x SATA III, 2x COM, 3x M.2 (M2280/ E2230/ B3052), supports iAMT & dTPM, DC IN (12V~24V), optional heatsink, cable kit
IB962AF-135U	Intel® Core™ Ultra 5 135U onboard 3.5 SBC, w/ I226LM + I226V 2.5G LAN, VGA(HDMI +DP + eDP + LVDS), 2x SATA III, 2x COM, 3x M.2 (M2280/ E2230/ B3052), supports iAMT & dTPM, DC IN (12V~24V), optional heatsink, cable kit
IB962AF-125U	Intel® Core™ Ultra 5 125U onboard 3.5 SBC, w/ I226LM + I226V 2.5G LAN, VGA (HDMI +DP + eDP + LVDS), 2x SATA III, 2x COM, 3x M.2 (M2280/ E2230/ B3052), supports iAMT & dTPM, DC IN (12V~24V), optional heatsink, cable kit
IB76A	Cable kit w/USB, COM, Power, SATA
HSIB962-B	Heatsink + Cooler for IB962 series
HSIB962-1	Heat Spreader for IB962 series

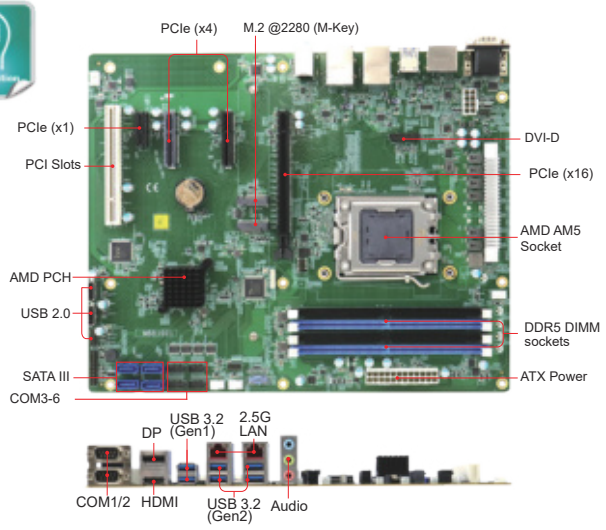
Dimensions and Drawing



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.

MBB1001

AI Edge Board
ATX Motherboard
with AMD Ryzen™ Embedded 7000 Series Processors



Features

- AMD Ryzen™ Embedded 7000 Processors with B650 chipset
- Dual-channel DDR5-5200 UDIMM (4 slots), up to 128GB, ECC support
- Triple independent display outputs: DP / HDMI / DVI-D
- Dual GbE LAN for high-speed networking
- Flexible expansion: 1x PCIe x16 (Gen5), 1x PCIe x4 (Gen5), 1x PCIe x4 (Gen4), 1x PCIe x1 (Gen3), 1x PCI slot
- 2x M.2 2280 (PCIe x2 Gen4, NVMe), supports RAID 0, 1

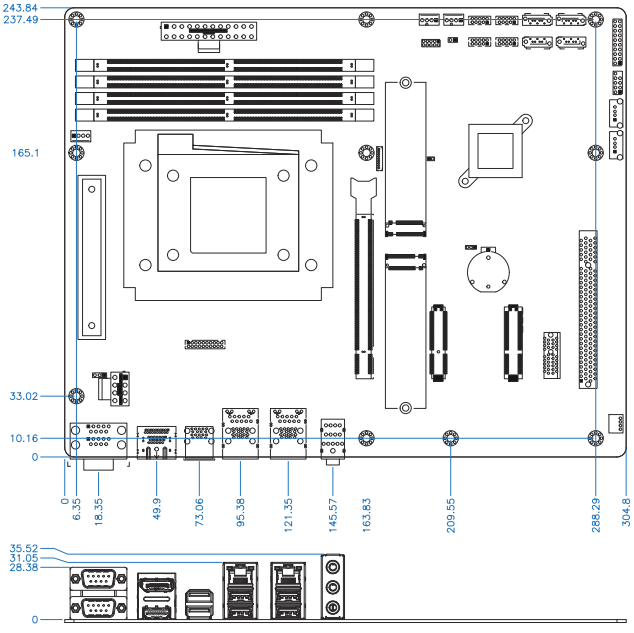
Specifications

Form Factor	ATX Motherboard
Dimensions	305mm x 244mm (12 x 9.6)
CPU Socket	LGA1718
CPU Type	AMD Ryzen™ Embedded 7000 series
PCH	B650
Memory	Dual-Channel DDR5 5200, UDIMM 4 slots, Max. up to 128GB Supports ECC
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	NVMe
Graphics	N/A
Display	1x HDMI 2.0 FRL (Max. 4K @ 60Hz) 1x DP 1.4 UHBR10 (Max. 4K @ 60Hz) 1x DVI-D port (Max. 1920 x 1080 @ 60Hz)
Image Capture Interface	N/A
Video Codec	H.264 / H.265 (HEVC)
I/O Chipset	Fintek F81956D-I/ AMD B650
External I/O	1x Dual DB9 stack connector for - COM 1 (RS-232/422/485) (jumperless selection) - COM 2 (RS-232) 1x HDMI 1x DP 2x 2.5G LAN (Intel® I226V) 2x USB 3.2 Gen1 with PDPC support 4x USB 3.2 Gen 2 1x Triplet type jack 3x 1 for HD audio port [Line-in / Lineout / Mic-in] Realtek ALC888S for 5.1 channel
Internal I/O	2x M.2 2280 (PCIe x2 Gen4, NVMe) 1x DVI-D 4x COM Port Header (RS-232) 2x USB 2.0 via pin header, 2x USB 2.0 type A vertical connector 4x SATA 6Gb/s supports RAID 0, 1, 10 / UEFI and Windows 10 x64 Only (9.2 based driver)
Expansion IO	1x PCIe(x16) supports (Gen5) / 1x PCIe(x4) supports (Gen5) 1x PCIe(x4) supports (Gen4) / 1x PCIe(x1) supports (Gen3) / 1x PCI
TPM	N/A
Others	Digital I/O (4-in/4-out)
Power Consumption	MBB1001-7645 / 7745 / 7945: AMD Ryzen™ 5 PRO 7645 3.8GHz AMD Ryzen™ 7 PRO 7745 3.8GHz AMD Ryzen™ 9 PRO 7945 3.7GHz w/ 1x 8GB DDR5-5200 UDIMM +12V: ~6.5A / +12V: ~7.0A / +12V: ~7.5A
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)
OS Support	Ubuntu 22.04, Windows 11, Windows Server 2022
Certification	CE, FCC Class B, LVD, RoHS 2.0

