PIB-302

Support NVIDIA Jetson Orin Nano/Orin NX modules。2*LAN, 2*CAN, 5*USB, 2*COM, 8-bit DIO, 1*HDMI, M.2 M-key, M.2 B-key, MiniPCIe, DC 9~36V

JHCTECH IoT Computer Connecting the Dots

SBC Series



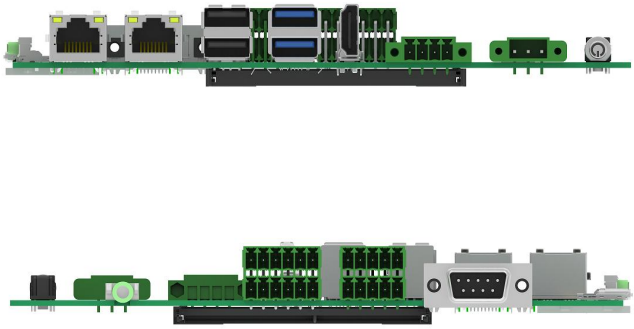
Key Features

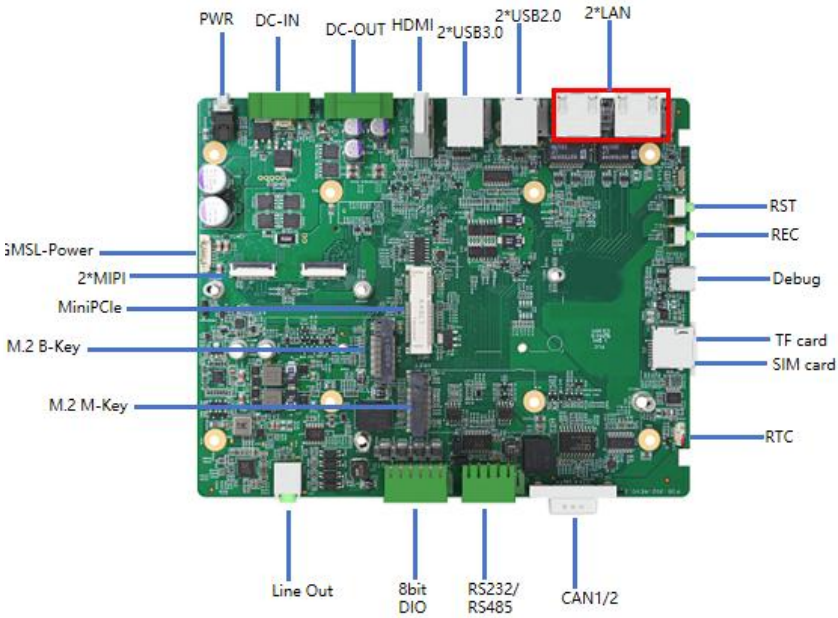
- Support NVIDIA Jetson Orin Nano/ Orin NX
- 1*M.2 2280 M-Key NVMe
- 2*LAN, 1*HDMI
- 1*Line-out,2*USB3.2,,2*USB2.0, 1*Debug, 2*COM (Iso) ,8-bit DIO (Iso) ,2*CAN (Iso)
- 1*M.2 3052 B-Key+SIM; 1*MiniPCIe;
- 4*GMSL(optional);
- DC-IN 9~36V, DC-OUT 12V;

Produc Overview

PIB-302 is a development board compatible with NVIDIA Jetson Orin Nano and Orin NX modules, up to 20~157TOPS AI performance, with multichannel IO , DC 9-36V wide voltage power supply. It can be used as MEC(Multi-Access Edge Computing) for intelligent transportation, machine vision, intelligent logistics and other industries.

