AIB-NW01

Edge AI System
with Nvidia Jetson Orin NX/Orin Nano module



Features

- Compatible with NVIDIA® Orin NX & Orin Nano
- High AI computing performance for GPU-accelerated processing
- Ideal for intelligent edge applications
- Support M.2 2242/2280 NVMe SSD
- Support M.2 3042/3052 5G module
- Support M.2 2230 WIFI/BT module
- 4 x USB3.1 Type A / 2 x Gigabit LAN / 2 x RS232 or RS485 / 1 x HDMI
- Support wide temperature environment

NVIDIA Jetson Orin Nano / NX

Ideal for intelligent edge applications

High AI computing performance for GPU-accelerated processing

-20°C ~ 60°C

Specifications

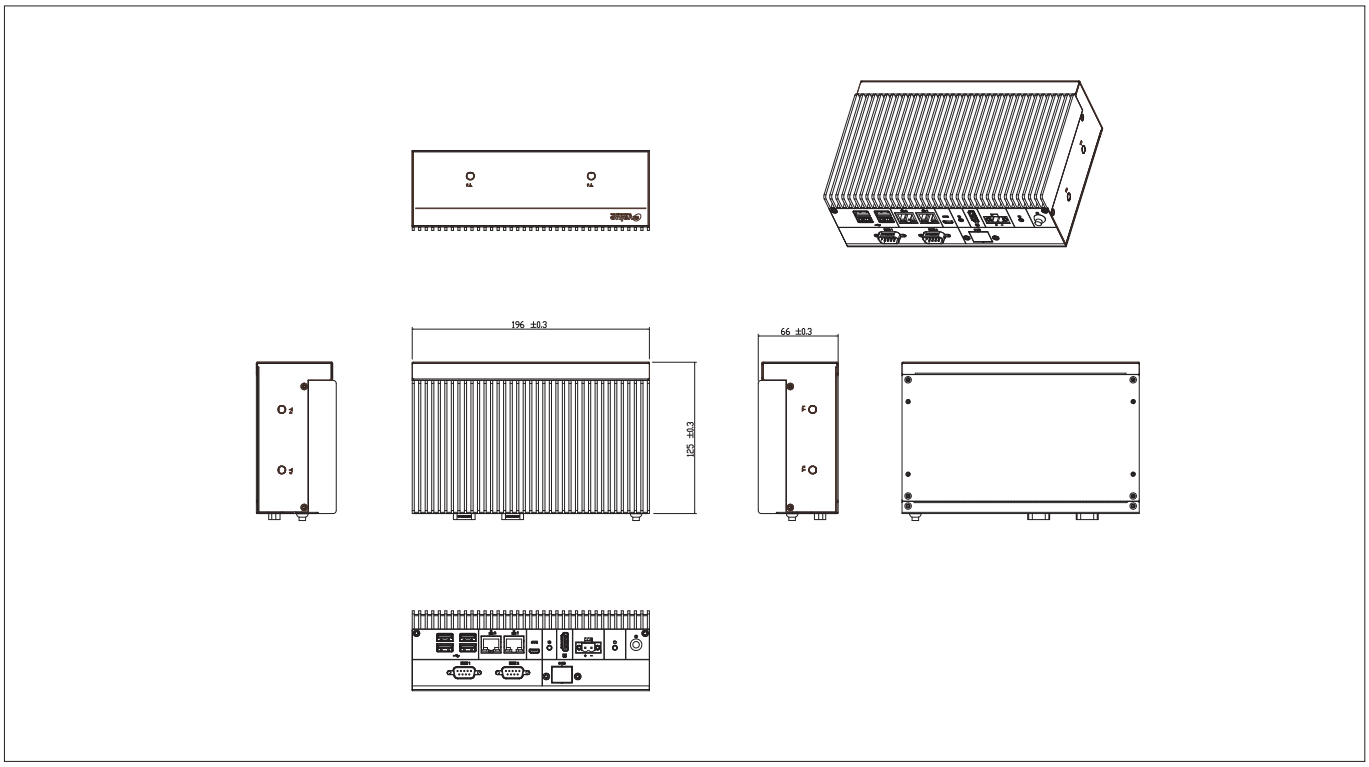
System Information	
Watchdog Timer	Built-in Nvidia Orin Module
System Memory	NX 16GB / NX 8GB / Nano 8GB / Nano 4GB 128-bit LPDDR5
Processor	CPU (Based on Nvidia Module) Jetson Orin NX 16GB: 8-core NVIDIA ARM Cortex-A78AE Jetson Orin NX 8GB: 6-core NVIDIA ARM Cortex-A78AE Jetson Orin Nano 8GB: 6-core NVIDIA ARM Cortex-A78AE Jetson Orin Nano 4GB: 6-core NVIDIA ARM Cortex-A78AE GPU (Based on Nvidia Module) Jetson Orin NX 16GB: NVIDIA Ampere architecture with 1024 cores and 32 Tensor cores Jetson Orin NX 8GB: NVIDIA Ampere architecture with 1024 cores and 32 Tensor cores Jetson Orin Nano 8GB: NVIDIA Ampere architecture with 1024 cores and 32 Tensor cores Jetson Orin Nano 4GB: NVIDIA Ampere architecture with 512 cores and 16 Tensor cores
Expansion	
M.2	M.2 E-key socket x1 for 2230 WIFI/BT module M.2 B-key socket x1 for 3042/3052 5G module
Storage	
M.2	128GB M.2 2280 NVMe SSD
Ethernet	
Ethernet Interface	2 x RJ-45 10/100/1000 Mbps Ethernet
Development Environment	
OS	Linux Ubuntu 20.04, JetPack 5.0
Certification	
Certification Information	CE, FCC Class A