Ordering Information

MBB1001	AMD Ryzen™ Embedded 7000 series ATX Motherboard w/ HDMI, DisplayPort, DVI-D, Dual Giga-LAN, RAID, TPM (2.0), ECC support

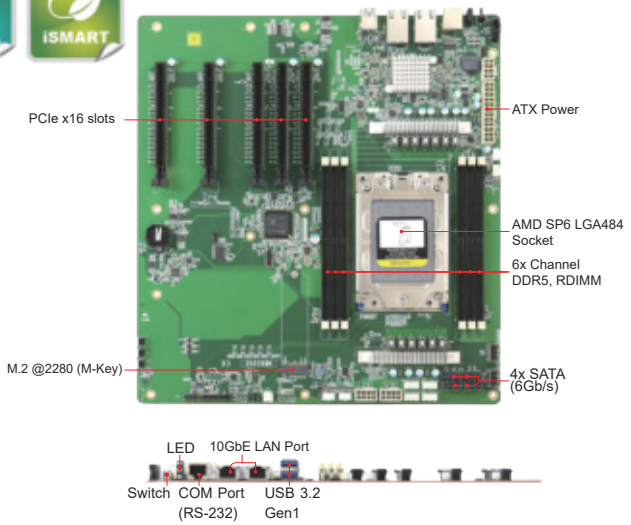
Dimensions and Drawing



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.

MBB1002

AI Edge Board
eATX Motherboard
with AMD EPYC™ Embedded 8004 Series Processors



Features

- AMD EPYC Embedded 8004 series CPU
- 6x DDR5 4800 up to 576GB ECC support
- 5x PCIe x16 slots
- 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)

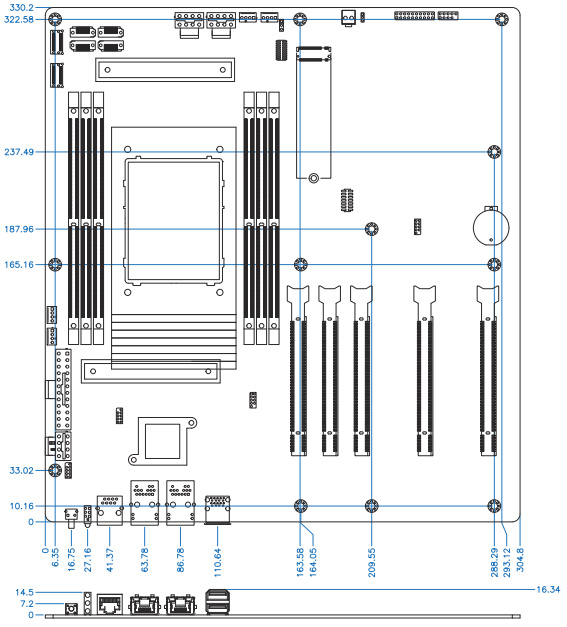
Specifications

Form Factor	eATX Motherboard
Dimensions	330mm x304mm (12.9 x 12)
CPU Socket	AMD SP6 LGA 4844 (EPYC SP6 processors)
CPU Type	AMD EPYC Embedded 8004 series
PCH	N/A
Memory	Six-Channel DDR5 4800, 6 slots RDIMM, Max. 576GB, supports ECC 3600/4000/4400/4800MHz, 16GB, 32GB, 64GB, 96GB
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	4x SATA (6Gb/s) NVMe: 1x 2280 (by PCIe Gen5 interface) NVMe: 2x MCIO x4 (Test by Gen5 SSD)
Graphics	N/A
Display	N/A
Image Capture Interface	N/A
Video Codec	N/A
I/O Chipset	N/A
External I/O	3x LED (Power+HDD+Status refer to Genoa) 1x RS-232/422/485 for COM1 2x Intel® X710-AT2 (Dual 10GbE port) 2x USB 3.2 Gen1 with PDPC support
Internal I/O	2x USB 2.0 via pin header 4x SATA 6Gb/s 1x M.2 2280 (1x 2280 (by PCIe Gen5 interface) 1x 24-pin SSI power connector 3x 8-pin SSI 12V power connector 4x Fan header 4-pin (3 for system + 1 for CPU) 1x SMBus
Expansion IO	5x PCIe(x16) (Gen5.0)
TPM	TPM 2.0
Others	N/A
Power Consumption	TBD
Operating Temperature	0°C~60°C (32°F~140°F)
Storage Temperature	-20°C~80°C (-4°F~176°F)
Relative Humidity	0%~90% (non-condensing@60°C)
OS Support	Ubuntu 22.04, Windows Server 2022, Windows Server 2025
Certification	CE, FCC Class B, LVD, RoHS 2.0

Ordering Information

MBB1002	AMD EPYC Embedded 8004 series eATX Motherboard w/o CPU, memory, storage, supports EEC

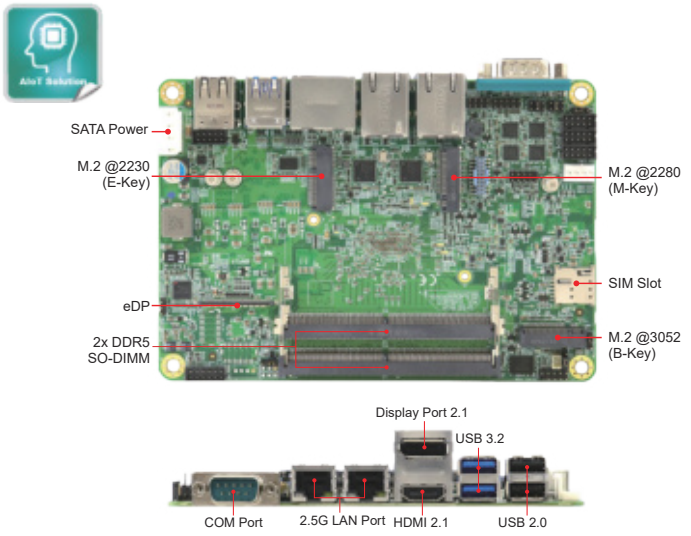
Dimensions and Drawing



IB301

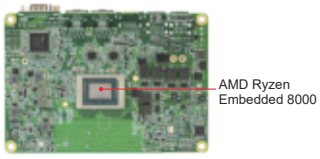
AI Edge Board

3.5" SBC with AMD Ryzen™ Embedded 8000 Series Processors



Features

- AMD Ryzen™ Embedded 8000 Series APU on board, up to 8 cores/16 threads
- Dual-channel SO-DIMM, DDR5 5600, Max. 128GB (per DIMM), Total capacity: 256GB
- 1x eDP, 1x LVDS, 1x DP 2.1, 1x HDMI 2.1
- 2x Intel® I226-V 2.5 Gigabit LAN, 2x USB3.2, 4x USB 2.0
- 1x M.2 B-Key for 5G or LTE options
- 1x M.2 E-Key for Wi-Fi, Bluetooth or capture card options
- Supports 2x RS-232/422/485 COM port, 2x RS-232 COM port



