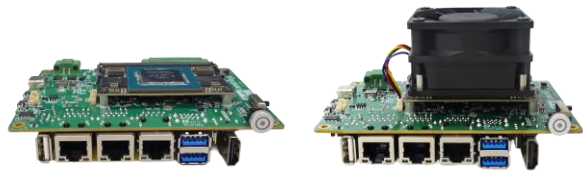


AI Inference / DeviceEdge

Jetson System AIB-MO23/AIB-MO33-S1 AIB-MN33/AIB-MN43-S1



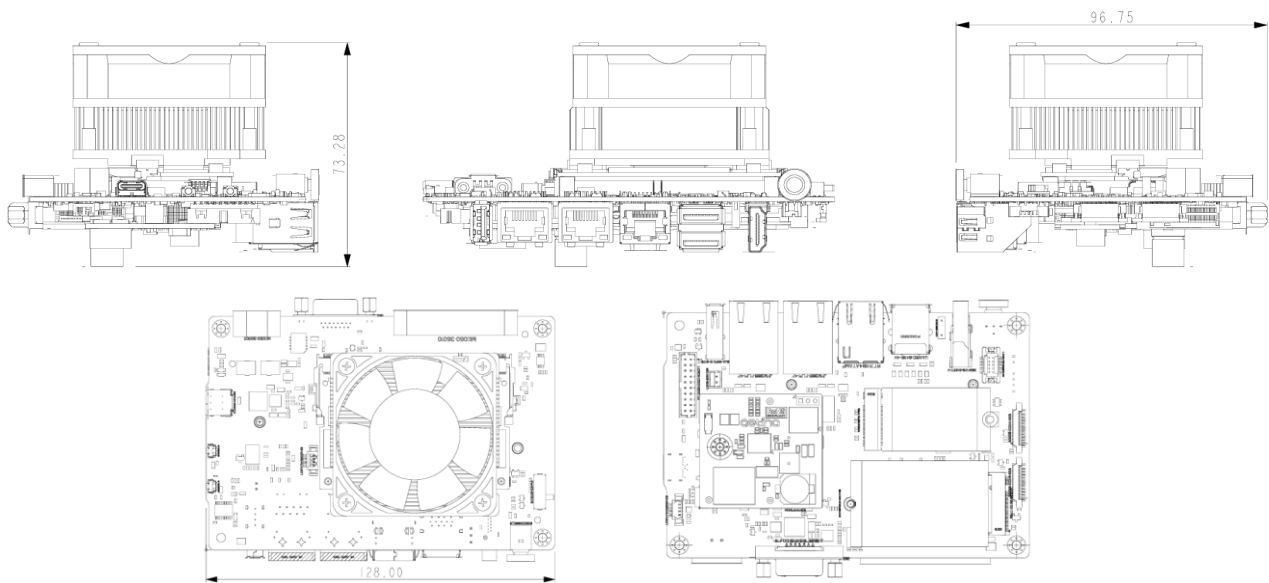
Features

- Supports NVIDIA Jetson Orin Nano / NX Series (Super mode)
- 1 x M.2 B-Key/ E-Key/ M-Key (NVMe 128GB built-in)
- 1 x RJ45 for GbE
- 2 x IEEE 802.3af GbE PSE Ports
- Power Input Voltage Range 12 to 24 VDC
- Operating temperature -25°C ~ +80°C

