

AIB-NINX-SC

Ultra Compact Business Card Size AI Edge Platform



Product Features

- Powered by NVIDIA® Jetson Orin™ NX up to 100 / 70 TOPS
- Business Card Size (90mm×55mm)
- 1×USB3.2 Gen2
- 1×Mini DisplayPort

Specification

System Information

System Memory NVIDIA Jetson Orin™ NX 8GB
8GB LPDDR5/
NVIDIA Jetson Orin™ NX 16GB
16GB LPDDR5

Processor NVIDIA Jetson Orin™ NX 8GB
6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU
1.5MB L2 + 4MB L3 /
NVIDIA Jetson Orin™ NX 16GB
8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU
2MB L2 + 4MB L3

AI Performance

AI Performance NVIDIA Jetson Orin™ NX 8GB
70 TOPS/
NVIDIA Jetson Orin™ NX 16GB
100 TOPS

Storage

M.2 1×M.2 2230 M Key PCIe Gen4×2 Slot
1×M.2 2230 E Key PCIe Gen4×1 Slot

Storage 128GB NVMe
1×Micro SD Card Slot

Ethernet

Ethernet Interface	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
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Development Environment

OS	Ubuntu: 20.04
Kernal	5.10.104-tegra or Higher
BSP	Linux for Tegra(L4T) R35.3.1 or Higher
SDK	JetPack 5.1.1 or Higher

External I/O connector

USB	1×USB3.2 Gen2 (Type-C)
Network	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
Display	1×Mini DP1.4
MIPI	Default: 2×4MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card) Option: 4×2MIPI CSI-2 Lanes (D-PHY 2.1, Support MIPI Camera, Capture Card)
Peripheral Communication	10 Pin Header 1×USB2.0 4×GPIO 1×I2C 3 Pin Header 1×UART 2×6 Pin Header 3×GPIO 1×RS485 1×I2C 8 Pin Phoenix Connector 1×GPIO 1×RS232 1×I2C
Misc. Features	Firmware Upgradable

Mechanical & Environmental

Dimension of main case	94.4 mm x 66 mm x 69.8 mm
Dimension of main board	90 mm x 55 mm
Power Requirement	DC 9~36V
Operating Temp.	Standard Version: 0~60。 C with Airflow
Storage Temp.	-20~80。 C

SDK / Software	By request
4K60 12G-SDI	1×12G-SDI In & Loop
12G-SDI QL 1×4K60 / 2×4K30 / 4×HD60	1×12G-SDI 2×6G-SDI 4×3G-SDI In Single-Link, Dual-Link, Quad-Link Support
4K60 HDMI2.1	1×HDMI2.1 In&Loop
4K60 HDMI2.0	1×HDMI2.0 In&Loop
HD60 GMSL2 and CAN Bus	4×GMSL2 In 1×CAN Bus
4×TVI	4×TVI In
HD60 4×HDMI	4×HDMI
4×USB3.2-A	1×USB3.2 Gen2, 4×USB3.2 Gen1
2×GIGE	2×GIGE In, PSE Support
OOB MK.2	<p>**Out-Of-Band Management Functions:</p> <p>Allxon swiftDR for Power Cycling: Edge Device Force Shutdown Edge Device Power Switch ON/OFF Edge Device Power ON/OFF Detection Edge Device Reset</p> <p>Extension I/O: 1×I2C 1×UART 1×GPIO</p> <p>*Out-Of-Band Management Network Interface: Ethernet: 1-port 10/100 Mbps RJ45 Port Wireless: Support 4G LTE Module with SIM Card Slot & Wi-Fi USB Dongle</p>
I/O	<p>"Capture Card (Optional) 1×DVI-I, 1×YPbPr, 1×VGA 4×3G-SDI 4×HDMI 4×TVI / AHD 1×12G-SDI 1×HDMI2.0"</p>