BRAV-7124

NVIDIA Jetson Orin Nano 4/8GB，20~67 TOPS AI Performance，2*GBE，2*USB2.0，2*USB3.0+PCIeX4 to 4*USB3.0(optional)，2*RS485, 2*CAN，1*HDMI，DC-IN 9~36V

JHCTECH

IoT Computer Connecting the Dots

MEC System——BARV Series



Key Features

- NVIDIA Jetson Orin Nano，4G/8G LPDDR5
- AI Performance 20~67 TOPS
- Support 1*M.2 2280 M-Key NVMe
- 2*GBE，2*USB3.0+PCIeX4 to 4*USB3.0（optional）
- 2*USB2.0，2*CAN FD，2*RS485
- 1*HDMI，1*MIC，2*Speaker
- 1*M.2 B-Key support 4G/5G，1*M.2 E-Key supports Wifi_6
- DC 9~36V wide voltage power input，with OVP，OCP and SCP
- Aluminum extruded enclosure, shock-absorbing structure, active + passive hybrid cooling design

Product Overview

BRAV-7124 is powered by the NVIDIA Jetson Orin Nano module, featuring a 6-core ARM CPU and a high-performance GPU, delivering 20~67 TOPS of AI performance. It comes with onboard 4GB/8GB memory, supports external NVMe storage, and offers a rich set of high-speed I/O interfaces. With DC 9-36V wide voltage power input, it is suitable for applications such as intelligent transportation, machine vision, humanoid robots, and other industries.

