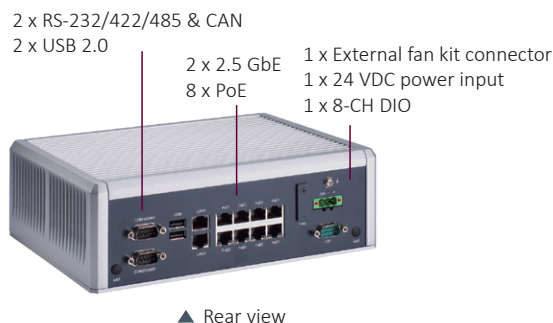
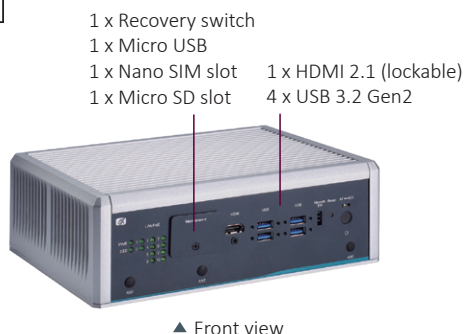


# AIE900A-A0 NEW

Fanless Edge AI System with NVIDIA® Jetson AGX Orin™, 1 HDMI, 2 2.5GbE, 8 PoE, 6 USB, 8-CH DI/DO, and 2 COM/CAN for 5G and Robotics Applications



IP40



Fanless



LPDDR5



4K Ultra HD



24 VDC



Jetson  
AGX Orin



Smart Ignition



Allxon DMS

## Features

- NVIDIA® Jetson AGX Orin™ (up to 275 TOPS)
- Seamless connectivity with 5G, Wi-Fi 6E, and 2.5 GbE combined
- 9 to 36VDC with Ignition (E-Mark compliance)
- Supports 8 PoE and GMSL for camera and LiDAR connectivity
- -25°C to +60°C operating temperature range
- Supports device management and optional OTA deployment, powered by Allxon

NVIDIA® Jetson AGX Orin™ will be available until 2032\*

The official end of life notice will be sent at least 8 months before the last shipment.

## Specifications

|                |                                                                                                   |
|----------------|---------------------------------------------------------------------------------------------------|
| Standard Color | Silver                                                                                            |
| Construction   | Aluminum extrusion and heavy-duty steel, IP40                                                     |
| AI Accelerator | NVIDIA® Jetson AGX Orin™ 32GB (200 TOPS)<br>*By project: NVIDIA® Jetson AGX Orin™ 64GB (275 TOPS) |
| CPU            | 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3                                   |
| GPU            | 1792-core NVIDIA Ampere™ GPU with 56 Tensor Cores                                                 |
| System Memory  | 32GB 256-bit LPDDR5 204.8GB/s                                                                     |
| Carrier Board  | PSB906                                                                                            |

## Specifications

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System I/O Outle       | 1 x Lockable HDMI 2.0 with 4K2K supported<br>2 x 10/100/1000/2500 Mbps Ethernet (Intel® I226)<br>8 x 10/100/1000 Mbps PoE (up to 60W) (via LAN switch, 1 Gbps switching capacity)<br>2 x DB9 for CAN & RS-232/422/485<br>4 x USB 3.2 Gen2<br>2 x USB 2.0<br>1 x 8-CH DI/DO<br>1 x Remote switch<br>1 x Reset button<br>1 x Power button<br>1 x AT/ATX switch<br>1 x Micro USB & 1 x recovery switch (for image update)<br>1 x 24 VDC power input connector<br>5 x SMA-type antenna opening |
| Watchdog Timer         | Built-in AGX Orin                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Storage                | 64GB eMMC onboard (via Jetson AGX Orin™)<br>1 x M.2 Key M 2280 with PCIe x4 NVMe SSD slot<br>1 x Micro SD slot<br>*The bootable device is supported by eMMC only                                                                                                                                                                                                                                                                                                                           |
| Expansion Interface    | 8-channel GMSL/FPD-LINK/V-by-One automotive camera interfaces (optional)<br>1 x Full-size PCI Express Mini Card slot (USB + PCIe)<br>1 x M.2 Key E 2230 slot for Wi-Fi 6 (E)<br>1 x M.2 Key B 3052/3042 slot for 5G/LTE<br>1 x Nano SIM slot                                                                                                                                                                                                                                               |
| System Indicator       | 1 x Green LED for system power-on<br>1 x Green LED for M.2 storage<br>2 x Green LED for LAN status<br>8 x Green LED for PoE status                                                                                                                                                                                                                                                                                                                                                         |
| Power Supply           | Input: 9 to 36 VDC (typical 12/24 VDC) with ignition power control                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Operating Temperature  | -25°C to +60°C (-13°F to +140°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Humidity               | 10% to 95%, non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Vibration              | IEC 60068-2-64 (with SSD: 3Grms STD, random, 5 to 500 Hz, 1 hr/axis)                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Shock                  | IEC 60068-2-27 (with SSD: 50G, half-sine, 11 ms duration)                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Dimensions (W x D x H) | 239 x 185.3 x 79.4 mm (9.41" x 7.3" x 3.13")                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Weight (net/gross)     | 3.2 kg (7.05 lb)/4.9 kg (10.8 lb)                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Certifications         | CE, FCC Class A, and UKCA                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| OS Support             | Linux Ubuntu 20.04 or later                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Ordering Information

### Standard

|                                      |                                                                                                                      |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| AIE900A-AO-2L8P<br>(P/N: E27H900A00) | Fanless edge AI system with NVIDIA® Jetson AGX Orin™ 32GB, 1 HDMI, 2 2.5GbE, 8 PoE, 6 USB, 8-CH DI/DO, and 2 COM/CAN |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------|

### Optional

|                             |                  |
|-----------------------------|------------------|
| E29R150110                  | Wall mount kit   |
| E29R150112                  | DIN-rail kit     |
| E29R150111                  | VESA mount kit   |
| E29R150109                  | External fan kit |
| M.2 NVMe SSD 128GB or above |                  |
| Power cord                  |                  |
| 5G module kit               |                  |
| LTE module kit              |                  |
| Wi-Fi module kit            |                  |
| 50906A24000E                | 24V/230W adapter |

\* Specifications and certifications may vary based on different requirements.

## Packing List

1 x Terminal block connector  
1 x Screw pack  
4 x Foot pad  
1 x M.2 SSD thermal kit  
1 x 5G module thermal kit

## Power Protection

### DC Adapter

OVP (over voltage protection)  
OCP (over current protection)  
UVP (under voltage protection)  
Reserve protection

## Dimensions