Specifications

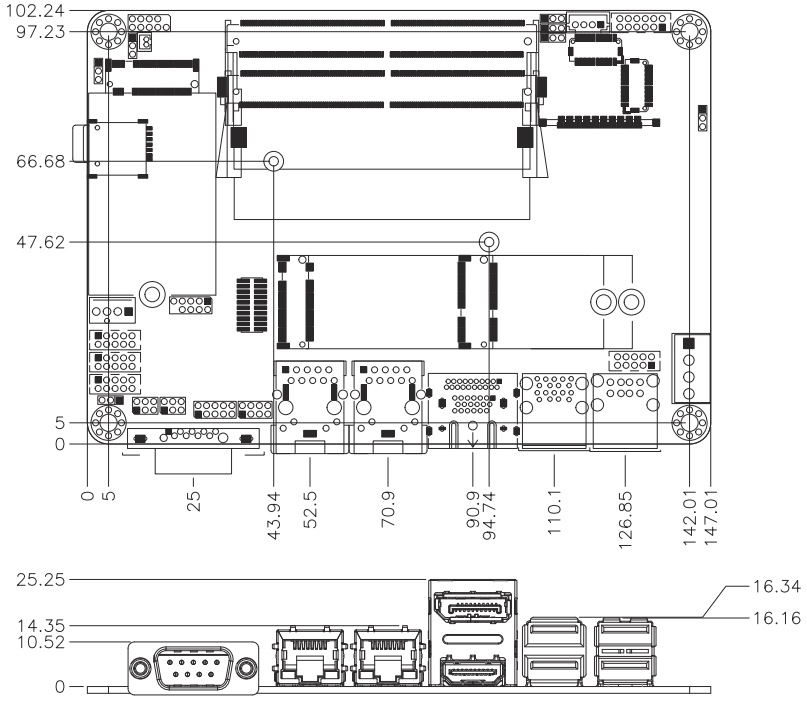
Form Factor	3.5-inch SBC
Dimensions	105mm(W) x 72mm(D) 4.13(W) x 2.83(D)
CPU Socket	N/A
CPU Type	AMD Ryzen™ Embedded 8000 series APU
PCH	N/A
Memory	Dual-Channel SO-DIMM, DDR5 5600, Max. 128GB (per DIMM), Total capacity: 256GB
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	1x M.2 (E-Key, Type:2230, supports CNVi) 1x M.2 (B-Key, Type:3052, supports 5G/LTE 1x SIM socket (Nano SIM)
Graphics	RDNA3 graphics with up to 6 WGPs (Work Group processors)
Display	1x DP 2.1, max resolution: 8K@60Hz (Up to DP 2.1 / UHBR10 (10Gbps)) 1x HDMI 2.1, max resolution: 4K@120Hz (10bpc), 8K60A (10 bpc, 4:2:0) (Up to HDMI 2.1 FRL and 10G with Re-driver (Windows) / 2.0b (Linux) 1x eDP 1.5 [original eDP, DP0], max resolution: 4K@60Hz 1x LVDS [original DP, DP1]max resolution: Dual Channel 18/24bit, up to 1920x1080 @ 60Hz
Image Capture Interface	N/A
Video Codec	H.264 / H.265 (HEVC), AV1 / VP9
I/O Chipset	Fintek F81956D-I
External I/O	1x Dual DB9 stack connector for - COM1 (RS-232/422/485) (jumperless selection) - COM2 (RS-232) 2x Intel® I226-V 2.5 Gigabit LAN 4x COM Port Header (RS-232) 4x USB 3.2 Gen 2 2x USB 3.2 Gen1 with PDPC support 1x Realtek audio codec ALC888S-VD2-GR Audio Header x 1 (for Line-in/Line-out/MIC)
Internal I/O	2x USB 2.0 via pin header, 2x USB 2.0 type A vertical connector 4x SATA 6Gb/s SUPPORT RAID 0, 1, 10 / UEFI and Windows 10 x64 Only (9.2 based driver) 2x M.2 2280 (PCIe x2 Gen4, NVMe)
Expansion IO	1x PCIe x16 supports (Gen5) / 1x PCIe x4 support (Gen5) 1x PCIe x4 supports (Gen4) / 1x PCIe x1 support (Gen3) / 1x PCI
TPM	Discrete TPM
Others	Digital I/O (4-in/4-out);
Power Consumption	MBB1001-7645 / 7745 / 7945: AMD Ryzen™ 5 PRO 7645 3.8GHz AMD Ryzen™ 7 PRO 7745 3.8GHz AMD Ryzen™ 9 PRO 7945 3.7GHz w/ 1x 8GB DDR5-5200 UDIMM +12V: ~6.5A / +12V: ~7.0A / +12V: ~7.5A
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)
OS Support	Ubuntu 22.04, Windows 11
Certification	CE, FCC Class B, LVD, RoHS 2.0

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.

