AIE100A-ONX

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



Features

- NVIDIA[®] Jetson Orin[™] NX with 1024-core NVIDIA Ampere GPU
- 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 -30°C to +50°C
- JetPack supported
- Supports 24/7 secure remote monitoring, control, and OTA deployment empowered by Allxon

NVIDIA® Jetson Orin[™] NX available through to 2028^{*} The official end of life notice will be sent for at least 8 months before the last shipment.



Specifications

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Standard Color	Silver
Construction	Aluminum extrusion and heavy-duty steel, IP40 (IP42 by optional cover kit)
AI Accelerator	NVIDIA® Jetson Orin™ NX
CPU	8GB: 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 16GB: 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3
GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores
System Memory	8GB: 8GB 128-bit LPDDR5 onboard 16GB: 16GB 128-bit LPDDR5 onboard
Carrier Board	SBC87903
System I/O Outlet	1 x HDMI 2.0 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 *The bootable device supported by NVMe only
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
Operating Temperature	-30°C to +50°C (-22°F to +122°F)
Humidity	10%- 95%, non-condensing



Specifications

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 (2.20lb)/1.6 kg (3.52lb)
Certifications	CE, FCC Class A
OS Support	Linux Ubuntu 20.04 or later

Remote Management Enrollment

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

Packing List

1 x Screw pack 4 x Foot pad

Power Protection

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

Ordering Information

Standard

AIE100A-ONX-8GBFanless edge AI system with NVIDIA® Jetson Orin™ NX 8GB SoM, 1 HDMI, 1 GbE LAN, 1 GbE PoE and 2 USBAIE100A-ONX-16GBFanless edge AI system with NVIDIA® Jetson Orin™ NX 16GB SoM, 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 cover kit
M.2 NVMe SSD 128GB or	above
LTE module	
Wi-Fi module	
Power cord	
50966124050E	12V/60W adapter

* Specifications and certifications may vary based on different requirements.

Dimensions



