

# AI Inference / DeviceEdge

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



\*Preliminary

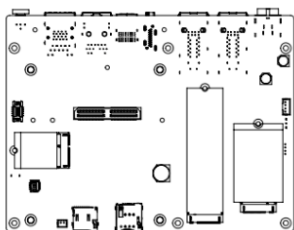
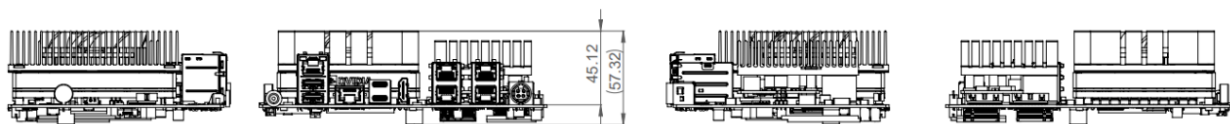
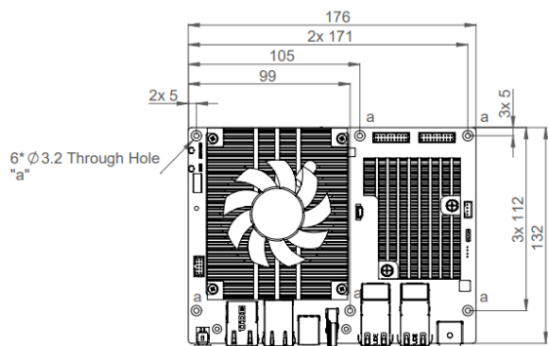
## Features

- 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 36 VDC
- Supports OOB (out-of-band) powered by Innodisk (optional)
- Operating Temperature -25°C ~ +80°C

## Specifications

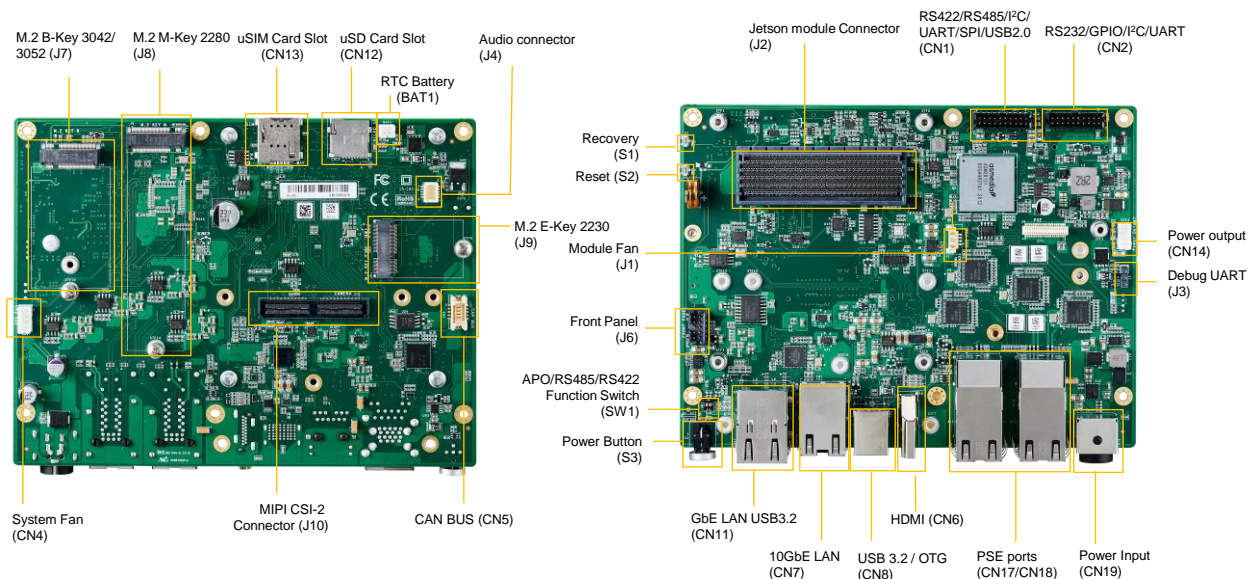
Model Number	AIB-MX11/AIB-MX12	AIB-MX21/AIB-MX22
Module Compatibility	NVIDIA Jetson AGX Orin 32GB	NVIDIA Jetson AGX Orin 64GB
AI Performance	200 TOPS	275 TOPS
GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores	2048-core NVIDIA Ampere GPU with 64 Tensor Cores
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit 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 (optional)	
RTC	With super capacitor, battery (optional)	
Audio	Line-out/Line-in/Mic (optional with 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	2/4 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W per Port)	2/4 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W per Port)
USB	2 x USB 3.2 Gen1 Type A, 1 x OTG Type-C, 1 x USB 3.2 Gen2 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, 2 x I <sup>2</sup> C, 1 x I <sup>2</sup> S, 1 x SPI, 5 x GPIO, 2 x 3.3VDC/0.5A, 3 x 5VDC/0.5A, 1 x 12VDC/0.5A, 1 x USB 2.0 1 x microSIM Card Slot	
Expansion	1 x M.2 B-Key 3042/3052 (LTE/4G/5G, USB 3.2/USB 2.0) 1 x M.2 E-Key 2230 (WiFi/BT, PCIe/USB 2.0) 1 x M.2 M-Key 2280 (supports NVMe, PCIe) 1 x microSD Card Slot	
MISC. Function	1 x Power / Recovery / Reset button	
Power Consumption	Idle: 10.5 W Full Loading: 111* W	Idle: 12 W Full Loading: 132* W
	*For more test condition information, please refer to user manual	
Power Input / Connector	DC-in 9 to 36 VDC / 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)	
OS Support	Ubuntu 20.04	
Certification	CE / FCC Class A / UKCA	

## System & Mounting Dimensions



\*Preliminary

## I/O Mechanical Layout



\*Preliminary



## Ordering Information

Model name	Description
AIB-MX11-1-A1	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-A1	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-A1	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-A1	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
92-6BMX11-4000	(ES) AIB-MX11 carrier board w/ AGX Orin 32GB
92-6BMX12-4000	(ES) AIB-MX12 carrier board w/ AGX Orin 32GB
92-6BMX21-4000	(ES) AIB-MX21 carrier board w/ AGX Orin 64GB
92-6BMX22-4000	(ES) AIB-MX22 carrier board w/ AGX Orin 64GB
53-0FG160-1200	85~264V 138W 12V 11.5A power adaptor

## Accessories (Optional)

Part Number	Description
32-010000-0005	US power cord
32-010000-0006	EU power cord
32-010000-0008	JP power cord
3102000037N000	UK power cord

## Peripheral (Optional)

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