Ordering Information

IB301-8845	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8845HS, CPU Freq. 3.8 GHz up to 5.1 GHz, 8 Cores, 16 Threads, TDP 35-54W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ LVDS
IB301-E-8845	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8845HS, CPU Freq. 3.8 GHz up to 5.1 GHz, 8 Cores, 16 Threads, TDP 35-54W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ eDP
IB301-8840	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8840U, CPU Freq. 3.3 GHz up to 5.1 GHz, 8 Cores, 16 Threads, TDP 15-30W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ LVDS
IB301-E-8840	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8840U, CPU Freq. 3.3 GHz up to 5.1 GHz, 8 Cores, 16 Threads, TDP 15-30W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ eDP
IB301-8645	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8645HS, CPU Freq. 4.3 GHz up to 5.0 GHz, 6 Cores, 12 Threads, TDP 35-54W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ LVDS
IB301-E-8645	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8645HS, CPU Freq. 4.3 GHz up to 5.0 GHz, 6 Cores, 12 Threads, TDP 35-54W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ eDP
IB301-8640	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8640U, CPU Freq. 3.5 GHz up to 4.9 GHz, 6 Cores, 12 Threads, TDP 15-30W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ LVDS
IB301-E-8640	3.5" AMD Ryzen™ Embedded 8000 series (Hawk Point 8640U, CPU Freq. 3.5 GHz up to 4.9 GHz, 6 Cores, 12 Threads, TDP 15-30W) / 3.5" SBC, 2x I226-V, 2x USB 3.2, 4x USB 2.0, 4x COM, 12V – 24V DC-in, w/ eDP
HSIB301-B	COOLER; HSIB301-B V-A, H052HSIB301B0000AP
PW595	Power CABLE; PW595 2-HD 4C Length 22cm, C501PW595042220000P

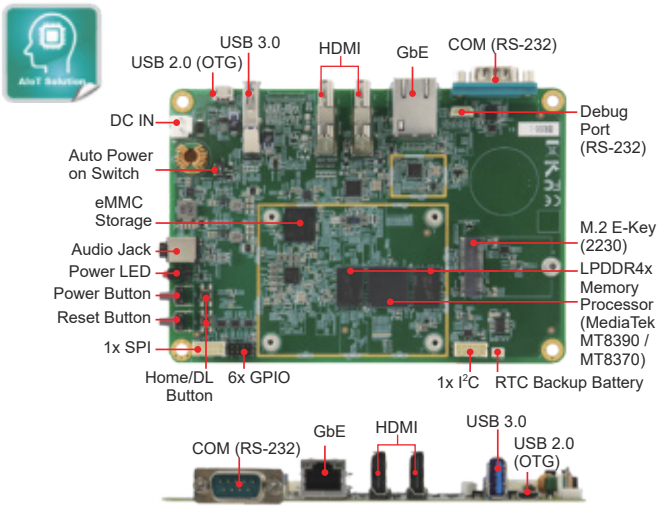
Dimensions and Drawing



IBR500

AI Edge Board

Low-Power 3.5" SBC
with MediaTek Genio 700/MT8390 or MediaTek Genio 510/MT8370 Processor



Features

- MediaTek Genio 700 /MT8390 2.2GHz or MediaTek Genio 510 / MT8370 2.0GHz processor
- On-board LPDDR4 4000MT/s, 4GB or 8GB
- 64GB or 128GB eMMC 5.1 Flash for O.S.
- HDMI 4K60, HDMI 4K30
- Embedded I/O for COM, GPIO, USB, Ethernet
- Supports M.2 E-Key (2230) for WiFi6 2T2R + BT 5.2 connectivity
- Ruggedized and fanless design

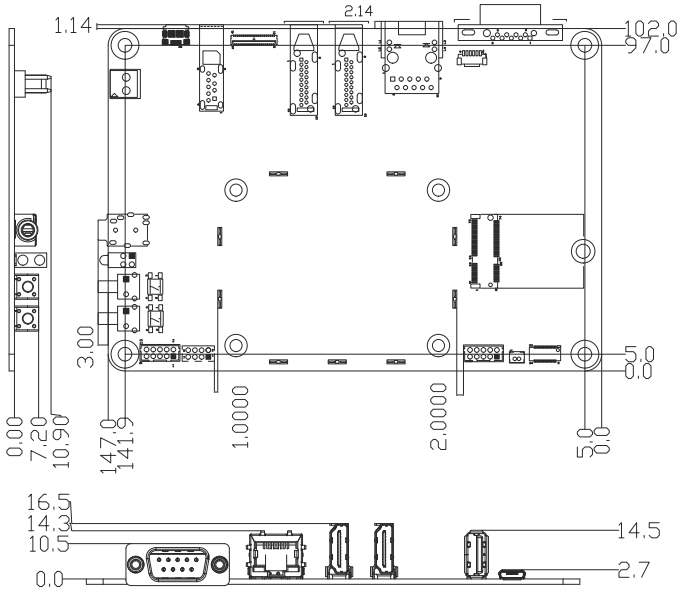
Specifications

Form Factor	3.5-inch SBC
Dimensions	147mm x 102mm (5.78 x 4) 4.13(W) x 2.83(D)
CPU Socket	N/A
CPU Type	MediaTek Genio 700 2x A78 2.2GHz L2 256KB, 6x A55 2.0GHz L2 128KB, shared 2MB L3 cache
PCH	N/A
Memory	LPDDR4 4000MT/s on-board 4GB~8GB 4ch 16-bits LPDDR4X@3733MHz, up to 8GB,29.8GB/s DRAM BW
BIOS	N/A
Watchdog Timer	256 levels, 0~128 Secs
H/W Monitor	N/A
Storage Device Interface	64GB or 128GB eMMC 5.1 Flash for O.S.
Graphics	ARM Mali-G57 MC3, OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1
Display	1x HDMI (4K60) + 1x HDMI (4K30)
Image Capture Interface	N/A
Video Codec	Decode: 4K75fps, AV1. VP9, H.265, H.264 Encode: 4K30fps, H.265, H.264
I/O Chipset	N/A
External I/O	1x COM port 1x RJ45 GbE LAN port 2x HDMI 2x On/Off button 1x USB 3.0 1x micro USB OTG 1x Reset button 1x Audio Line-Out 2x LEDs
Internal I/O	1x SPI in 2x 2 pin header Home & Power key in 2x2 Header 1x RS-232 (Debug) 1x 12V DC IN connector
Expansion IO	1x M.2 E-Key (2230) w/ SDIO, UART (for Wireless) 6x GPIO in 2x pin header 1x I2C in 2x 2-pin header
TPM	N/A
Others	N/A
Power Consumption	N/A
Operating Temperature	With heat sink or through housing design: -10°C~+50°C (14°F ~122°F)
Storage Temperature	-20°C to 80°C (-4°F to 176°F)
Relative Humidity	10% ~ 90% (non-condensing)
OS Support	Android 14, Other OS (by request)
Certification	CE/ FCC Class-B

