

AI Inference / DeviceEdge

Jetson Platform AIB-MX11-A2/AIB-MX12-A2 AIB-MX21-A2/AIB-MX22-A2



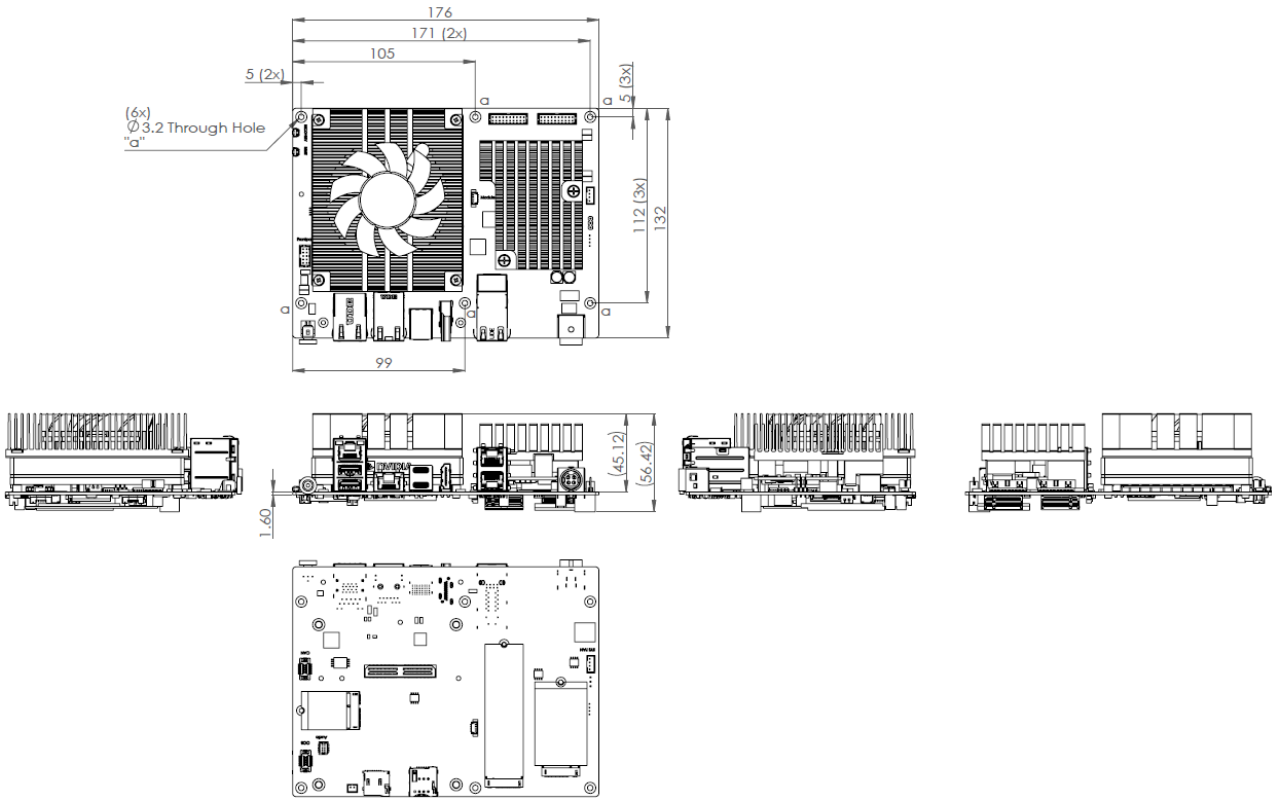
Features

- Supports NVIDIA® Jetson AGX Orin™ 32GB/64GB
- 2/4 x IEEE 802.3af GbE PSE ports
- 1 x GbE, 1 x 10GbE LAN port
- 1 x M.2 B-Key, 1 x M.2 E-Key & 1 x M.2 M-Key slot
- Wide Input Voltage Range 9 to 36V DC
- Supports OOB (out-of-band) powered by Innodisk (optional)
- Operating Temperature -25°C ~ +80°C

