

AIB-NINX-S

Compact & Fan-less Edge AI Platform



Product Features

- Up to 100 TOPS AI Performance
- Fanless Design
- RS232 / RS485 / I2C
- 3×M2 M Key, Gen 4×4 / Gen 4×2 / Gen 4×1
- 4×USB3.2 Gen2

Specification

System Information

NVIDIA Platform NVIDIA Jetson Orin™ NX 8GB/16GB

AI Performance 70/100 TOPS

System Memory 8/16GB 128 bit LPDDR5 102.4GB/s

Development Environment

OS Ubuntu 20.04 / Ubuntu 22.04

Kernal 5.10.104 tegra or Higher

BSP Linux for Tegra(L4T) R35.3.1 or Higher

SDK JetPack 5.1.1 / JetPack 6.2 or Higher

AI SDK GitHub <https://github.com/Avalue-Technology/repositories.directory>

Storage

M.2 128 GB

Storage Supports External NVMe

I/O

USB Port	4×USB3.2 Gen2 (Type-A) 2×USB3.2 Gen1 (Pin Header)
LAN Port	1 x RJ45 for 10/100/1000Mbps Ethernet (DHCP Client)
HDMI	2 x HDMI2.0
MIPI (Internal)	8 MIPI CSI 2 Lanes (D PHY 2.1, Support MIPI Camera, Capture Card)
Antenna	4 x Antenna Mounting with Dust Protection Cover
AC/DC Input	1 x DC Jack
Audio	1×3.5mm Line In 1×3.5mm Line Out
RS232	1×RS232 (Phoenix Connector)
RS485	1×RS485 (Phoenix Connector)
SIM Card Slot	Optional

Expansion

M.2	1×M.2 2280/3080 M Key PCIe Gen4×4 Slot 1×M.2 2280 M Key PCIe Gen4×1 Slot 1×M.2 2280 M Key PCIe Gen4×2 Slot (HDMI 2.0 Model)
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Mechanical & Environmental

Power Requirement	DC input : 9~36V / DC Input : 48V (PSE model)
Operating Temperature	0~60C° with Airflow
Storage Temperature	-20~70 C°
Dimension (W x L x H)	286mm × 144mm × 76.6mm
Weight	1850g

Ordering Information

Ordering Information	AIB-NINX-S08B-A1R:Orin NX 8GB/128GB SSD/Ubuntu 20.04, Jetpack 5.1.1 or JetPack 6.2 / HDMI 2.0 AIB-NINX-S16B-A1R:Orin NX 16GB/128GB SSD/Ubuntu 20.04,Jetpack 5.1.1 or JetPack 6.2 / HDMI 2.0 AIB-NINX-S08E-A1R:Orin NX 8GB/128GB SSD/Ubuntu 20.04,Jetpack 5.1.1 or JetPack 6.2 / PSE AIB-NINX-S16E-A1R:Orin NX 16GB/128GB SSD/Ubuntu 20.04,Jetpack 5.1.1 or JetPack 6.2 / PSE AIB-NINX-S08X-A1R:Orin NX 8GB/128GB SSD/Ubuntu 20.04,Jetpack 5.1.1 or JetPack 6.2 AIB-NINX-S16X-A1R:Orin NX 16GB/128GB SSD/Ubuntu 20.04,Jetpack 5.1.1 or JetPack 6.2
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Optional Product Features Extension by Daughter Board

SDK / Software

By request

NX 5G

5G Mobility Network (Supports 5G / 4G / 3G SIM Module)

NX PSE

**IP Camera
4×RJ45 for 10 / 100 / 1000Mbps Ethernet with IEEE802.3af Compliant
*PSE Power Supply
4×15W (IEEE802.3af)"