Ordering Information

IBR500-1	MediaTek Genio 700 Cortex A78 & A55, 8GB LPDDR4, 64GB eMMC 5.1
IBR500-2	MediaTek Genio 510 Cortex A78 & A55, 4GB LPDDR4, 64GB eMMC 5.1

Dimensions and Drawing

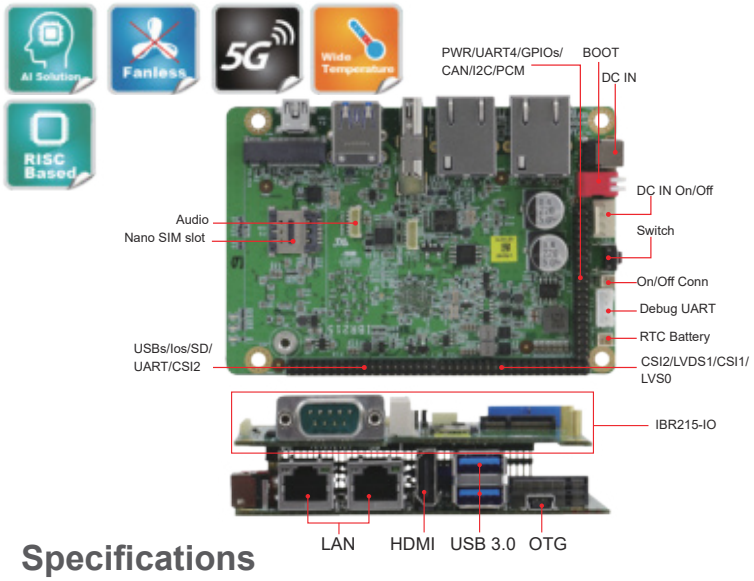


Remarks: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user's manual & datasheet download, visit www.ibase.com.tw.

IBR215

AI Edge Board

Low-Power 2.5" SBC
with NXP i.MX 8M Plus - ARM Cortex-A53 Quad-Core Processor



Features

- NXP Cortex™-A53, i.MX 8M Plus Quad-core 1.6GHz Processor
- Up to 2.3 TOPS NPU
- External connectivity for USB, HDMI & Ethernet
- Supports M.2 B-Key (3052)/m-PCIe for 5G module and NFC functions
- IBR215-IO: Expansion board for WiFi/BT, 4G/LTE, LCD, camera functions
- Supports Yocto5, Debian12 and Android14
- Wide-range operating temperature (-40°C~85°C)
- Ruggedized and fanless design

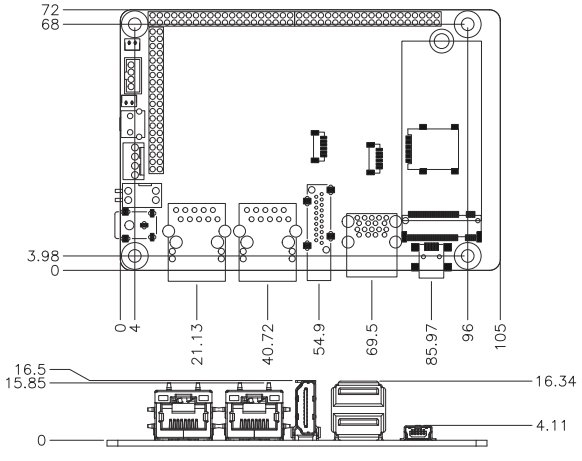
Specifications

Form Factor	2.5-inch SBC
Dimensions	IBR215: 105mm(W) x 72mm(D) (4.13" x 2.83") IBR215-IO: 100mm(W) x 72mm(D) (3.94" x 2.83") IBR215+IBR215-IO: 105mm(W) x 72mm(D) x 35mm(H) (4.13" x 2.83" x 1.37")
CPU Socket	N/A
CPU Type	NXP i.MX 8M Plus - ARM Cortex-A53 Quad-core Processor
PCH	N/A
Memory	System memory: 3GB LPDDR4 on board (option: 4/8GB) Data Memory: 16GB eMMC on board (up to 256GB)
BIOS	N/A
Watchdog Timer	256 levels, 0~128 seconds
H/W Monitor	N/A
Storage Device Interface	uSDHC(eMMC/SD)
Graphics	OpenGL Es 1.1, 2.0, 3.0, 3.1, OpenCL 3.0, OpenVG 1.1, OpenGL 4.0, EGL 1.5, Vulkan 1.1
Display	1x 8-lane or 2x 4-lane LVDS 1x HDMI
Image Capture Interface	2x MIPI-CSI
Video Codec	Decode: 1080p60, H.265, H.264, VP9, VP8 Encode: 1080p60, H.265, H.264
I/O Chipset	NXP i.MX 8M Plus - ARM Cortex-A53 Quad-core Processor
TPM	Yes (sTPM)
Others	N/A
Power Consumption	10.30 W
Storage Temperature	-40°C to 85°C (-40F to 185F)
Relative Humidity	0 % to 90 % RH at 60° C (non-condensing)
OS Support	Yocto 5.0, Android 14, Debian 12 Support for other OS available upon request
External I/O	1x On/Off button 1x 12V~24V DC-IN jack 1x SD socket (UHS-I SDR-104, 104MB/s max.) 1x Boot select switch (boot from eMMC or SD) 1x HDMI 2x USB 3.0 Type-A 2x RJ45 GbE LAN 1x Mini-USB OTG
Expansion IO	3x 2mm pitch 2x20-pin headers for main board connection: 1x M.2 E-Key 2230 (SDIO, UART) for Wi-Fi/BT module 1x mPCIe (USB2.0, SIM, PCM) for 4G/LTE/Wi-Fi modules 1x DB-9 RS-232/422/485 port 2x USB 3.0 in 2x10 pin header 1x LVDS 2ch with Back light control 1x Capacitive touch IF 2x MIPI-CSI for cameras 2x CAN-FD
Internal I/O	1x M.2 3052 B-Key with SIM socket (for 5G module) 2x I^2C / 4x GPIO in a 6-pin header 1x Audio Line-in and Line-out in a 6-pin header 1x DC power supply in a 4-pin header 3x IO expansion headers (2x 20-pin) with the following signals: 1x USB2.0, 1x PCM, 2x UART(RX,TX), 1x SDIO, 1x UART (Tx,Rx,CTS,RTS), 2x USB 3.0, 1x LVDS 2ch with Back light control, 1x I^2C, 2x PWM, 3x GPIO, 1x Capacitive touch IF, 2x MIPI-CSI for cameras, 2x CAN-FD, 5V, 12V (DC-IN)
Operating Temperature	With heat sink or through housing design: -40°C~85°C (-40°F ~185°F) Without heatsink:-40°C~65°C (-40°F ~149°F)
Certification	CE/ FCC Class-B

