

AI Inference / DeviceEdge

Jetson System AIE-PO23/33-6USB AIE-PN33/43-6USB



*Preliminary

Features

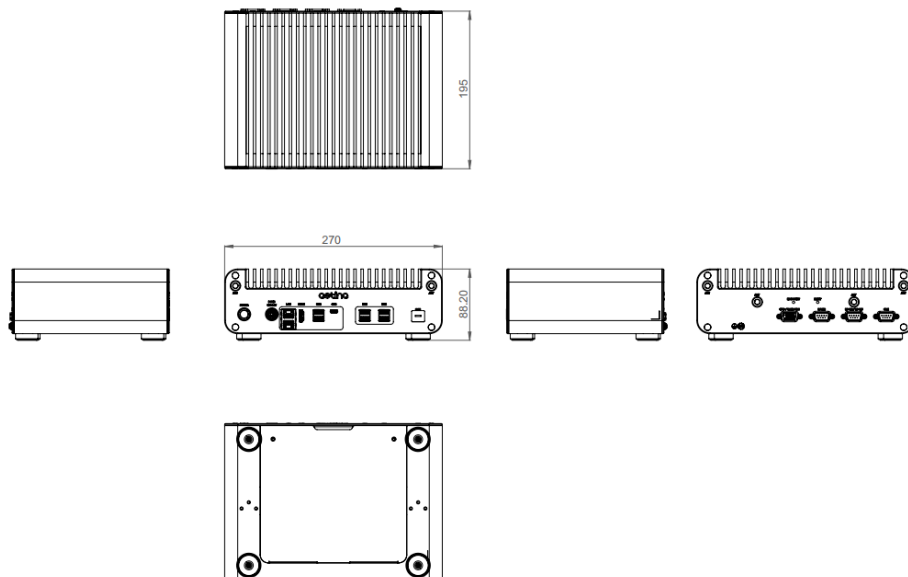
- Supports NVIDIA Jetson Orin Nano/NX Series
- 1 x M.2 B-Key/E-Key/M-Key (128GB built-in)
- 6 x USB 3.2 Ports
- 2 x RJ-45 GbE Ports
- Wide Power Input Range 12 to 24 VDC
- Supports OOB (out-of-band) powered by Innodisk (optional)
- Operating temperature -25°C ~ +55°C
- Fanless Design



Specifications

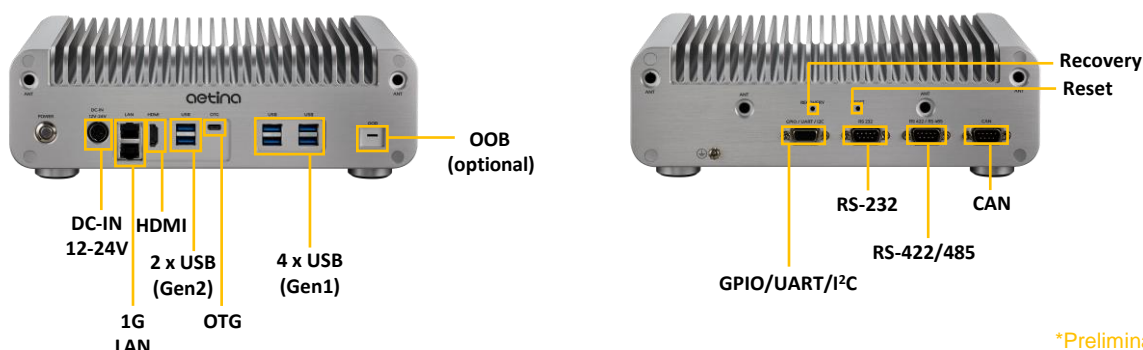
Model Number	AIE-PO23-6USB / AIE-PO33-6USB	AIE-PN33-6USB / AIE-PN43-6USB
Module Compatibility	NVIDIA Jetson Orin Nano 4/8G	NVIDIA Jetson Orin NX 8/16GB
AI Performance	20/40 TOPS	70/100 TOPS
GPU	512 Core NVIDIA Ampere, with 16 Tensor Cores 1024 Core NVIDIA Ampere, with 32 Tensor Cores	1024 Core NVIDIA 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 NVMe M-Key 2242 (128GB built-in)	
Display	1 x HDMI 2.0 Type A	
LAN	2 x RJ-45 GbE Ports	
USB	2 x USB 3.2 Gen2 Type A (support up to 10 Gbps shared) 4 x USB 3.2 Gen1 Type A 1 x OTG Type-C	
I/O Interfaces	5 x GPIO, 1 x UART, 1 x I ² C, 1 x RS-232, 1 x RS-422/485, 1 x CAN (isolation; support CAN FD)	
Expansion	1 x M.2 B-Key 3042/3052 (LTE/5G) 1 x M.2 E-Key 2230 (Wifi/BT) 1 x M.2 M-Key 2242 (NVMe 128GB built-in)	1 x M.2 B-Key 3042/3052 (LTE/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 Power Button, 1 x Recovery Button, 1 x Reset Button	
Power Input /Connector	DC-in 12-24VDC / 4-Pin DC Jack Power Connector	
Power consumption	Idle: 6.413 W Full Loading: 47.13* W	Idle: 6.413 W Full Loading: 47.13* W
	*For more test condition information, please refer to user manual	
Dimension (W x D x H)	270 x 195 x 80 mm (10.63 x 7.67 x 3.15 in)	
Mounting	Wall Mount (optional) / Din Rail (optional)	
Net Weight	TBC kg (TBC 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 ~ +55°C (-13°F ~ +131°F) with 0.5 m/s air flow Storage Temp.: -25°C ~ +85°C (-40°F ~ +185°F)	
Humidity	95% @ 40°C (104°F) (non-condensing)	
Software Support	Linux (Support Jetpack 5.0 above)	
Certification	CE / FCC Class A / UKCA	

System & Mounting Dimensions



*Preliminary

I/O Mechanical Layout



*Preliminary

Ordering Information

Model name	Description
AIE-PO23-6USB-1-A1	Orin Nano 4GB, 1 x HDMI, 2 x GbE, 6 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-PO33-6USB-1-A1	Orin Nano 8GB, 1 x HDMI, 2 x GbE, 6 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-PN33-6USB-1-A1	Orin NX 8GB, 1 x HDMI, 2 x GbE, 6 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-PN43-6USB-1-A1	Orin NX 16GB, 1 x HDMI, 2 x GbE, 6 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C

Packing List

Item/Part Number	Description
AIE-PO23-6USB-1-A1	AIE-PO23-6USB system w/ Orin Nano 4GB
AIE-PO33-6USB-1-A1	AIE-PO33-6USB system w/ Orin Nano 8GB
AIE-PN33-6USB-1-A1	AIE-PN33-6USB system w/ Orin NX 8GB
AIE-PN43-6USB-1-A1	AIE-PN43-6USB 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
3102000037N000	UK power cord
55-BEPX11-Z000	Wall Mount Kit
55-AEPX11-Z000	Din Rail Kit

Peripheral (Optional)

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