



IoT SuperServer ARS-E103-JONX-H2

Compact fanless edge AI platform, with 8-core CPU. Up to 157 TOPS.

Key Applications

Artificial Intelligence (AI), Imaging and Computer Vision, Industrial Automation, Retail, Smart Medical Expert Systems, Healthcare, Digital Signage Kiosk, Interactive info system,

Key Features

- Fanless DIN Rail Mounted System
 - Jetson Orin NX Fanless Edge AI Inferencing System;
- 8-core Arm® Cortex® -A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3;
- 1024-core NVIDIA Ampere GPU with 32 Tensor Cores, Up to 157 TOPS;
- 1 10G/1G LAN optional by Sku (10G: -H(2), 1G: -L(2))
 - 4 1Gbe w/ POE or 2 x1Gbe w/ PoE+ (by AOM-POE-001 jumper setting);
- 1 M.2 B-key 3042/3052 (USB3.2, USB2.0) w/ dual nano-SIM
 - 1 M.2 E-key 2230 (PCIe x1, USB2.0)
 - 1 M.2 M-key 2280 (PCIe4.0 x4);
- 1 NVMe 2280 at M.2 M-Key;
- DC 9-36V
 - Operating Temperature -25℃to 60 ℃(-40°F to 131°F) with 0.7m/s airflow and Industrial Grade peripherals;

Form Factor	Fanless Embedded Enclosure: 185 x 80 x 140mm (7.28" x 3.15" x 5.5") Package: 290 x 200 x 230mm (11.42" x 7.87" x 9.06")
Processor	Arm® Cortex®-A78AE v8.2 64-bit CPU Up to 8C/8T; Up to 6MB Cache
System Memory	Slot Count: Onboard Memory Max Memory: Up to 16GB ECC LPDDR5X
Drive Bays Configuration	1 M.2 PCIe 4.0 x4 NVMe slot (M-key 2280(default))
Expansion Slots	1 M.2 PCIe 4.0 x4 NVMe slot (M-key 2280(default)) 1 M.2 PCIe 4.0 x1 slot (E-key 2230(default); USB 2.0) 1 M.2 slot (B-key 3052(default)/3042; USB 3.0)
On-Board Devices	Chipset: System on Chip Network Connectivity: 4 RJ45 1GbE with Intel® I210-IT 1 RJ45 10GbE with Marvell® AQC113C No NIC option supported
Input / Output	LAN: 4 RJ45 1 GbE LAN ports (Intel® I210-IT) 1 RJ45 10 GbE LAN port (Marvell® AQC113) USB: 1 USB 3.2 Gen2 Type-C port(Front) 3 USB 3.2 Gen2 Type-A ports(Front) Video: 1 HDMI 2 port(Front) Serial: 2 COM RS232/RS422/RS485 ports(Front) Others: 1 CANBus port 1 4 DI/4 x DO (terminal block) port





System Cooling	Fans: N/A
Dimensions and Weight	Weight: Gross Weight: 4.3 lbs (1.95 kg) Net Weight: 3.7 lbs (1.68 kg) Available Color: Black
Operating Environment	RoHS Compliant Operating Temperature: -25°C to 60°C (-40°F to 131°F) with 0.7 m/s airflow Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 8% to 90% (non-condensing)
Motherboard	Super AOM-JSOR-001
Chassis	CSE-E102L