Ordering Information

IBR215-01	ARM-based IoT Gateway, NXP Cortex®-A53, i.MX 8M Plus Quad-core 1.6GHz processor, 3GB LPDDR4, 16GB eMMC
IBR215-IO	Expansion Board for IBR215
HSIBR215-A	Heat sink

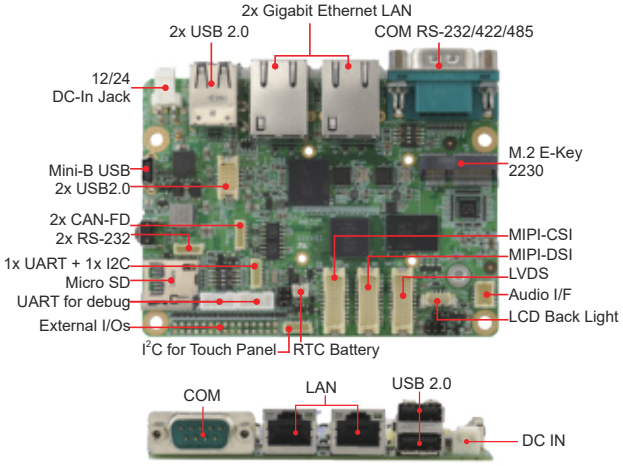
Dimensions and Drawing



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.

IBR300

AI Edge Board
Low-Power 2.5" SBC
with NXP i.MX 93 - ARM Cortex-A55 Dual Core Processor



Features

- NXP i.MX 93 - ARM Cortex-A55 Dual Core 1.7GHz Processor
- 2GB LPDDR4, 32GB eMMC & SD socket for expansion
- 1x COM, 1x 1080p60 MIPI-DSI, 1x 720p60 LVDS, 2x USB, 2xGb Ethernet
- Supports M.2 E-Key (2230) for WiFi/BT module
- Supports Yocto5
- Wide-range operating temperature (-40°C~85°C)
- Ruggedized and fanless design

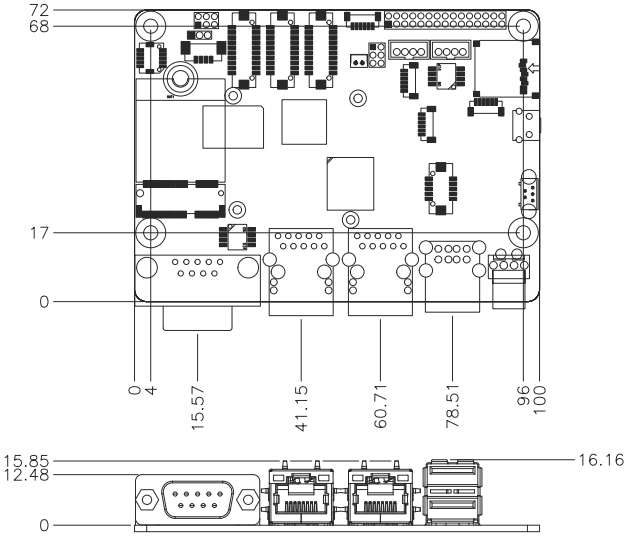
Specifications

Form Factor	2.5-inch SBC
Dimensions	105mm(W) x 72mm(D) (4.13" x 2.83")
CPU Socket	N/A
CPU Type	NXP Cortex®-A55 i.MX 93 Dual Core industrial-Grade SoC operating up to 1.7 GHz MCU: Cortex®-M33 CPU operating up to 250 MHz NPU: ARM Ethos®-U65 microNPU (256 MACs operating up to 1.0 GHz and 2 OPS/MAC)
PCH	N/A
Memory	System memory: 2GB LPDDR4 on board Data Memory: 32GB eMMC on board (up to 256GB)
BIOS	N/A
Watchdog Timer	256 levels, 0~128 Secs
H/W Monitor	N/A
Storage Device Interface	uSDHC (eMMC/SD)
Graphics	Pixel processing pipeline (PXP) engine to support 2D image processing
Display	1x LVDS (4-lane) 1x MIPI-DSI (4-lane, 1080p60)
Image Capture Interface	1x MIDI-CSI (2-lane, 1080p30)
Video Codec	N/A
I/O Chipset	Cortex®-A55 i.MX93 Dual Core industrial-Grade SoC operating up to 1.7 GHz Cortex®-M33 CPU operating up to 250 MHz
External I/O	2x USB2.0 (Type-A) 1x Reset button 1x 12V~24V DC-IN jack 2x Gigabit LAN port 1x COM port for RS-232/422/485 2x RJ45 GbE LAN
Internal I/O	2x USB 2.0 (2x5-pin wafer connector) 1x Debug COM port 2x COM port (RS-232,3-pin header) 2x CAN FD pin header 1x I2C / 1x UART pin header 1x Audio Line-in and Line-out (6-pin header) 1x RTC battery pin header 1x DC power (4-pin header) 1x Pin DIP switch 2x Green LED for power on/off 1x M.2 E-Key (2230) for WiFi/BT module 1x Micro SD slot 1x I2C 1x UART
Expansion IO	N/A
TPM	Yes (sTPM)
Others	N/A
Power Consumption	6.94 W
Operating Temperature	-40°C~85°C (-40°F ~185°F)
Storage Temperature	-40°C~85°C (-40°F ~185°F)
Relative Humidity	0 % to 90 % RH at 60° C (non-condensing)
OS Support	Yocto 5.0 Support for other OS available upon request
Certification	CE/ FCC Class-B

Ordering Information

IBR300	ARM-based IOT Gateway, NXP i.MX 93 Cortex-A55, 1.7GHz, 2GB LPDDR4, 32GB eMMC
HSIBR300-A	Heat sink

Dimensions and Drawing

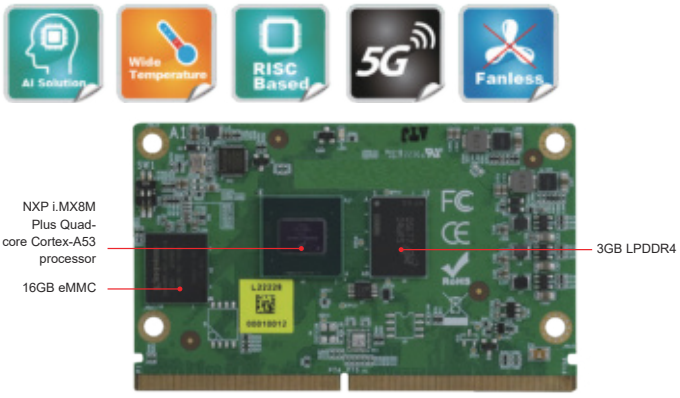


Remarks: 1. Specifications are subject to change without prior notice. 2. ODM/OEM is available. 3. For user's manual & datasheet download, visit www.ibase.com.tw.

