

Features

- NVIDIA Jetson Orin NX 8GB/16GB
- Up to 100 TOPS AI Performance
- 6-core/8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB/2MB CPU Performance up to 2 GHz
- 512-core /1024-core NVIDIA Ampere architecture GPU
- 8GB/16GB LPDDR5 102.4GB/s system memory on module
- 128GB NVMe SSD onboard
- M.2 M-Key 2242/2280, B-Key 3042 (5G/LTE), E-Key 2230 (Wi-Fi/BT)
- Dual GbE LAN ports
- 1 x OTG, 4 x USB 3.0, dual RS232/485 serial ports
- 1 x HDMI
- 1 x Phoenix connector DC-in, Power button
- Optional OOB module
- Wall Mount bracket (optional)
- Fanless Operation



Specifications

System	
Module	NVIDIA Jetson Orin NX 8GB or NX 16GB
AI Performance	Jetson Orin NX 8GB: 70 TOPS Jetson Orin NX 16GB: 100 TOPS
CPU	Jetson Orin NX 8GB: 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 up to 2 GHz Jetson Orin NX 16GB: 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2 + 4MB L3 up to 2 GHz
GPU	Jetson Orin NX 8GB: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores up to 765MHz Jetson Orin NX 16GB: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores up to 918MHz
System Memory	8GB 128-bit LPDDR5 102.4GB/s 16GB 128-bit LPDDR5 102.4GB/s
DL Accelerator	Jetson Orin NX 8GB: 1x NVDLA v2 Jetson Orin NX 16GB: 2x NVDLA v2
Vision Accelerator	1x PVA v2
Storage	128GB NVMe SSD
Expansion	1 x M.2 M-Key 2242/2280 (NVMe SSD) 1 x M.2 B-Key 3042 (SIM Card Socket, 5G/LTE) 1 x M.2 E-Key 2230 (Wi-Fi/BT)
External I/O	2 x RJ45 Gigabit Ethernet LAN Ports 1 x DC Phoenix 1 x HDMI 2.0 Out 1 x Micro USB OTG 1 x Power LED 1 x Reset 2 x RS232/485 DB9 4 x USB 3.0 6 x Antenna Knockouts
OS Support	Ubuntu 20.04, Jetpack 5.1.1

Mechanical and Environment

Power Requirement	12V-24V Wide Range DC-In
Operating Temp	Wide Temp: -20°C ~ 60°C (-4°F ~ 140°F)
Storage Temp	-40°C ~ 80°C (-40°F ~ 176°F)
Mounting	Mounting Bracket (optional)
Certification Information	CE, FCC Class A
Other Features	Fanless, shock resistance and anti-static
Dimensions	7.72" x 4.92" x 2.6" (196 x 125 x 66.1 mm)
Weight	TBD

Ordering Info

AIB-NW01-NX-8GB	NVIDIA Jetson Orin NX 8GB system memory, 128GB NVMe SSD
AIB-NW01-NX-16GB	NVIDIA Jetson Orin NX 16GB system memory, 128GB NVMe SSD

* All product specifications and images are subject to change without notice. Last update: 02/29/2024