AI Inference / DeviceEdge

Powered by NVIDIA® Jetson™
AIE-KO22/AIE-KO32-S2
AIE-KN32/AIE-KN42-S2





Features

- Supports NVIDIA® Jetson Orin Nano™ /Orin™ NX with Super Mode
- 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 ~ +70°C
- Supports OOB (out-of-band) powered by Innodisk (optional)

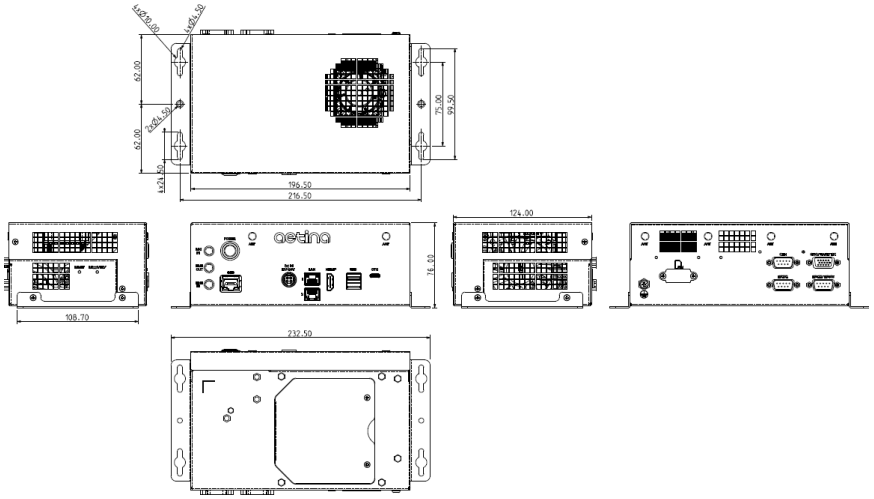
NVIDIA Elite Partner

Specifications

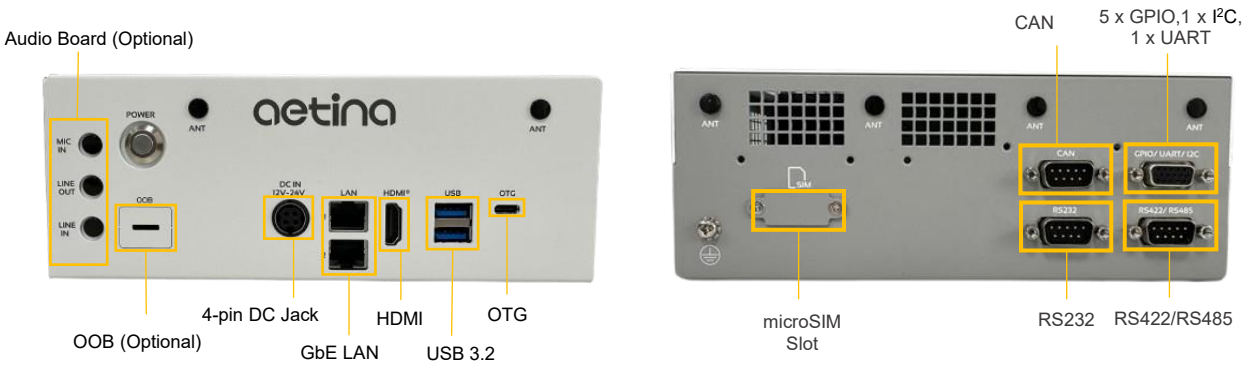
Model Number	AIE-KO22-1-S2	AIE-KO32-1-S2	AIE-KN32-1-S2	AIE-KN42-1-S2
Module Compatibility	NVIDIA Jetson Orin Nano with Super Mode 4GB	NVIDIA Jetson Orin Nano with Super Mode 8GB	NVIDIA Jetson Orin NX with Super Mode 8GB	NVIDIA Jetson Orin NX with Super Mode 16GB
AI Performance	34 TOPS	67 TOPS	117 TOPS	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 2.0 Type A			
Audio	Line-out / Line-in / Mic (optional with daughter board)			
TPM	TPM			
RTC	RTC Battery 2032			
LAN	2 x RJ-45 GbE Ports			
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^2C, 1 x RS-232, 1 x RS-422/485 (2-in-1), 1 x CAN (isolation), 1 x OOB (optional), 1 x microSIM Card Slot			
Expansion	1 x M.2 B-Key 3042/3052 (LTE/4G/5G with 1PPS function supported at 1.8V / 3.3V) 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 / Recovery Button / Reset Button			
Power Input / Connector	DC-in 12-24VDC / 4-Pin DC Jack Power Connector			
Power consumption	Idle: 6.413 W Full Loading: 35.13* W		Idle: 6.413 W Full Loading: 52.13* W	
	*For more test condition information, please refer to user manual			
Dimension (W x D x H)	196.5 x 124 x 74 mm (7.73 x 4.88 x 2.91)			
Mounting	Wall Mount (optional) / Din Rail (optional)			
Net Weight	1.102 kg (2 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 ~ +70°C (-13°F ~ +158°F) with 0.5 m/s air flow Storage Temp.: -40°C ~ +85°C (-40°F ~ +185°F) *With full CPU+GPU stressing: System non-throttling at 60C with 40W (MAXN Mode)			
Humidity	95% @ 40°C (104°F) (non-condensing)			
OS Support	Linux (Support NVIDIA JetPack™ 6.2 and above)			
Certification	CE / FCC Class A / UKCA			

*Product Specifications Are Subject To Change Without Prior Notice

System & Mounting Dimensions



I/O Mechanical Layout



Ordering Information

Model name	Description
AIE-KO22-1-S2	NVIDIA Jetson 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 ~ +70°C
AIE-KO32-1-S2	NVIDIA Jetson 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 ~ +70°C
AIE-KN32-1-S2	NVIDIA Jetson 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 ~ +70°C
AIE-KN42-1-S2	NVIDIA Jetson 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 ~ +70°C

Packing List

Item/Part Number	Description
92-CEKO22-J007	AIE-KO22-S2 system w/ NVIDIA Jetson Orin Nano 4GB
92-CEKO32-J00C	AIE-KO32-S2 system w/ NVIDIA Jetson Orin Nano 8GB
92-CEKN32-J006	AIE-KN32-S2 system w/ NVIDIA Jetson Orin NX 8GB
92-CEKN42-J009	AIE-KN42-S2 system w/ NVIDIA Jetson Orin NX 16GB
53-0FG160-1200	100-240V 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-BECN32-Z000	Wall Mount Kit
55-AEKN32-Z000	Din Rail Kit

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