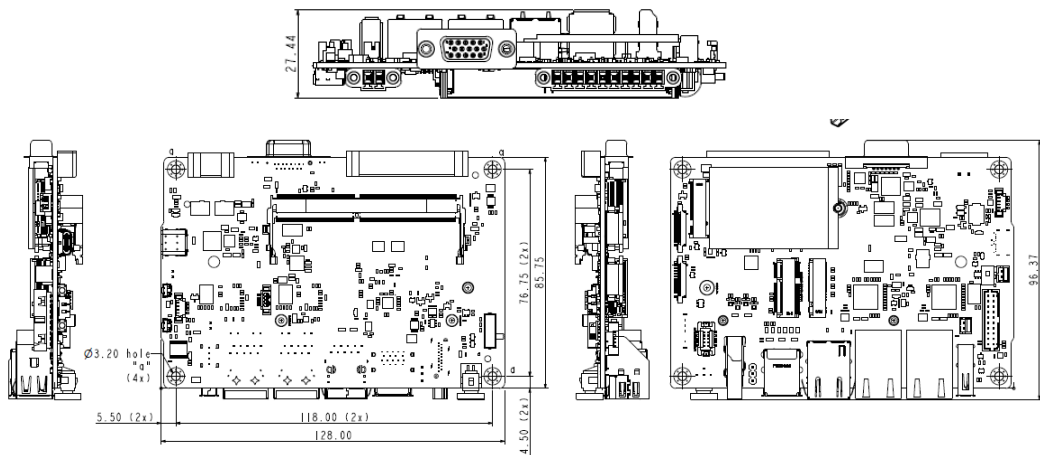
Specifications

Model Number	AIB-MO23-S1	AIB-MO33-S1	AIB-MN33-S1	AIB-MN43-S1
Module Compatibility	NVIDIA Jetson Orin Nano 4GB	NVIDIA Jetson Orin Nano 8GB	NVIDIA Jetson Orin NX 8GB	NVIDIA Jetson Orin NX 16GB
AI Performance	34 TOPS	67 TOPS	117 TOPS	157 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 2MB L2 + 4MB L3	8-core Arm® Cortex®-A78AE v8.2 64-bit 2MB L2 + 4MB L3
Memory	4GB 64-bit LPDDR5 51 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 1.4 Type A		1 x HDMI 2.0 Type A	
MIPI Camera Input	2 x 4 lane MIPI CSI-2, 22 pin FPC Connector			
TPM	TPM			
RTC	RTC Battery			
LAN	1 x RJ-45 GbE Ports			
PoE Interface	2 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W/Port, Total PSE ports support up to 30W)			
USB	2 x USB 3.2 Gen2 Type A (supports up to 10Gbps shared) 1 x USB 2.0 Gen2 Type A 1 x OTG Type-C			
I/O Interfaces	7 x GPIO, 1 x SPI, 3 x I2C, 1 x UART, 1 x UART (Debug Only), 1 x CAN (Isolation; support CAN FD), 1 x RS-422/485/232 (switch 3-in1)			
Expansion	1 x M.2 B-Key 3052 (LTE/4G/5G) 1 x M.2 E-Key 2230 (WiFi/BT) 1 x M.2 M-Key 2242 (NVMe 128GB built-in)			
MISC. Function	1 x Recovery Button			
Power Consumption	Idle: 15 W Full Loading: 77* W		Idle: 16 W Full Loading: 78 W	
	*For more test condition information, please refer to user manual			
Power Input / Connector	DC-in 12 to 24 VDC / 2-Pin Terminal Block			
Dimension (W x D x H)	128.00 x 96.75 x 27.44 (5.04 x 3.81 x 1.08 in) without Fansink 128.00 x 96.75 x 73.28 (5.04 x 3.81 x 2.89 in) with Fansink			
Net Weight	164 g (0.362 lb) without Fansink 348 g (0.767 lb) with 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) *With full CPU+GPU stressing: System non-throttling at 70C with 40W (MAXN Mode)			
Humidity	95% @ 40°C (104°F) (non-condensing)			
Software Support	Linux (Support Jetpack 6.2 above)			
Certification	CE / FCC Class A / UKCA			

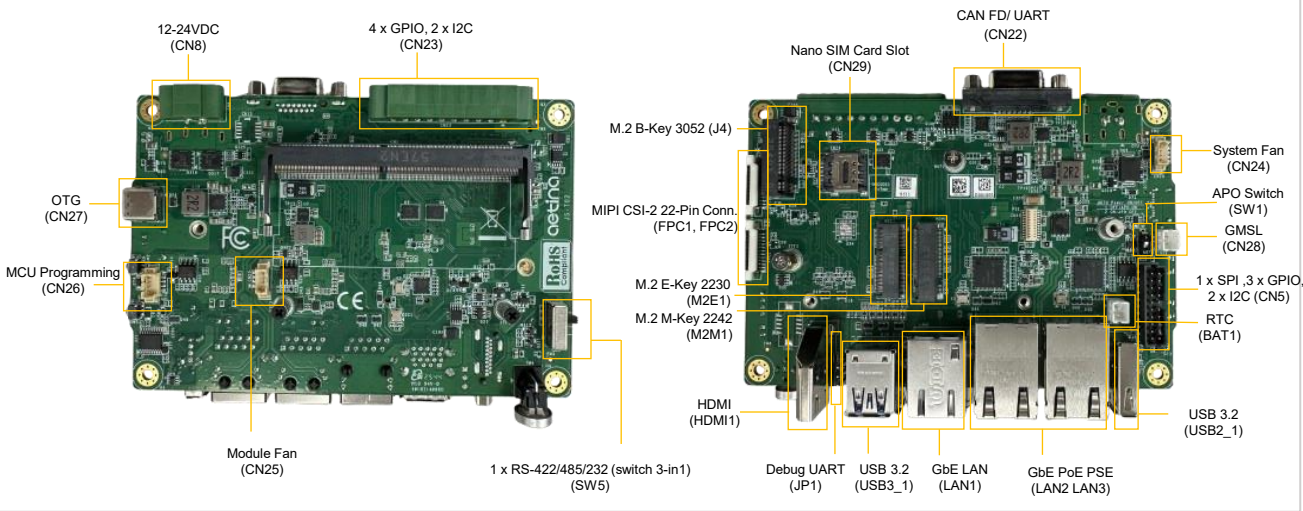
System & Mounting Dimensions with Fansink



System & Mounting Dimensions without Fansink



I/O Mechanical Layout



Ordering Information

Model name	Description
AIB-MO23-1-S1	Orin Nano 4GB, 1 x HDMI, 1 x GbE, 2 x PoE, 3 x USB, 128GB SSD, E/M/B Key, 12 to 24 VDC input, -25°C ~ +80°C
AIB-MO33-1-S1	Orin Nano 8GB, 1 x HDMI, 1 x GbE, 2 x PoE, 3 x USB, 128GB SSD, E/M/B Key, 12 to 24 VDC input, -25°C ~ +80°C
AIB-MN33-1-S1	Orin NX 8GB, 1 x HDMI, 1 x GbE, 2 x PoE, 3 x USB, 128GB SSD, E/M/B Key, 12 to 24 VDC input, -25°C ~ +80°C
AIB-MN43-1-S1	Orin NX 16GB, 1 x HDMI, 1 x GbE, 2 x PoE, 3 x USB, 128GB SSD, E/M/B Key, 12 to 24VDC input, -25°C ~ +80°C

Packing List

Item/Part Number	Description
92-6BMO23-4003	AIB-MO23 carrier board w/ Orin Nano 4GB
92-6BMO33-4000	AIB-MO33 carrier board w/ Orin Nano 8GB
92-6BMN33-4000	AIB-MN33 carrier board w/ Orin NX 8GB
92-6BMN43-R001	AIB-MN43 carrier board w/ Orin NX 16GB
53-0FG160-1200	100-240V 138W 12V 11.5A power adaptor
20-100000-0003	Battery wire Panasonic BR2032 3V/200mA L=45mm

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