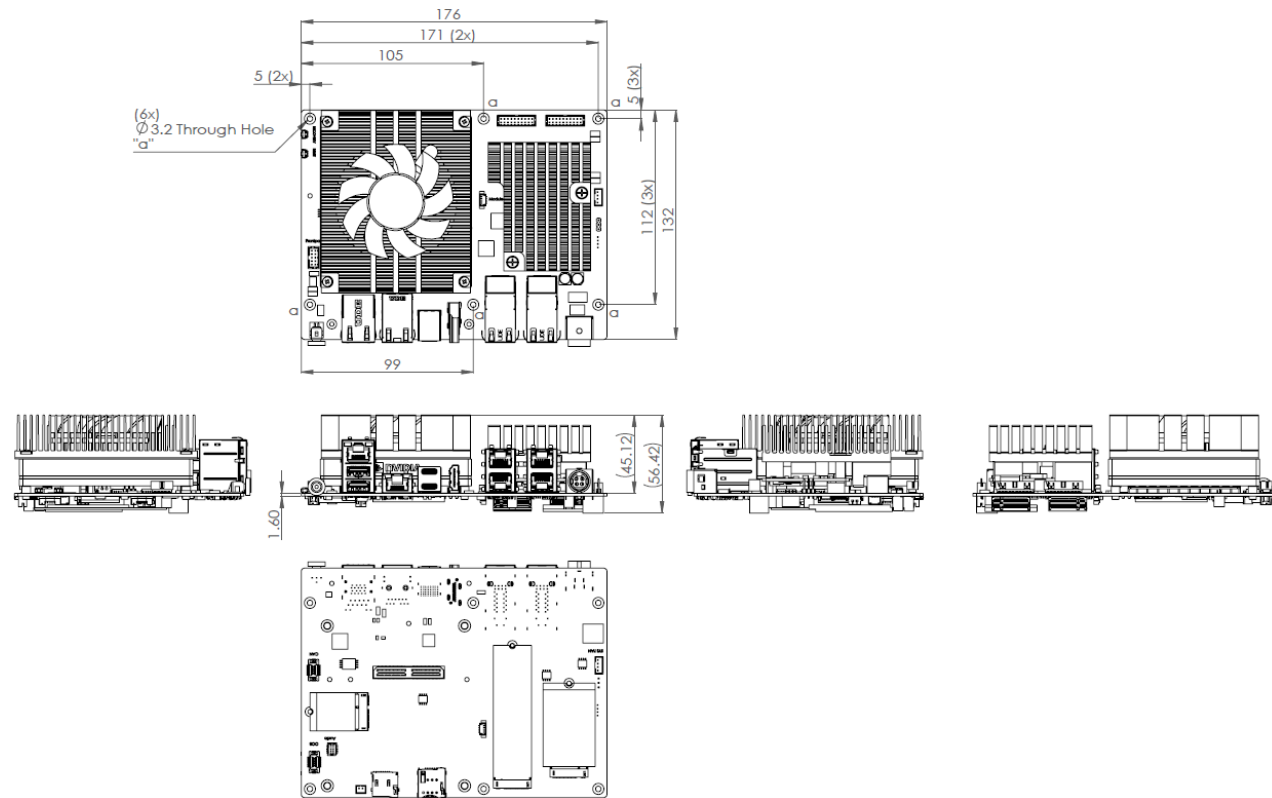
Specifications

Model Number	AIB-MX11-1-A2		AIB-MX12-1-A2	AIB-MX21-1-A2	AIB-MX22-1-A2	
Module Compatibility	NVIDIA® Jetson AGX Orin™ 32GB			NVIDIA® Jetson AGX Orin™ 64GB		
AI Performance	200 TOPS			275 TOPS		
GPU	1792-core NVIDIA® Ampere GPU with 56 Tensor Cores			2048-core NVIDIA® Ampere GPU with 64 Tensor Cores		
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3			12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3		
Memory	32GB 256-bit LPDDR5 204.8 GB/s			64GB 256-bit LPDDR5 204.8 GB/s		
Storage	64GB eMMC 5.1					
Display	1 x HDMI 2.0 Type-A					
TPM	TPM v2.0 (default)					
RTC	RTC battery CR2032 (default with battery)					
Audio	Line-out, Line-in, Mic (optional, requires daughter board)					
Camera Input	1 x 16-Lane MIPI expansion connector (120 pin)					
LAN	1 x RJ-45 GbE port 1 x RJ-45 10GbE port					
PoE Interface	2 x RJ-45 GbE PSE	4 x RJ-45 GbE PSE		2 x RJ-45 GbE PSE	4 x RJ-45 GbE PSE	
	IEEE 802.3af compliant, power output 15W per port, 30W max per connector					
USB	2 x USB 3.2 Gen1 Type-A 1 x USB 3.2 Gen2 Type-C 1 x USB 2.0 OTG Type-C					
I/O Interfaces	2 x UART 1 x UART (debug only) 1 x RS-232 1 x RS-422 / RS-485 2 x CAN 2.0b (with isolation; supports CAN FD) 2 x I²C 1 x I²S			1 x SPI 5 x GPIO 2 x 3.3V DC / 0.5A 2 x 5V DC / 0.5A 1 x 5V DC / 0.5A (standby) 1 x 12V DC / 0.5A 1 x USB 2.0		
Expansion	1 x M.2 B-Key 3042/3052 (LTE/4G/5G) 1 x M.2 E-Key 2230 (Wi-Fi/BT) 1 x M.2 M-Key 2280 (supports NVMe; PCIe Gen4 x4) 1 x microSD card socket			1 x microSIM card socket 1 x OOB (out-of-band, optional) 1 x GMSL power connector 1 x 1PPS module function		
MISC. Function	1 x Power button, 1 x Recovery button, 1 x Reset button					
Power Consumption	Idle: 10.5 W Full Loading: 85 W	Idle: 10.5 W Full Loading: 125 W		Idle: 12 W Full Loading: 116 W	Idle: 12 W Full Loading: 146 W	
	*For more test condition information, please refer to user manual					
Power Input / Connector	DC-in 9 to 36V DC, 4-Pin DC Jack Power Connector					
Dimension (W x D x H)	176 x 132 x 57.32 mm (6.93 x 5.19 x 2.26 in)					
Net Weight	0.980 kg (2.161 lb) w/ Fansink					
Vibration	1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis					
Shock	10 G, IEC 60068-2-27, half sine, 11 ms duration					
Temperature	Operating Temp.: -25°C ~ +80°C (-13°F ~ +176°F) Storage Temp.: -40°C ~ +85°C (-40°F ~ +185°F)					
Humidity	95% @ 40°C (104°F) (non-condensing)					
Software Support	Linux (supports NVIDIA® Jetpack™ 6.2 and above)					
Certification	CE, FCC Class A, UKCA					

