IoT SuperServer ARS-E103-JONX-H2

Compact fanless edge AI platform, with 8-core Jetson Orin™ NX module. 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 ⯑(-13°F to 140°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 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: 3 RJ45 1 GbE LAN ports (Intel® I210-IT)
	   1 RJ45 10 GbE LAN port (Marvell® AQC113)
	   1 RJ45 1 GbE LAN port (SoC)
	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

(Front View – System)

HDMI 2.0 Port
CANBus Port
4 1GbE LAN Ports
(PoE function support option)
2 COM Ports
(RS232/422/485)
2 USB3.2 Type-A Ports
10GbE LAN Port
1 USB Type-C Port
1 USB3.2 Type-A Port
4-Digital Input / Digital Output
Terminal Block
Power Button

(Rear View – System)

Antenna Hole
DIN Rail

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 (-13°F to 140°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**