External I/O connector	
USB	4 x USB3.1 Type A
COM	2 x COM (switch by Jumper to RS-232 or RS485)
Display	1 x HDMI Type A
Mechanical & Environmental	
Power Requirement	DC 10 ~ 24V
Operating Temp.	-20°C ~ 60°C, (-4°F ~ 140°F)
Storage Temp.	-40°C ~ 75°C, (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension (W x L x H)	125mm x 196mm x 66.1mm (w/o wall mount bracket)
Weight	1.4 kg
Mounting Kit	Wall Mount Bracket (Optional)

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Mechanical Drawing



Ordering Information

P/N	Processor	Memory	Storage	Adapter/PSU	Mounting Kit	Temp.
AIB-NW01-NA04-A1R	NVIDIA Jetson Orin Nano	4GB LPDDR5	128GB SSD	DC 10~24V Terminal Block 2 pin	Wall Mount Bracket (Optional)	-20°C ~ 60°C (-4°F ~ 140°F)
AIB-NW01-NA08-A1R	NVIDIA Jetson Orin Nano	8GB LPDDR5	128GB SSD	DC 10~24V Terminal Block 2 pin	Wall Mount Bracket (Optional)	-20°C ~ 60°C (-4°F ~ 140°F)
AIB-NW01-NX08-A1R	NVIDIA Jetson Orin NX	8GB LPDDR5	128GB SSD	DC 10~24V Terminal Block 2 pin	Wall Mount Bracket (Optional)	-20°C ~ 60°C (-4°F ~ 140°F)
AIB-NW01-NX16-A1R	NVIDIA Jetson Orin NX	16GB LPDDR5	128GB SSD	DC 10~24V Terminal Block 2 pin	Wall Mount Bracket (Optional)	-20°C ~ 60°C (-4°F ~ 140°F)

Packing List

Item	P/N	Quantity
AC/DC adapter 12V/5A 90 Screw Type	ACC-ADP-060N-08R	1
Power cable M8 DC Jack/2P- 10cm	E170P040031R	1

I/O Overview