RM-N8MP

AI Edge Board

Wide-Temperature SMARC™ 2.1 Module
with NXP ARM® i.MX 8M Plus Quad-core Cortex-A53 Processor



Features

- NXP i.MX 8M Plus Quad-core Cortex-A53 1.6GHz processor
- Up to 2.3 TOPS NPU
- Extensive peripheral I/O support
- Validated with Yocto4 and Android 11
- Long-term availability with NXP solution
- Compliant with SMARC™ 2.1
- Ruggedized and fanless design
- Wide-range operating temperature (-40°C~85°C)

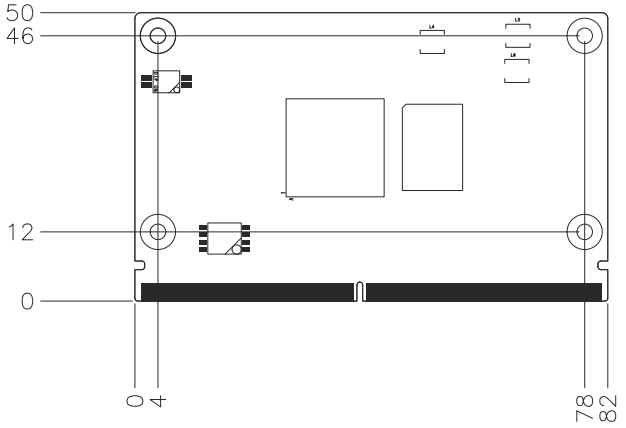
Specifications

Form Factor	SMARC™ 2.1 Module
Dimensions	82mm x 50mm (3.2" x 2")
CPU Socket	N/A
CPU Type	NXP i.MX 8M Plus Quad-core Cortex-A53 processor
PCH	N/A
Memory	System memory: 3GB LPDDR4 on board (option: 4/8GB) Data Memory: 16GB eMMC on board (up to 256GB)
BIOS	N/A
Watchdog Timer	256 levels, 0~128 seconds
H/W Monitor	N/A
Storage Device Interface	uSDHC(eMMC/SD)
Graphics	OpenGL ES 1.1, 2.0, 3.0, 3.1, OpenCL 3.0, OpenVG 1.1, OpenGL 4.0, EGL 1.5, Vulkan 1.1
Display	1x MIPI-DSI (4-Lane), up to 1920 x 1080 at 60 Hz 1x LVDS (2-channel, 4-lane; 1-ch LVDS mux shared with MIPI-DSI) 1x HDMI
Image Capture Interface	1x MIPI CSI-2 4-lanes 1x MIPI CSI-2 2-lanes
Video Codec	1080p/60fps video decode, AVC/H.264, HEVC/H.265, VP8, VP9 1080p/60fps video encode, AVC/H.264, HEVC/H.265
I/O Chipset	NXP i.MX 8M Plus Quad-core Cortex-A53 processor, Cortex® -M7 CPU operating up to 800 MHz
External I/O	N/A
Internal I/O	2x I²S 2x GbE with YT8531H LAN PHY on board 2x USB 3.0 with OTG interface 4x UART, 2x SPI 3x High-speed SDIO 1x PCIe Gen 3x 1 Lane 12x GPIO 4x I²C 2x CAN FD
Expansion IO	N/A
TPM	Yes(sTPM)
Others	NPU: 2.3 TOP/s Neural Network performance • Keyword detect, noise reduction, beamforming • Speech recognition (i.e. Deep Speech 2) • Image recognition (i.e. ResNet-50)
Power Consumption	10.75 W
Operating Temperature	-40°C~85°C (-40°F ~ 185°F)
Storage Temperature	-40°C~85°C (-40°F ~185°F)
Relative Humidity	0 % to 90 % RH at 60° C (non-condensing)
OS Support	Yocto 4.0 Android 11 Other OS (by request)
Certification	CE/ FCC Class B

Ordering Information

RM-N8MP	NXP i.MX 8M Plus Quad-core Cortex-A53 1.8GHz processor, 3GB LPDDR4, 16GB eMMC

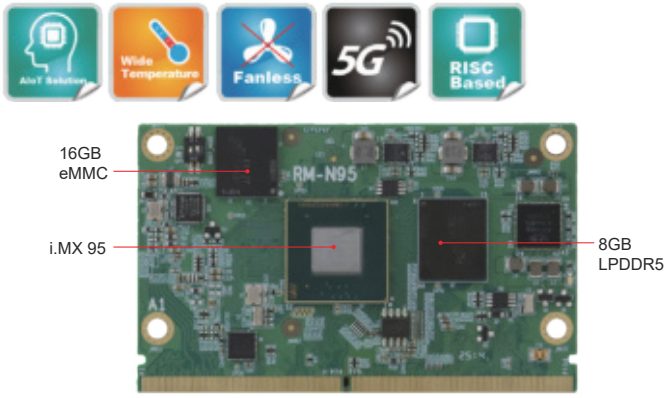
Dimensions and Drawing



RM-N95

AI Edge Board

Wide-Temperature SMARC™ 2.1.1 Module
with Six Cortex-A55/Cortex-M33/Cortex-M7 Processor



Preliminary

Features

- 6x Cortex-A55 / 1x Cortex-M33 / 1x Cortex-M7 processors
- 8GB LPDDR5 6400 MT/s on board (option: 4GB or 16GB)
- 16GB eMMC on board (upgradeable to 256GB)
- NPU with 2.0 TOPS performance
- MIPI-DSI / LVDS / HDMI
- 10 GbE support
- Validated on Yocto 5
- Wide-range operating temperature (-40°C ~ 85°C)