IO Layout





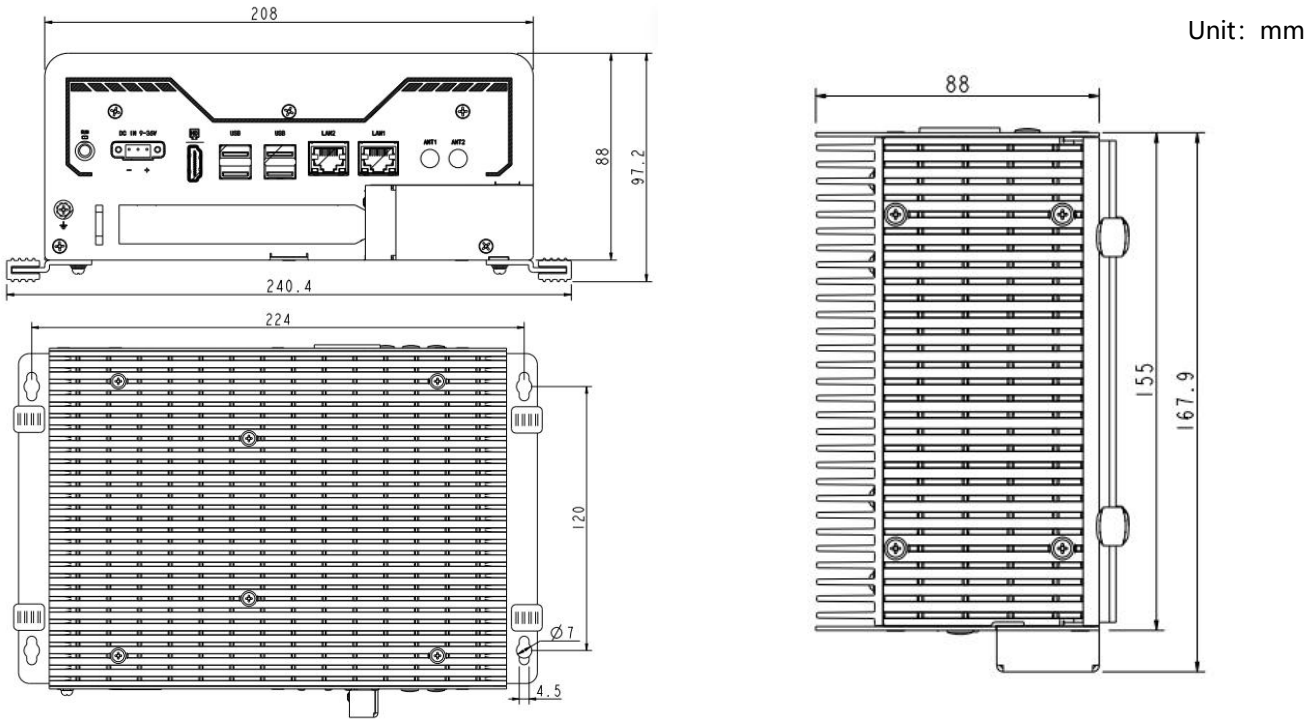
Product SPEC

CPU	6-core Arm® Cortex-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3
GPU	512*Cores NVIDIA Ampere architecture GPU, with 16*Tensor Cores(S001) 1024*Cores NVIDIA Ampere architecture GPU , with 32*Tensor Cores(S002)
AI Performance	20~34TOPS（S001），40~67TOPS（S002）
Memory	Onboard 4GB 64bit LPDDR5 34GB/s(S001) / 8GB 128bit LPDDR5 68GB/s(S002)
Storage	1*M.2 2280 M-Key，support NVMe ultra-high-speed SSD storage
Video	1*HDMI 2.0
Audio	Realtek ALC5640 audio codec，support left/right channel output，with power amplifier, support 2*10W speakers, 1*MIC input
LAN	2*Intel I210AT PCIe GbE,support 10/100/1000Mbps auto-negotiation
USB3.0	2*USB3.0(Type A)+PCIeX4 to 4*USB3.0（optional replacement for 4*GbE or other configurations）
USB2.0	2*USB2.0 (Type A)，1*USB2.0 (TYPE-C debug port)
CAN Bus	2*isolated CAN FD（Phoenix terminal block）
Serial Port	2*2.5KV optically isolated RS485
Expansion	1*M.2 3052/304 B-Key, USB3.0 signal，support 4G LTE or 5G NR wireless function modules，1*SIM card slot，4*ANT 1*M.2 2230 E-Key , PCIeX1+USB2.0 signal，support Gigabit WiFi6/BT5.0，2*ANT

LED	1*Power LED(on Power button)，1*Running light
Control SW	1* Power button w/LED, 1*RST button ; 1*REV button
Power Supply	DC 9~36V wide voltage power input, 3-pin 3.81mm pitch female connector，with OVP，OCP and SCP;
OS Support	Linux Ubuntu 22.04 ， with JetPack 6.2
Structure	Passive cooling structure, SGCC chassis
Color	Graphite black + granite gray
Mounting	Desktop mounting with shock-absorbing anti-slip feet
Dimension	(L*W*H)：Main box：208x155x88mm
Net weight	2.9 KG
Operating temperature	-20℃～60℃，with air flow
Storage Temperature	-40°C~85°C
Storage Humidity	10~90%@40°C, non-condensing
Vibration	5grms/5~500Hz/random/operating state(SSD); 1grms/5~500Hz/random/operating state(HDD)
Shock	50g peak acceleration(11ms duration)(SSD); 20g peak acceleration(11ms duration)(HDD)
EMC/Certification	CE/FCC Class A

Dimension

Unit：mm



Ordering Info.

Model No.	Module	Introduction
BRAV-7124-S001	Jetson Orin Nano 4GB	1*HDMI，2*GBE RJ45，2*USB3.0，2*USB2.0，2*RS485，2*Iso. CAN FD，2*Speaker，1*Mic，1*M.2 B-Key w/SIM，1*M.2 E-key，DC-IN 9~36V,
BRAV-7124-S002	Jetson Orin Nano 8GB	
Function Expansion Card	PCIeX4 to 4*USB3.0	
PA-60DC12	AC/DC power adapter，DC12V/5A,60W（standard）	
PA-120DC19	AC/DC power adapter，DC19V/6.32A,120W（optional）	