AIB-MX11 / AIB-MX21 System & Mounting Dimensions

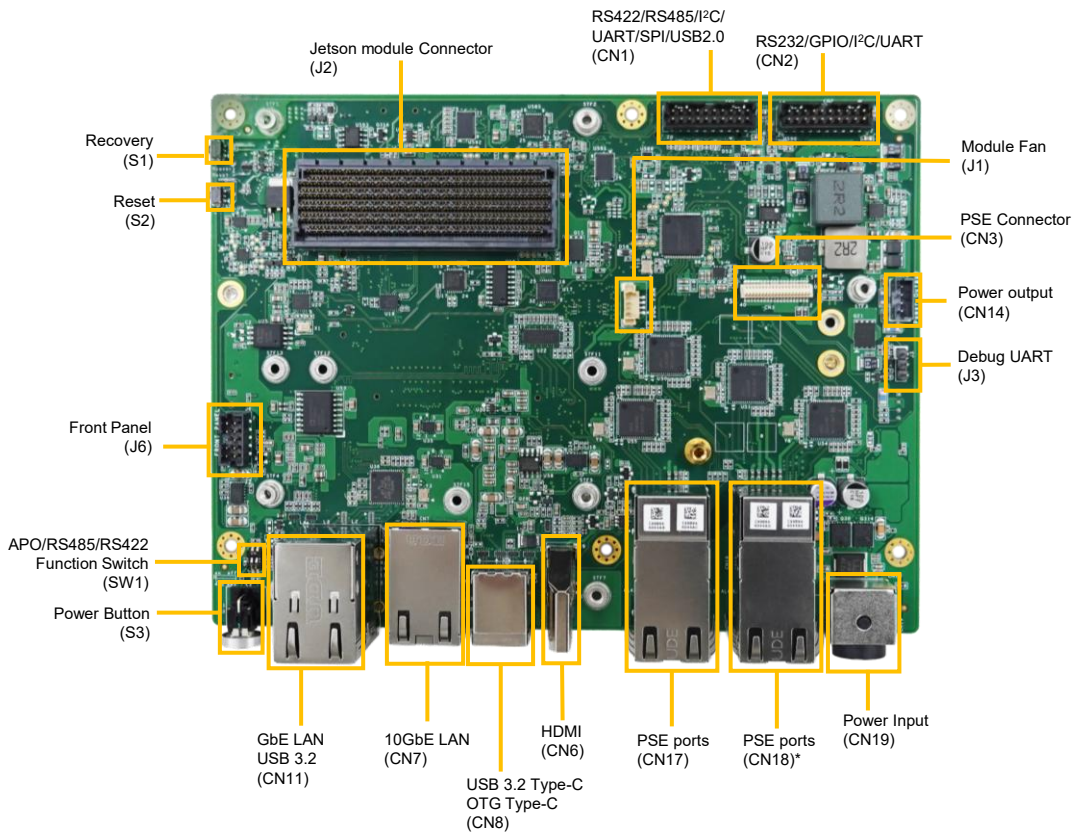


AIB-MX12 / AIB-MX22 System & Mounting Dimensions



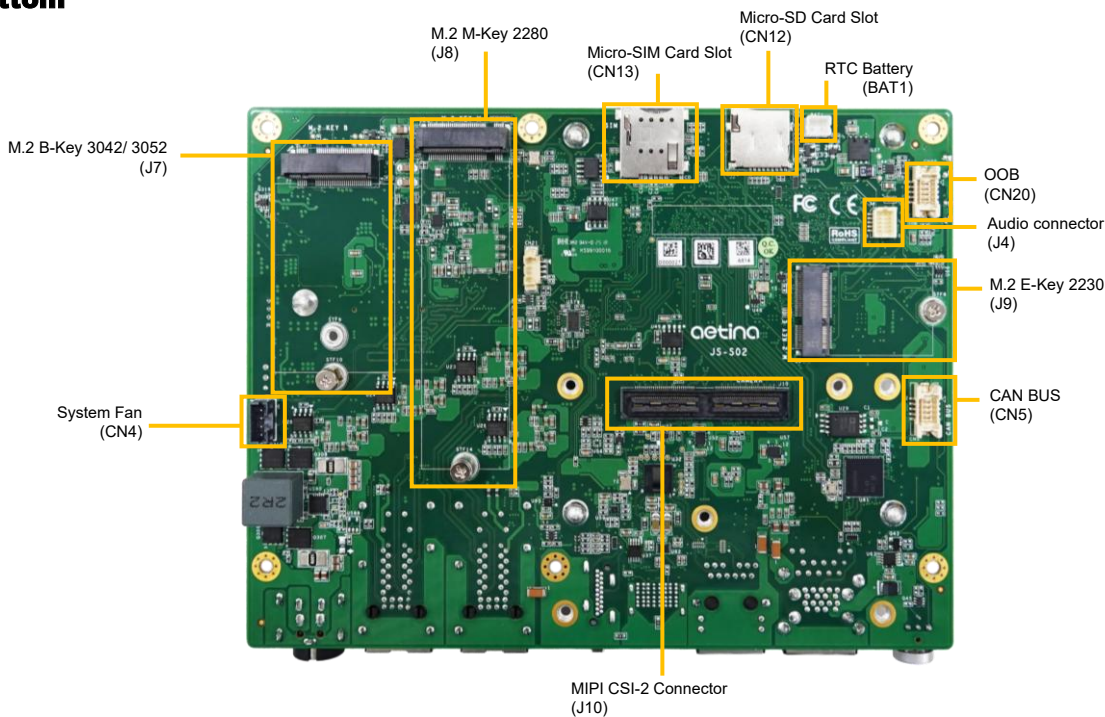
I/O Mechanical Layout

Top



*PSE ports (CN18) are not populated on the AIB-MX11 and AIB-MX21 series.

Bottom



Ordering Information

Model name	Description
AIB-MX11-1-A2	AGX Orin 32GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 2 x GbE PSE, 4 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +80°C
AIB-MX12-1-A2	AGX Orin 32GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 4 x GbE PSE, 4 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +80°C
AIB-MX21-1-A2	AGX Orin 64GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 2 x GbE PSE, 4 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +80°C
AIB-MX22-1-A2	AGX Orin 64GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 4 x GbE PSE, 4 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +80°C

Packing List

Item/Part Number	Description
92-6BMX11-4002	AIB-MX11 carrier board w/ AGX Orin 32GB
