

AI Inference / DeviceEdge

Jetson System AIE-KX11/AIE-KX12 AIE-KX21/AIE-KX22



Features

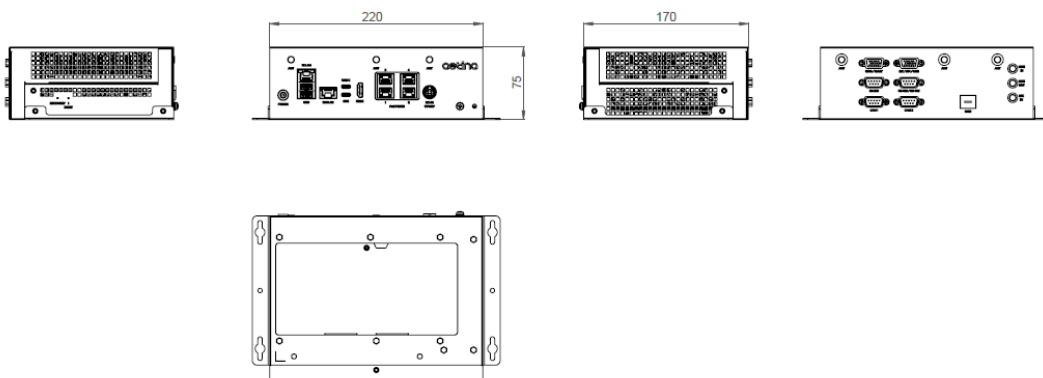
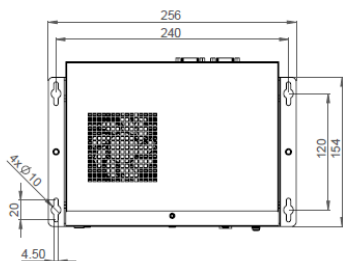
- Supports NVIDIA® Jetson AGX Orin™ 32GB/64GB
- 2/4 x IEEE 802.3af GbE PSE ports
- 1 x GbE/1 x 10GbE LAN port
- 1 x M.2 B-Key/1 x M.2 E-Key/1 x M.2 M-Key slot
- Wide Input Voltage Range 9 to 36 VDC
- Operating Temperature -25°C ~ +70°C



Specifications

Model Number	AIE-KX11	AIE-KX12	AIE-KX21	AIE-KX22
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 with daughter board)			
TPM	TPM v2.0 (optional)			
LAN	1 x RJ-45 GbE port, 1 x RJ-45 10GbE port			
PoE Interface	2 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W/Port)	4 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W/Port)	2 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W/Port)	4 x RJ-45 GbE PSE (IEEE 802.3af compliant, Power Output 15W/Port)
	*PSE Port 1 & Port 2 support IEEE 802.3at compliant; Total PSE ports support up to 60W			
USB	2 x USB 3.2 Gen1 Type A, 1 x OTG Type-C, 1 x USB 3.2 Gen2 Type-C, 1 x DB-15 USB 2.0			
I/O Interfaces	2 x I ² C, 1 x SPI, 5 x GPIO 1 x RS-232, 1 x RS-422 / RS-485 (2-in-1) 2 x CAN 2.0b (isolation; support CAN FD) / 2 x UART 1 x microSIM Card Slot			
Expansion	1 x M.2 B-Key 3042/3052 (LTE/4G/5G) 1 x M.2 E-Key 2230 (WiFi/BT) 1 x M.2 M-Key 2280 (supports NVMe; PCIe x2 Gen3) 1 x microSD Card Slot			
MISC. Function	1 x Power / 1 x Recovery / 1 x Reset button			
Power Input /Connector	DC-in 9 to 36 VDC / 4-Pin DC Jack Power Connector			
Power Consumption	Idle: 14.3 W Full Loading: 115.8* W		Idle: 14.8 W Full Loading: 136.8* W	
	*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	1.852 kg (4 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)			
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



I/O Mechanical Layout



Ordering Information

Model name	Description
AIE-KX11-1-A1	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-A1	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-A1	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-A1	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
92-CEKX11-J000	AIE-KX12 system w/ AGX Orin 32GB
92-CEKX12-J001	AIE-KX12 system w/ AGX Orin 32GB
92-CEKX21-J000	AIE-KX21 system w/ AGX Orin 64GB
92-CEKX22-J001	AIE-KX22 system w/ AGX Orin 64GB
53-0F0000-0008	85~264V 221W 24V 9.2A 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-BEKX11-Z000	Wall Mount Kit
55-AEKX11-Z000	Din Rail Kit

Peripheral (Optional)

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