

AI Inference / DeviceEdge

Jetson System AIE-KX11/12-1-A2 AIE-KX21/22-1-A2



Features

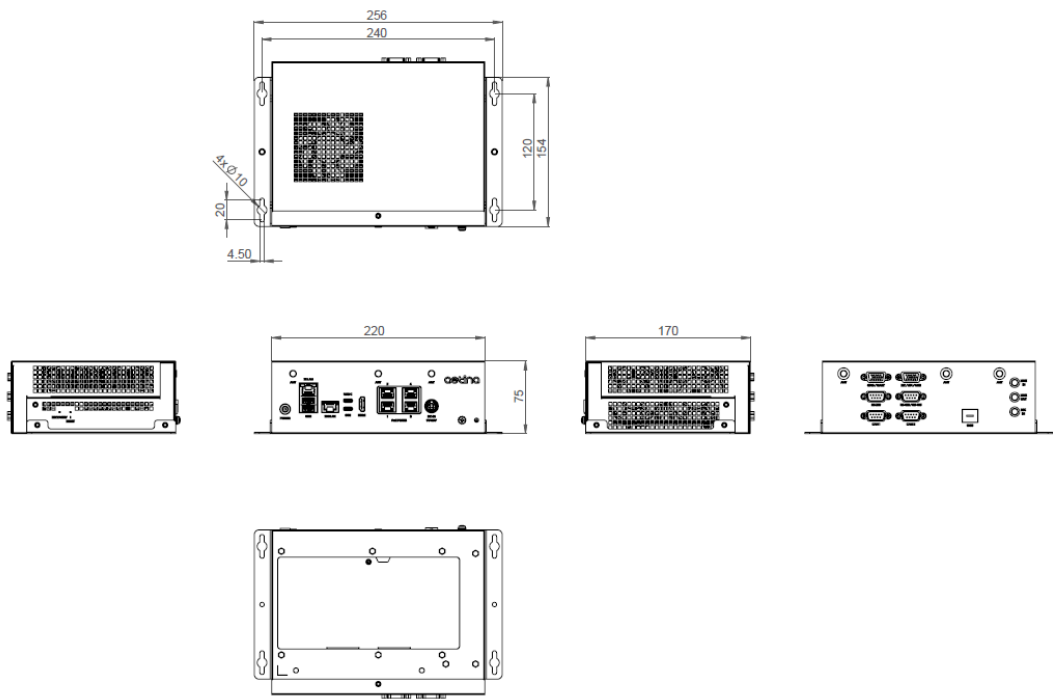
- Supports NVIDIA® Jetson AGX Orin™ 32GB/64GB
- 2/4 x IEEE 802.3af GbE PSE ports
- 1 x 1GbE, 1 x 10GbE LAN port
- 1 x M.2 B-Key, 1 x M.2 E-Key, 1 x M.2 M-Key slot
- Wide Input Voltage Range 9 to 36V DC
- Operating Temperature -25°C – 70°C



Specifications

Model Number	AIE-KX11-1-A2		AIE-KX12-1-A2		AIE-KX21-1-A2		AIE-KX22-1-A2	
Module Compatibility	NVIDIA® Jetson AGX Orin™ 32GB				NVIDIA® Jetson AGX Orin™ 64GB			
AI Performance	200 TOPS				275 TOPS			
GPU	1792-core NVIDIA Ampere GPU with 56 Tensor Cores				2048-core NVIDIA Ampere GPU with 64 Tensor Cores			
CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3				12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3			
Memory	32GB 256-bit LPDDR5 204.8 GB/s				64GB 256-bit LPDDR5 204.8 GB/s			
Storage	64GB eMMC 5.1							
Display	1 x HDMI 2.0 Type-A							
Audio	Line-out, Line-in, Mic (optional, requires daughter board)							
TPM	TPM v2.0 (optional)							
LAN	1 x RJ-45 1GbE port 1 x RJ-45 10GbE port							
PoE Interface	2 x RJ-45 GbE PSE		4 x RJ-45 GbE PSE		2 x RJ-45 GbE PSE		4 x RJ-45 GbE PSE	
	*IEEE 802.3af compliant, 15 W per port; PSE ports 1 & 2 support IEEE 802.3at; total PSE power up to 60 W							
USB	2 x USB 3.2 Gen 1 Type-A 1 x USB 3.2 Gen 2 Type-C 1 x USB 2.0 (DB-15) 1 x USB 2.0 OTG Type-C							
I/O Interfaces	5 x GPIO 2 x I²C 2 x UART 2 x CAN 2.0b (Isolated, CAN FD supported) 1 x SPI 1 x RS-232 1 x RS-422/485 (2-in-1)							
Expansion	1 x M.2 B-Key 3042/3052 (LTE/4G/5G) 1 x M.2 E-Key 2230 (Wi-Fi/BT) 1 x M.2 M-Key 2280 (NVMe, PCIe Gen 4 x4) 1 x microSD card slot 1 x micro SIM card slot 1 x OOB (out-of-band, optional)							
MISC. Function	1 x Power button, 1 x Recovery button, 1 x Reset button							
Power Input /Connector	DC-in 9–36 VDC, 4-pin DC jack power connector							
Power Consumption	Idle: 14.3W Full Loading: 115.8W*				Idle: 14.8W Full Loading: 136.8W*			
	*For more test condition information, please refer to user manual							
Dimension (W x D x H)	220 x 170 x 79 mm (8.66 x 6.69 x 3.11 in)							
Mounting	Wall mount (optional) / Din rail (optional)							
Net Weight	1.852kg (4lb)							
Vibration	1Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis							
Shock	10 G, IEC 60068-2-27, half sine, 11ms duration							
Temperature	Operating Temp.: -25°C – 70°C (-13°F – 158°F) with 0.5 m/s airflow <i>Super Mode: No thermal throttling under full CPU and GPU load at 65°C</i> Storage Temp.: -40°C – 85°C (-40°F – 185°F)							
Humidity	95% @ 40°C (104°F) (non-condensing)							
Software Support	Linux (supports NVIDIA® Jetpack™ 6.2 and above)							
Certification	CE, FCC Class A, UKCA							

System & Mounting Dimensions



I/O Mechanical Layout



Ordering Information

Model name	Description
AIE-KX11-1-A2	AGX ORIN 32GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 2 x PoE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +70°C
AIE-KX12-1-A2	AGX ORIN 32GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 4 x PoE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +70°C
AIE-KX21-1-A2	AGX ORIN 64GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 2 x PoE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +70°C
AIE-KX22-1-A2	AGX ORIN 64GB, 1 x HDMI, 1 x GbE, 1 x 10GbE, 4 x PoE, 3 x USB, B/E/M Key, 9 to 36 VDC input, -25°C ~ +70°C

Packing List

Item/Part Number	Description
AIE-KX11-1-A2	AIE-KX11 system w/ AGX Orin 32GB
AIE-KX12-1-A2	AIE-KX12 system w/ AGX Orin 32GB
AIE-KX21-1-A2	AIE-KX21 system w/ AGX Orin 64GB
AIE-KX22-1-A2	AIE-KX22 system w/ AGX Orin 64GB
53-0F0000-0008	85~264V 221W 24V 9.2A power adaptor

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
55-BEKX11-Z000	Wall Mount Kit
55-AEKX11-Z000	Din Rail Kit