Specifications

Form Factor	SMARC™ 2.1 Module
Dimensions	82mm x 50mm (3.2 x 2)
CPU Socket	N/A
CPU Type	NXP i.MX95 with Six Cortex-A55 cores (up to 2.0GHz)
PCH	N/A
Memory	System memory: 3GB LPDDR4 on board (option: 4/8GB) Data Memory: 16GB eMMC on board (up to 256GB)
BIOS	N/A
Watchdog Timer	1~6553s, power on/off 4s
H/W Monitor	N/A
Storage Device Interface	uSDHC (eMMC/SD)
Graphics	Arm Mali-G310 V2 GPU 3D GPU OpenGL® ES 3.2 Vulkan® 1.3 OpenCL 3.0
Display	1x 4-lane MIPI-DSI (4kp30 or 3840 x 1440p60, BOM selectable) 1x 8-lane or 2x 4-lane LVDS (up to 1080p or 1920 x 1200 or dual 720P) 1x HDMI interface (up to 4kp30 or 3840 x 1440p60)
Image Capture Interface	1x MIPI CSI-2 2-lane (BOM Optional) 1x MIPI CSI-2 4-lane
Video Codec	Decoder: H.265, H.264, 4Kp30 Encoder: H.265, H.264, 4Kp30
I/O Chipset	NXP Cortex™ A55 i.MX95 Six Cores 2.0 GHz Industrial Grade Support of 64-bit Arm® v8.2 architecture Cortex®-M7 CPU operating up to 800 MHz Cortex®-M33 CPU operating up to 333 MHz
External I/O	N/A
Internal I/O	1x 10 GbE Ethernet 2x 10/100/1000 Mbps Ethernet 1x USB 3.0 Type-C with PHY 1x USB 2.0 with PHY 1x 4-bit high-speed SDIO 2x 4-wire UART and 2x 2-wire UART 14x GPIO 2x I²S 4x I²C 1x SPI interface 1x XSPI interface 2x PCIe 3.0 x1 lanes 2x CAN FD
Expansion IO	N/A
TPM	Yes (Discrete TPM 2.0)
Others	RTC: Yes 1x Green LED for power on/off
Power Consumption	9.60 W
Operating Temperature	-40°C to +85°C (-40°F~+185°F) Industrial grade, with heat-sink
Storage Temperature	-40°C to +85°C (-40°F~+185°F)
Relative Humidity	0%~90% (non-condensing@60°C)
OS Support	Yocto5 Other OS (by request)
Certification	CE/ FCC Class-B

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.

RON-956

AI Edge Board

OSM v1.2 Module with NXP i.MX95 Cortex® A55 Processor

Preliminary

Features

- 6x Arm Cortex-A55, 1x Cortex-M33 and 1x Cortex-M7
- Neutron NPU 2.0 TOPS
- Onboard 8GB LPDDR5, 16GB eMMC
- 1x Dual-channel LVDS, 1x single-channel LVDS or 1x 4 lane MIPI-DSI
- 1x 10 GbE, 2x Gigabit LAN, 1x USB 3.0, 1x USB 2.0, 2x PCIe 3.0, 3x CAN FD, 24x GPIO, 2x SDIO
- OSM Size L (45x45mm) Compact Size
- Supports wide-range operating temperature from -40°C to 85°C
- Validated with Yocto5

Specifications

Form Factor	OSM v1.2 Size-L compatible
Dimensions	45mm x 45mm
CPU Socket	N/A
CPU Type	6x Arm Cortex-A55 (up to 2.0 GHz, industrial grade; supports 64-bit Arm® v8.2 architecture, 2.0 TOP/s Neural Network performance) 1x Arm Cortex-M7 core 1x Arm Cortex-M33 core
PCH	N/A
Memory	System memory: 8 GB LPDDR5 6400 MT/s onboard (options: 4 GB or 16 GB) Flash memory: 16 GB eMMC NAND Flash for OS (optional configurations up to 256 GB)
BIOS	N/A
Watchdog Timer	1~6553s, power on/off delay 4s
H/W Monitor	N/A
Storage Device Interface	uSDHC(eMMC/SD)
Graphics	Arm Mali-G310 V2 GPU 3D GPU OpenGL® ES 3.2 Vulkan® 1.3 OpenCL 3.0
Display	1x 4-lane MIPI-DSI supporting 4kp30 or 3840 x 1440p60 1x 8-lane or 2 x 4-lane LVDS up to 1080p or 1920x1200 or Dual 720P
Image Capture Interface	1x 4-lane MIPI CSI-2 camera interface 1x 4-lane MIPI CSI-2 camera interface, shared with MIPI-DSI interface
Video Codec	Decoder: H.265, H.264, 4Kp30 Encoder: H.265, H.264, 4Kp30
I/O Chipset	NXP Cortex™ A55 i.MX95 Six Cores 2.0 GHz Industrial Grade Support of 64-bit Arm® v8.2 architecture Cortex®-M7 CPU operating up to 800 MHz Cortex®-M33 CPU operating up to 333 MHz
Internal I/O	2x Gigabit Ethernet (RGMII interface) 1x 10 Gigabit Ethernet (SGMII interface) with TSN support 1x USB 2.0 Host/Client 1x USB 2.0/3.0 Host/Client 2x MMC/SD/SDIO 2x 4-wire UART (w/ RTS/CTS) 3x 2-wire UART (Rx, Tx) 2x I^2S 5x I^2C up to 400 Kbit/s (2x for GP) 1x SPI (with two chip selects) 1x QSPI/SPI (with two chip selects) 2x CAN-FD / CAN 2.0B 1x CAN-FD / CAN 2.0B on vendor defined pins 2x PCIe 3.0 x 1-Lane 24x GPIO, configurable as input or output

External I/O	N/A
Expansion IO	N/A
TPM	Discrete TPM 2.0
Others	Temperature compensated RTC 4x PWM 2x ADC INputs (12-bit) 4x ADC INputs (12-bit) on vendor defined pins
Power Consumption	Power Supply +5V +/-5% Power Consumption 4-6 W typ. (depending on CPU)
Operating Temperature	-40°C to +85°C (-40°F~185°F), Industrial grade, with heat-sink
Storage Temperature	-40°C to 85°C (-40°F~185°F)
Relative Humidity	0 % to 90 % RH at 60° C (non-condensing)
OS Support	Yocto 5 Other OS (by request)
Certification	CE/FCC Class B

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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EDGE AI PRODUCTS CATALOG