

EAI-I251

Preliminary

Industrial-grade AI Inference System With NVIDIA® Jetson AGX Orin



Features

- NVIDIA® Jetson AGX Orin Processors
- Up to 275 TOPS AI performance
- LPDDR5 DRAM Up to 64GB
- 1x GbE RJ45, 1x 10GbE RJ45, 2x 2.5GbE RJ45 with PoE+
- 2x COM(optional CAN), 4x USB3.2, 1x HDMI, 8x Video-in, 1x Line-in & 1x Line-out
- 1x M.2 2230 E-Key for WiFi, 1x M.2 3042/3052 B-Key for LTE/5G, 2x Nano-SIM
- Wide range of operating temperature -40~70°C

Preliminary Specifications

Platform

CPU	NVIDIA® Jetson AGX Orin
SOM TDP	up to 60W

System Memory

Technology	LPDDR5 DRAM with ECC
Max. Capacity	64 GB

Ethernet

Interface	1x GbE RJ45 1x 10GbE RJ45 2x 2.5GbE RJ45 w/ PoE+
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 RS232/422/485 (optional 2x CAN)
Display	1x HDMI
USB	4x USB 3.2 Type A
DIO	4x DI, 2x DO
Audio	1x Line-in, 1x Line-out
Video-in	8x GMSL2 De-serializer
Antenna	4x Antenna for LTE/5G Sub6 2x Antenna for WiFi

Storage

eMMC	Onboard eMMC 5.1 64GB
Onboard Slot	1x M.2(NVMe) 2280 M-Key(default 128G)

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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SIM Card Slot	2x Nano-SIM support Dual 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 120 x 120 x 25 mm, 2200 RPM (1025 FAN)

Environmental Parameters

Temperature	-40°C~70°C (35W) -40°C~60°C (60W)
Humidity (RH)	5~90% Operating 5~95% Non-Operating

System Dimensions

WxHxD	201 x 95 x 196 mm
Weight	TBD
Mounting	Wall mount

Power

Type/Watts	ATX
Input	12V/24 DC input with 2 pin Terminal Block Connector

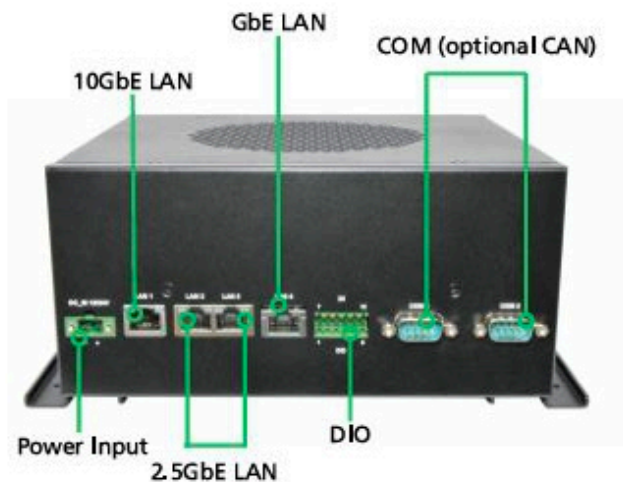
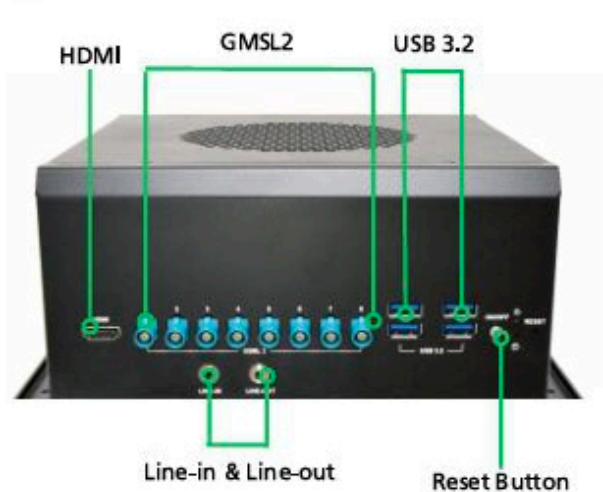
Driver Support

Linux	Linux (NVIDIA Jetpack 6.0.0)
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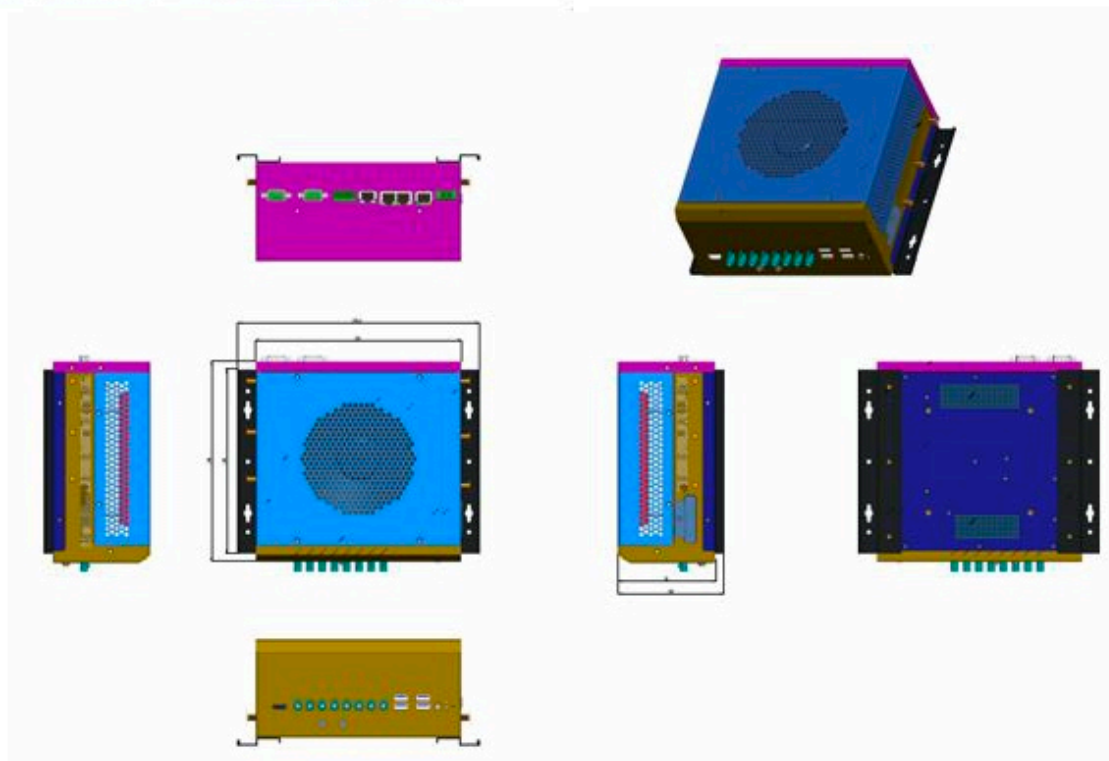
Certification

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

Product I/O View



Dimensions (WxHxD): 201 x 95 x 196 mm



Ordering Information

SKU	CPU	Memory	Storage	Ethernet	I/O	Power
EAI-I251A	NVIDIA® Jetson AGX Orin	LPDDR5 DRAM up to 64GB	Onboard eMMC 5.1 64GB 1x M.2(NVMe) 2280 M-Key	1x GbE RJ45 1x 10GbE RJ45 2x 2.5GbE RJ45 w/ PoE+	2x COM (optional CAN) 4x USB 3.2 1x HDMI 8x GMSL2	DC 12V/24