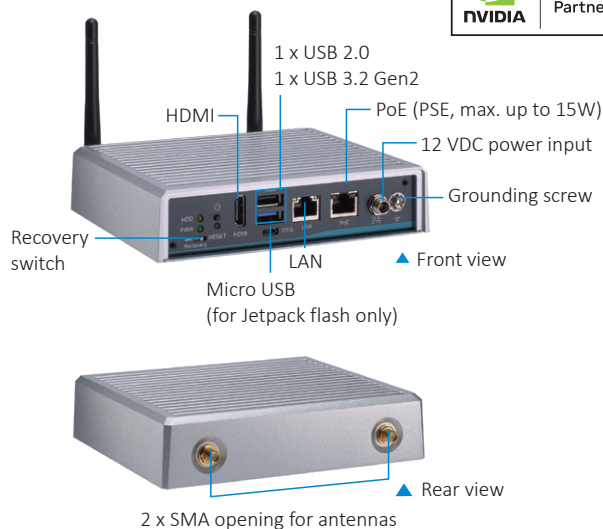# AIE100-ONX NEW

Fanless Edge AI System with NVIDIA® Jetson Orin™ NX, 1 HDMI, 1 GbE LAN, 1 GbE PoE, 2 USB, and Remote Management Service Empowered by Allxon

Preferred Partner NVIDIA

- 1 x USB 2.0
- 1 x USB 3.2 Gen2
- HDMI
- PoE (PSE, max. up to 15W)
- 12 VDC power input
- Grounding screw
- Recovery switch
- LAN
- ▲ Front view
- Micro USB (for Jetpack flash only)

▲ Rear view

2 x SMA opening for antennas

Features

- NVIDIA® Jetson Orin™ NX, up to 100 TOPS
- High AI computing performance for GPU-accelerated processing
- Ideal for edge AI smart city applications
- Supports one 15W GbE PoE for camera
- Wide operating temperature from -25°C to +50°C
- IP42 rating for semi-outdoor applications
- Supports 24/7 secure remote monitoring, control, and OTA deployment empowered by Allxon

NVIDIA® Jetson Orin™ NX available through to 2030*
The official end of life notice will be sent for at least 8 months before the last shipment.

| IP42 | Fanless | Low Power | LPDDR5 | 4K Ultra HD | 12VDC | Orin NX |

Specifications

Standard Color	Silver
Construction	Aluminum extrusion and heavy-duty steel, IP40 (IP42 by optional cover kit)
AI Accelerator	NVIDIA® Jetson Orin™ NX (up to 100 TOPS)
CPU	16GB: 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 8GB: 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores
System Memory	16GB: 16GB 128-bit LPDDR5 onboard 8GB: 8GB 128-bit LPDDR5 onboard
Carrier Board	SBC87903
System I/O Outlet	1 x HDMI 2.1 with 4K2K supported 1 x 10/100/1000 Mbps Ethernet (via Jetson Orin™ NX) 1 x 10/100/1000 Mbps PoE (Intel® I210-IT; max. up to 15W) 1 x USB 3.2 Gen2, 1 x USB 2.0 1 x Micro USB for image flash 1 x Recovery switch 1 x Reset button 1 x Power button 1 x 12 VDC power input connector 2 x SMA-type antenna connector
Watchdog Timer	Built-in Orin NX
Storage	1 x M.2 Key M 2280 with PCIe x4 NVMe SSD slot *Orin NX no longer has built-in eMMC and only supports SSD for the bootable device. *The AIE100-ONX requires an SSD for image installation. Kindly order the SSD if you need image installation service.
Expansion Interface	1 x Full-size PCI Express Mini Card slot (USB + PCI Express signal) 1 x SIM slot
System Indicator	1 x Green LED for system power-on 1 x Yellow LED for M.2 storage
Power Supply	12 VDC screw type

Specifications

Operating Temperature	-25°C to +50°C (-13°F to +122°F) (power mode: 25W)
Humidity	10% - 95%, non-condensing
Vibration Endurance	3 Grms with M.2 (5 to 500Hz, X, Y, Z directions)
Dimensions	148.6 mm (5.85") (W) x 129.8 mm (5.11") (D) x 34.6 mm (1.36") (H)
Weight (net/gross)	1 kg (2.20 lb)/1.6 kg (3.52 lb)
Certifications	CE, FCC Class A
OS Support	Linux Ubuntu 20.04 or later

Remote Management Enrollment

Allxon Portal – Enroll in 24/7 secure service to get the full feature of remote device management on one centralized cloud portal
*Enrollment Page: https://allxon.com/jetson/device_enroll/

Packing List

1 x Screw pack
4 x Foot pad

Power Protection

DC Adapter
OVP (over voltage protection)
OCP (over current protection)
UVP (under voltage protection)
SCP (short circuit protection)

Ordering Information

Standard

AIE100-ONX-16GB (P/N: E27H100105)	Fanless edge AI system with NVIDIA® Jetson Orin™ NX 16GB, 1 HDMI, 1 GbE LAN, 1 GbE PoE and 2 USB
AIE100-ONX-8GB	Fanless edge AI system with NVIDIA® Jetson Orin™ NX 8GB, 1 HDMI, 1 GbE LAN, 1 GbE PoE and 2 USB
Optional	
8817H1003A0E	Wall mount kit
8817H1001A0E	DIN-rail kit
8817H1006A0E	VESA mount kit
8817H1002A0E	IP42 waterproof cover kit *Please order the wireless module kit that includes the waterproof antennas.
M.2 NVMe SSD 128GB or above	
*The AIE100-ONX requires an SSD for image installation. Kindly order the SSD if you need image installation service.	
LTE module	
Wi-Fi module	
Power cord	
50966124050E	12V/60W adapter

* Specifications and certifications may vary based on different requirements.

Dimensions