

AI Inference / DeviceEdge

Jetson System AIE-PN33-2/4PSE AIE-PN43-2/4PSE



Features

- Supports NVIDIA Jetson Orin Nano/NX Series
- 1 x M.2 B-Key/E-Key/M-Key (128GB built-in)
- 2/4 x IEEE 802.3af GbE PSE 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

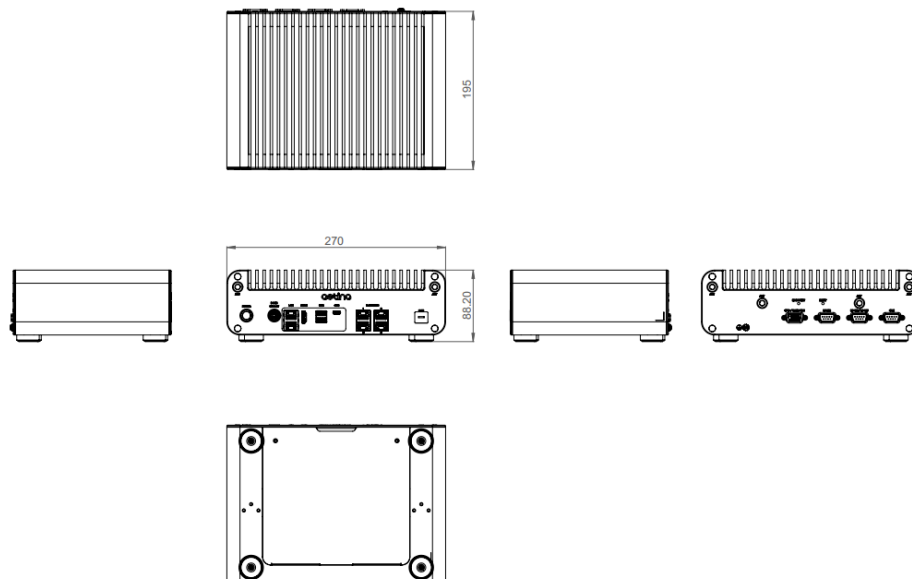
Specifications

*Preliminary



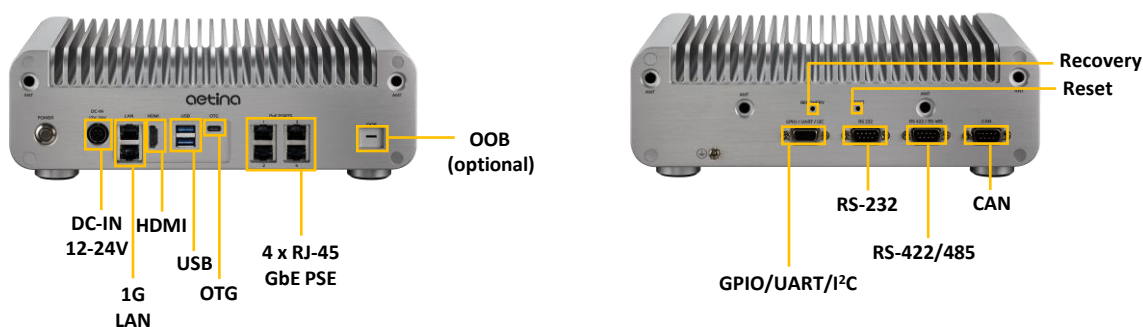
Model Number	AIE-PN33-2PSE / AIE-PN33-4PSE	AIE-PN43-2PSE / AIE-PN43-4PSE
Module Compatibility	NVIDIA Jetson Orin NX 8GB	NVIDIA Jetson Orin NX 16GB
AI Performance	70 TOPS	100 TOPS
GPU	1024 Core NVIDIA Ampere, with 32 Tensor Cores	1024 Core NVIDIA Ampere, with 32 Tensor Cores
CPU	6-core Arm® Cortex®-A78AE v8.2 64-bit 1.5MB L2 + 4MB L3	8-core Arm® Cortex®-A78AE v8.2 64-bit 2MB L2 + 4MB L3
Memory	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	
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 Gen2 Type A (supports up to 10Gbps shared) 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: 89.13* W	Idle: 6.413 W Full Loading: 89.13* 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.: -40°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-PN33-2PSE-1-A1	Orin NX 8GB, 1 x HDMI, 2 x GbE, 2 x PoE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-PN33-4PSE-1-A1	Orin NX 8GB, 1 x HDMI, 2 x GbE, 4 x PoE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-PN43-2PSE-1-A1	Orin NX 16GB, 1 x HDMI, 2 x GbE, 2 x PoE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C
AIE-PN43-4PSE-1-A1	Orin NX 16GB, 1 x HDMI, 2 x GbE, 4 x PoE, 2 x USB, 128GB SSD, B/E/M Key, 12 to 24 VDC input, -25°C ~ +55°C

Packing List

Item/Part Number	Description
AIE-PN33-2PSE	AIE-PN33-2PSE system w/ Orin NX 8GB
AIE-PN33-4PSE	AIE-PN33-4PSE system w/ Orin NX 8GB
AIE-PN43-2PSE	AIE-PN43-2PSE system w/ Orin NX 16GB
AIE-PN43-4PSE	AIE-PN43-4PSE system w/ Orin NX 16GB
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
55-BEPX11-Z000	Wall Mount Kit
55-AEPX11-Z000	Din Rail Kit

Peripheral (Optional)

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