

# AI Inference / DeviceEdge

## Jetson Platform AIB-MO22/AIB-MO32 AIB-MN32/AIB-MN42



\*Preliminary

### Features

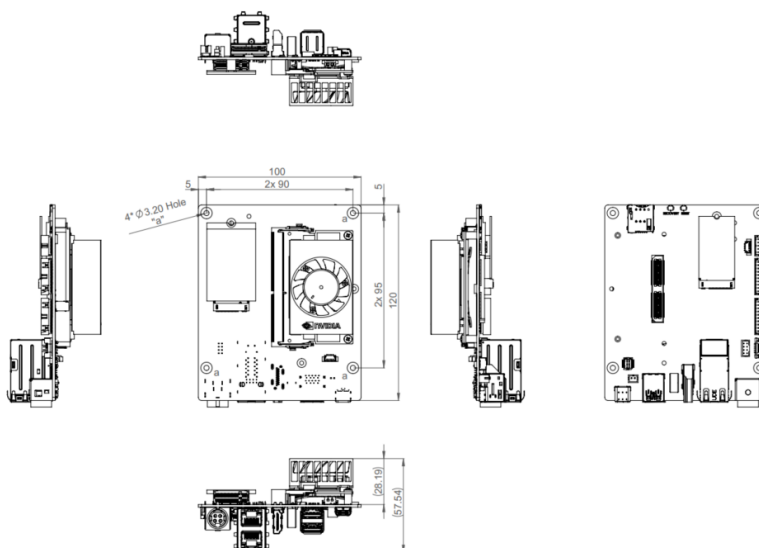
- Supports NVIDIA Jetson Orin Nano/NX Series
- 1 x M.2 B-Key/E-Key/M-Key (NVMe 128GB built-in)
- 2 x RJ-45 GbE Ports
- Wide Input Voltage Range 12 to 24 VDC
- Operating temperature -25°C ~ +80°C



### Specifications

Model Number	AIB-MO22 / AIB-MO32	AIB-MN32 / AIB-MN42
Module Compatibility	NVIDIA Jetson Orin Nano 4/8G	NVIDIA Jetson Orin NX 8/16GB
AI Performance	20/40 TOPS	70/100 TOPS
GPU	512 Core NVIDIA Ampere, with 16 Tensor Cores 1024 Core NVIDIA Ampere, with 32 Tensor Cores	1024 Core NVIDIA Ampere, with 32 Tensor Cores
CPU	6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3	6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3 8-core Arm® Cortex®-A78AE v8.2 64-bit 2MB L2 + 4MB L3
Memory	4GB 64-bit LPDDR5 34 GB/s 8GB 128-bit LPDDR5 68 GB/s	8GB 128-bit LPDDR5 102.4 GB/s 16GB 128-bit LPDDR5 102.4 GB/s
Storage	1 x M.2 M-Key 2242 (NVMe 128GB built-in)	
Display	1 x HDMI 2.0 Type A	
Audio	Line-out / Line-in / Mic (optional with daughter board)	
RTC	With super capacitor, battery (optional)	
Camera Input	1 x 8-Lane MIPI Expansion Connector (120-Pin)	
LAN	2 x RJ-45 GbE Ports	
USB	2 x USB 3.2 Gen2 Type A 1 x OTG Type-C	
I/O Interfaces	5 x GPIO, 1 x SPI, 1 x I <sup>2</sup> S, 3 x I <sup>2</sup> C, 1 x UART, 1 x UART (Debug Only), 1 x RS-232, 1x CAN (Isolation), 1 x RS-422/485	
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 2242 (NVMe 128GB built-in)	
MISC. Function	1 x Recovery / Reset Button	
Power Consumption	TBD	
Power Input / Connector	DC-in 12 to 24 VDC / 4-Pin DC Jack Power Connector	
Dimension (W x D x H)	120 x 100 x 57.54 mm (4.73 x 3.94 x 2.27 in)	
Net Weight	0.195 kg (0.43 lb)	
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.: -25°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	

## System & Mounting Dimensions



\*Preliminary

## I/O Mechanical Layout



\*Preliminary

## Ordering Information

Model name	Description
AIB-MO22-1-A1	Orin Nano 4GB, 1 x HDMI, 2 x GbE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +80°C operating temp.
AIB-MO32-1-A1	Orin Nano 8GB, 1 x HDMI, 2 x GbE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +80°C operating temp.
AIB-MN32-1-A1	Orin NX 8GB, 1 x HDMI, 2 x GbE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +80°C operating temp.
AIB-MN42-1-A1	Orin NX 16GB, 1 x HDMI, 2 x GbE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +80°C operating temp.

## Packing List

Item/Part Number	Description
AIE-MO22	AIE-MO22 system w/ Orin Nano 4GB
AIE-MO32	AIE-MO32 system w/ Orin Nano 8GB
AIE-MN32	AIE-MN32 system w/ Orin NX 8GB
AIE-MN42	AIE-MN42 system w/ Orin NX 16GB
53-0F0000-0003	100-240V 60W 12V 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

## Peripheral (Optional)

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