

AI Inference / DeviceEdge

Jetson Platform AIB-SO21/AIB-SO31 AIB-SN31/AIB-SN41



Features

- Support NVIDIA® Jetson Orin NX™ 8GB/16GB
- Wide Power Input Range 12 to 24VDC
- Storage supports external 128GB M.2 2242 NVMe
- M.2 E-Key 2230 for wireless communication.
- 1 x RJ-45 GbE Port
- -25°C ~ + 80°C operating temperature
- Support OOB (out-of-band) powered by Innodisk (optional)
- Support recovery/backup function

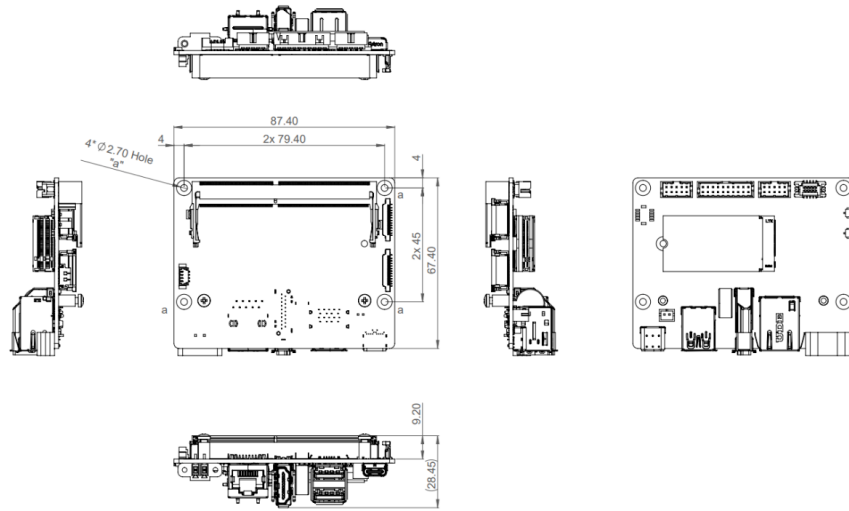
Specifications

*Preliminary

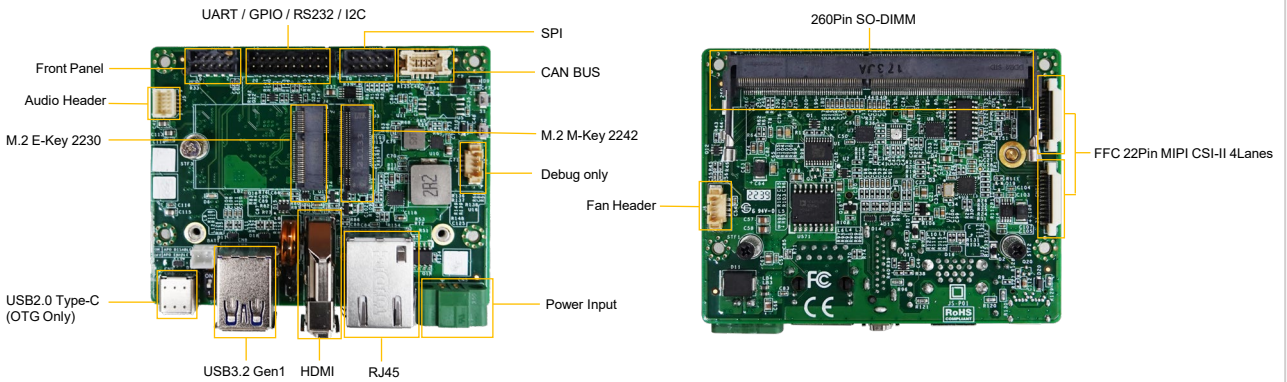


Model Number	AIB-SO21/SO31	AIB-SN31/SN41
Module Compatibility	Nvidia Jetson ORIN NANO 4G / 8G	Nvidia Jetson ORIN NX 8G / 16G
AI Performance	20 TOPS / 40 TOPS	70 TOPS / 100 TOPS
GPU	512 Core Ampere, with 16 Tensor Cores 1024 Core Ampere, with 32 Tensor Cores	1024 Core Ampere, with 32 Tensor Cores
CPU	6-core Arm Cortex-A78AE 1.5MB L2 + 4MB L3	6-core Arm Cortex-A78AE 1.5MB L2 + 4MB L3 8-core Arm Cortex-A78AE 2MB L2 + 4MB L3
Memory	4GB 64-bit LPDDR5 34 GB/s 8GB 128-bit LPDDR5 68 GB/s	8GB 128-bit LPDDR5 @ 2133 HMz 102.4 GB/s 16GB 128-bit LPDDR5 @ 2133 HMz 102.4 GB/s
Storage	128GB M.2 2242 NVMe PCIe SSD	
Display	1 x HDMI Type A	
Audio	Line-out/Line-in/Mic (opt. with Daughter Board)	
RTC	With super capacitor, battery optional	
MIPI Camera Input	2 x 4 lane MIPI CSI-2, 22 pin FPC Connector	
LAN	1 x RJ-45 GbE Port (no PD function)	
USB	2 x USB 3.2 Gen2 Type A 1x USB2.0 Type-C (OTG Only)	
I/O Interfaces	5 x GPIO, 1 x I ² C, 1 x RS-232, 1 x UART1, 1 x UART3 (Debug Only), 1 x SPI, 1 x CAN (Isolation)	
Expansion	1 x M.2 E-Key 2230 (PCIe/USB2.0) : WIFI/BT Module 1 x M.2 M-Key (NVME) 2242 : Storage	
MISC. Function	1 x Power / Recovery / Reset Button	
Power Consumption	TBD	
Power Input / Connector	DC-in 12-24VDC / 2-Pin Euro block	
Dimension (W x D x H)	87.4 x 67.4 x 28.45 mm	
Net Weight	TBD	
Vibration	1 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis	
Shock	10 G, IEC 60068-2-27, half sine, 11 ms duration	
Temperature	Operating Temp.: -25°C ~ + 80°C / Storage Temp.: -25°C ~ + 85°C	
Humidity	95% @ 40°C Related Humidity, Non-condensing	
OS Support	Ubuntu 20.04	
Certification	CE/FCC Class A, IEC 62368	

System & Mounting Dimensions



I/O Mechanical Layout



Ordering Information

Model Name	Description
AIB-SO21-1-A1	With ORIN NANO 4G, 1 x HDMI, 2 x USB-A, 1 x USB-C(OTG only), 1 x RJ-45 GbE PORT, 1 x FAN, 12 to 24V DC INPUT, -20°C ~ + 80°C
AIB-SO31-1-A1	With ORIN NANO 8G, 1 x HDMI, 2 x USB-A, 1 x USB-C(OTG only), 1 x RJ-45 GbE PORT, 1 x FAN, 12 to 24V DC INPUT, -20°C ~ + 80°C
AIB-SN31-1-A1	With ORIN NX 8G, 1 x HDMI, 2 x USB-A, 1 x USB-C(OTG only), 1 x RJ-45 GbE PORT, 1 x FAN, 12 to 24V DC INPUT, -20°C ~ + 80°C
AIB-SN41-1-A1	With ORIN NX 16G, 1 x HDMI, 2 x USB-A, 1 x USB-C(OTG only), 1 x RJ-45 GbE PORT, 1 x FAN, 12 to 24V DC INPUT, -20°C ~ + 80°C

