

# AIB-NINX-SC

**Ultra Compact Business Card Size AI Edge Platform**



## Product Features

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

<b>Ethernet Interface</b>	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
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## Development Environment

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

## External I/O connector

<b>USB</b>	1×USB3.2 Gen2 ( Type-C )
<b>Network</b>	1×RJ45 for 10/100/1000Mbps Ethernet DHCP Client
<b>Display</b>	1×Mini DP1.4
<b>MIPI</b>	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 )
<b>Peripheral Communication</b>	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
<b>Misc. Features</b>	Firmware Upgradable

## Mechanical & Environmental

<b>Dimension of main case</b>	94.4 mm x 66 mm x 69.8 mm
<b>Dimension of main board</b>	90 mm x 55 mm
<b>Power Requirement</b>	DC 9~24V
<b>Operating Temp.</b>	Standard Version: 0~60。 C with Airflow
<b>Storage Temp.</b>	-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 (PCIe) (MIPI)	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 &amp; Wi-Fi USB Dongle</p> <p>"</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>