

EAI-I233

Preliminary

AI Inference System With NVIDIA® Jetson AGX Orin



Preliminary Specifications

Platform

CPU	NVIDIA® Jetson AGX Orin
SOM TDP	up to 30W

System Memory

Technology	LPDDR5 DRAM with ECC
Max. Capacity	64/32 GB (by SKU)

Ethernet

Interface	1x GbE RJ45 1x 10GbE RJ45 1x 2.5GbE RJ45
Speed	10/100/1000 Mbps 10/100/10000 Mbps 10/100/1000/2500 Mbps
Bypass	N/A

I/O Interface

Reset Button	1
Serial	2x DB9 RS-232 (TX/RX/CTS/RTS)
Display	1x HDMI
USB	4x USB 3.2 Type A
Antenna	4x Antenna for LTE/5G Sub6 2x Antenna for WiFi

Storage

eMMC	eMMC 5.1 64GB on SOM
Onboard Slot	1x M.2(NVMe) 2280 (default 128G) /2242 (non-essential) M-Key

Expansion

mini-PCIe/M.2	1x M.2 2230 E-Key for WiFi 1x M.2 3042/3052 B-Key for LTE/5G
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Features

- NVIDIA® Jetson AGX Orin Processors, up to 2,048 CUDA cores & 64 Tensor Cores
- Up to 275 TOPS AI performance
- LPDDR5 DRAM Up to 64/32GB (by SKU)
- 1x GbE RJ45, 1x 10GbE RJ45, 1x 2.5GbE RJ45
- 2x COM, 4x USB3.2, 1x HDMI
- 1x M.2 2230 E-Key for WiFi, 1x M.2 3042/3052 B-Key for LTE/5G, 1x Nano-SIM
- Integrate with NVIDIA JetPack SDK 6.0

SIM Card Slot	1x Nano-SIM
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Miscellaneous

Watchdog	Yes
Internal RTC with Li Battery	Yes
TPM	Onboard TPM 2.0

Cooling

Processor	Passive Heatsink
System	1x 12V Fan 120x120x25 mm, 2200 RPM (12025 FAN)

Environmental Parameters

Temperature	0°C~40°C
Humidity (RH)	5~90% Operating 5~95% Non-Operating

System Dimensions

WxHxD	169.2 x 70 x 181.7 mm
Weight	TBD
Mounting	Wall mount, Embedded system

Power

Type/Watts	60W Adapter
Input	1x Power Jack/12V

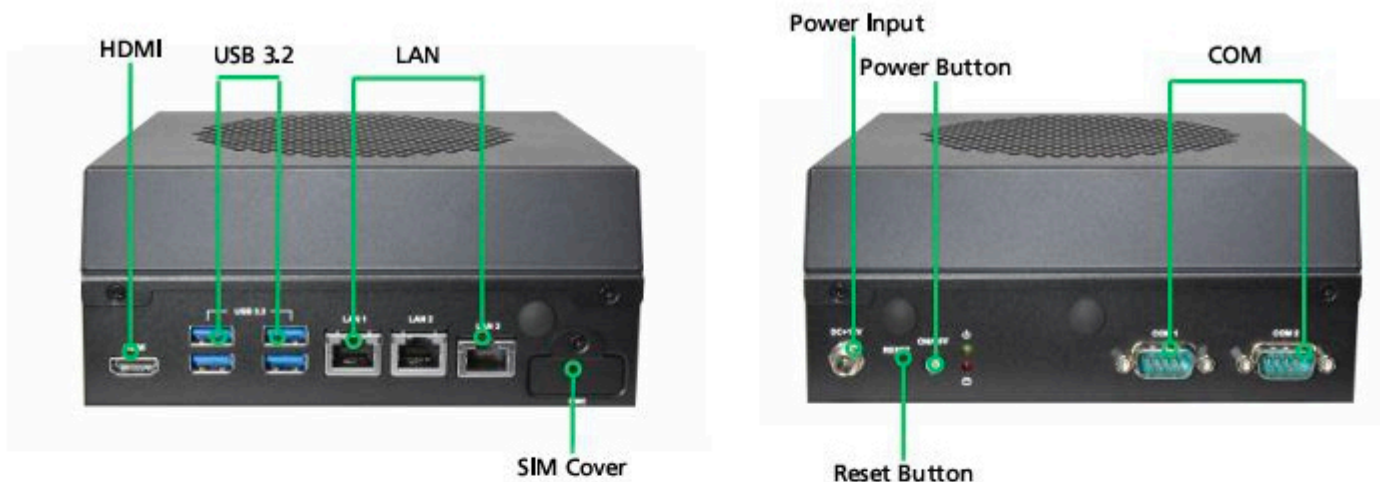
Driver Support

Linux	SDK: Linux (NVIDIA Jetpack 6.0) Ubuntu 22.04.05 LTS
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Certification

EMC	CE/UKCA, FCC Class A, RoHS
Safe	MTBF, UL+CB(62368-1/60950)

Product I/O View



Dimensions (W x H x D): 169.2 x 70 x 181.7 mm



Ordering Information

SKU	CPU	SOM CPU	Memory	SOM GPU	Ethernet	I/O
EAI-I233A	NVIDIA® Jetson AGX Orin	12-core NVIDIA Arm® Cortex A78AE	LPDDR5 DRAM up to 64GB	NVIDIA Ampere, 2048 CUDA Cores and 64 Tensor Cores, 1.3 GHz	1x GbE RJ45 1x 10GbE RJ45 1x 2.5GbE RJ45	2x COM 4x USB 3.2 1x HDMI
EAI-I233B		8-core NVIDIA Arm® Cortex A78AE	LPDDR5 DRAM up to 32GB	NVIDIA Ampere, 1792 CUDA Cores and 56 Tensor Cores, 939 MHz		