92-6BMX12-4003	AIB-MX12 carrier board w/ AGX Orin 32GB
92-6BMX21-4002	AIB-MX21 carrier board w/ AGX Orin 64GB
92-6BMX22-4004	AIB-MX22 carrier board w/ AGX Orin 64GB
53-0F0000-0008	85~264V 221W 24V 9.2A power adaptor

Accessories (Optional)

Part Number	Description
3102000153N000	US power cord
32-010000-0006	EU power cord
32-010000-0008	JP power cord
3102000037N000	UK power cord
20-100000-0000	Battery wire Panasonic CR2032 3V/225mA L=45mm
53-0DAS19-0000	(HF) CMOS ONSEMI PYTHON 2000 1920*1200 43FPS COLOR 0°C~50°C
53-0DAC13-0000	(HF) CMOS E2V EV76C560 1280*1024 60FPS COLOR 0°C~50°C
53-0DA219-0000	(HF) SONY IMX392 1920*1200 51FPS MONO -10°C~50°C
53-0DA238-0000	(HF) SONY IMX334 3840*2160 12.4FPS COLOR -10°C~50°C
53-0DA253-0000	(HF) SONY IMX540 5328*4608 4.2FPS MONO -10°C~50°C
53-0DAC24-0000	(HF) CMOS SONY IMX264 2448*2048 22.7FPS COLOR 0°C~50°C
53-0DAC25-0000	(HF) CMOS ONSEMI MT9P031 2592*1942 14.6FPS COLOR 0°C~50°C
53-0DAC40-0000	(HF) CMOS SONY IMX226 4024*3036 8.7FPS COLOR 0°C~50°C
53-0DAC54-0000	(HF) SONY IMX183 5472*3648 5FPS COLOR 0°C~50°C