IO Layout





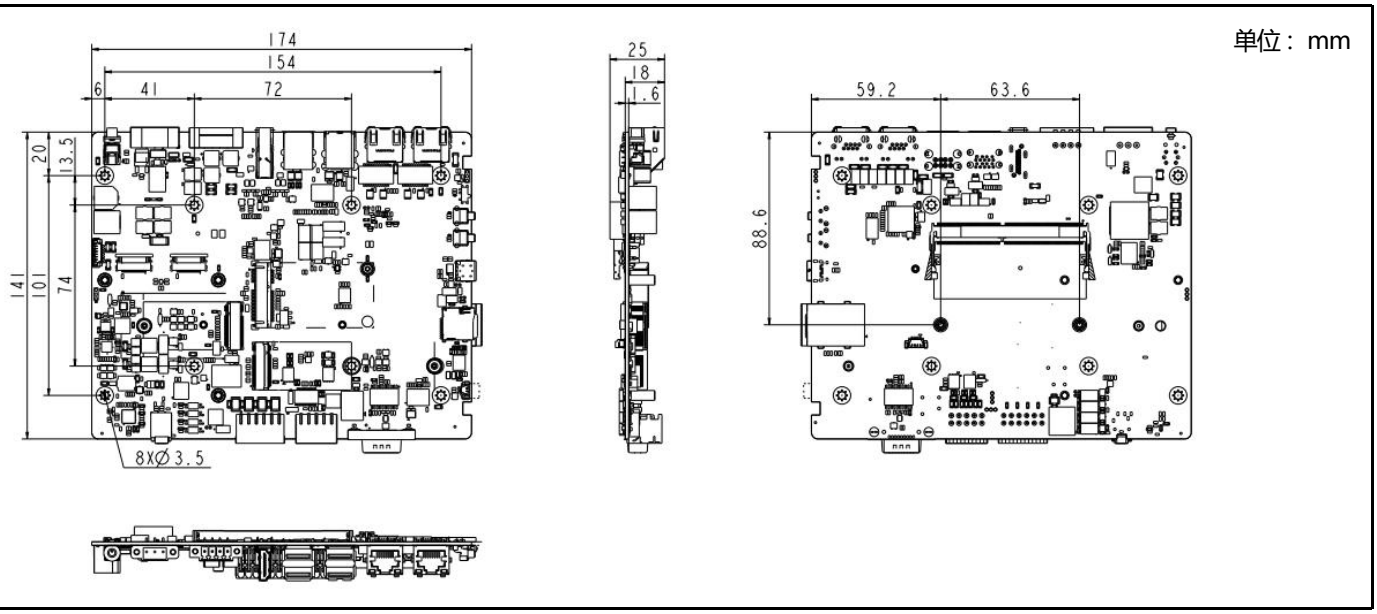
Product SPEC

Compatible Modules	Jetson Orin Nano 4/8GB & Orin NX 8/16GB
Expansion	1*M.2 3052 B-Key, with SIM card slot, support 4G LTE or 5G NR ; 1*M.2 2280 M-Key, support NVMe high-speed memory card ; 1*Mini PCIe
Graphics/Audio	1*HDMI 2.0; Realtek ALC5640,support stereo channel output
LAN	2*LAN 10/100/1000Mbps
Storage	1*M.2 2280 M-Key, support NVMe high-speed memory card; 1*Micro SD
Camera	Default support 2*4 lane Mipi (22pin) , 4*GMSL as an option
DIO and serial port	4-bit 2.5KV Iso.DI (TTL signal) , 4-bit 2.5KV Iso.DO (TTL signal) ; 1*2.5KV Iso.RS232+1*2.5KV Iso.RS485 /422;
I/O Interface	2*LAN;2*USB3.2(Gen2 10Gbps, Type A); 2*USB2.0 (Type A); 1*Line out; 1*Iso.RS232+1*Iso.RS485/422(2*5pin Phoenix terminal); 2*Iso.CAN (1个DB9) ; 1*8-bit Iso.DIO (2*6pin Phoenix terminal); 1*SIM card slot; 1*Mico SD card slot;

LED	1*Power LED(on power button), 1*Running lights
Control switch	1* Power button w/LED, 1*RST button; 1*REV button;
Power Supply	DC 9~36V wide power input , 3-pin 3.81mm terminal block , with short circuit, over voltage and over current protection; TDP: 25w ; DC 12V output up to 3A , 4-pin 3.5mm terminal block
OS Support	Linux Ubuntu 20.04 and 22.04 with JetPack
Dimension	(L*W*H): 174*141*25mm
Operating temperature	-20℃ ~ 60℃, airflow
Storage Temperature	-40°C~85°C
Storage Humidity	10~90%@40°C, Non-condensing
Certification /EMC	CE/FCC Class A

Dimension

单位： mm



Ordering Info

Model No.	Module	Introduction
PIB-302-S001	Jetson Orin Nano 4/8GB Jetson Orin NX 8/16GB	Standard configuration: 2*LAN,2*Iso.CAN, 2*MIPI, 1xHDMI2.0, 1*Iso.RS485/422, 1*Iso.RS232, 2*USB3.2+2*USB2.0+1*Debug (Type-c) , 1*Iso.8bit DIO, 1*Line-out, 1*Micro SD (TF card) ; 1*Mini PCIe, 1*M.2 3052 B-Key+SIM (4/5G) , 1*M.2 2280 M-Key; DC-IN 9~36V, DC-OUT 12V; Optional configuration: ECB-309: 4*GMSL
Radiator Assembly	Standard configuration, radiator assembly with fan, installation dimensions: 63.6*74 (mm)	
PA-60DC12	AC/DC power adapter , DC12V/5A,60W	
PA-120DC19	AC/DC power adapter , DC19V/6.32A,120W (When DC-OUT 12V is used)	