

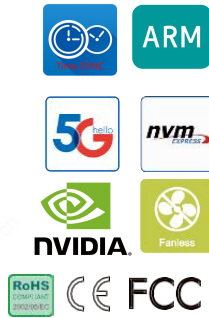
BRAV-7123

NVIDIA Jetson Orin NX 8G/16GB, 70~157 TOPS, 2*GBE,
2*USB2.0, 2*USB 3.0 + PCIe x4 to 4*USB 3.0 (Optional), 2*RS485,
2*CAN, 1*HDMI, DC 9~36V

JHCTECH

IoT Computer
Connecting the Data

MEC System—BARV Series



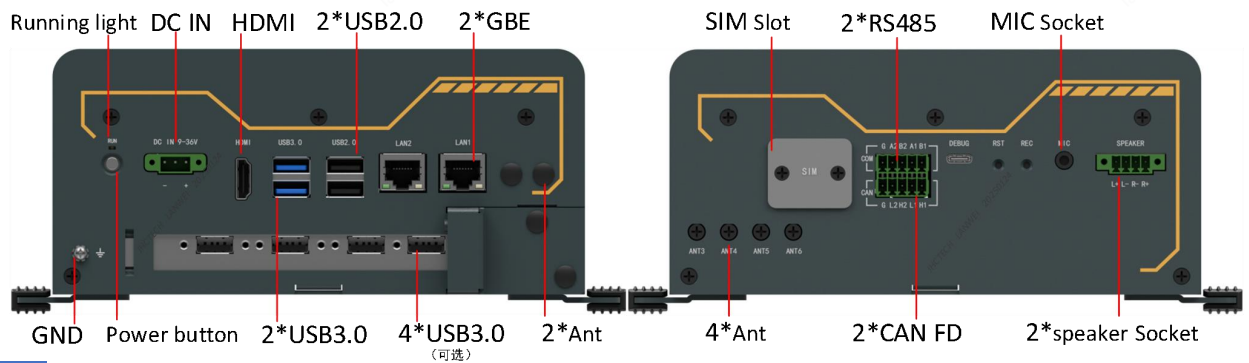
Key Features

- NVIDIA Jetson Orin NX, 8G/16G LPDDR5
- AI Performance 70~157 TOPS
- support 1*M.2 2280 M-Key NVMe
- 2*GBE, 2*USB 3.0 + PCIe x4 to 4*USB 3.0 (Optional)
- 2*USB2.0, 2*CAN FD, 2*RS485
- 1*HDMI, 1*MIC, 2*Speaker
- 1*M.2 B-Key support 4G LTE or 5G NR, 1*M.2 E-Key support Wifi_6
- DC9~36V wide power input, with OVP,OCP and SCP
- Aluminum extruded shell, cushioning structure, active and passive combined heat dissipation design

Product Overview

BRAV-7123 is equipped with NVIDIA Jetson AGX Orin module, 6/8 cores ARM CPU and high performance GPU, support 70~157 TOPS AI performance, onboard 8/16GB memory, support external NVMe storage, high-speed IO interface rich resources, DC 9-36V wide voltage power supply, used in intelligent transportation, machine vision, humanoid robot and other industries.

IO Layout

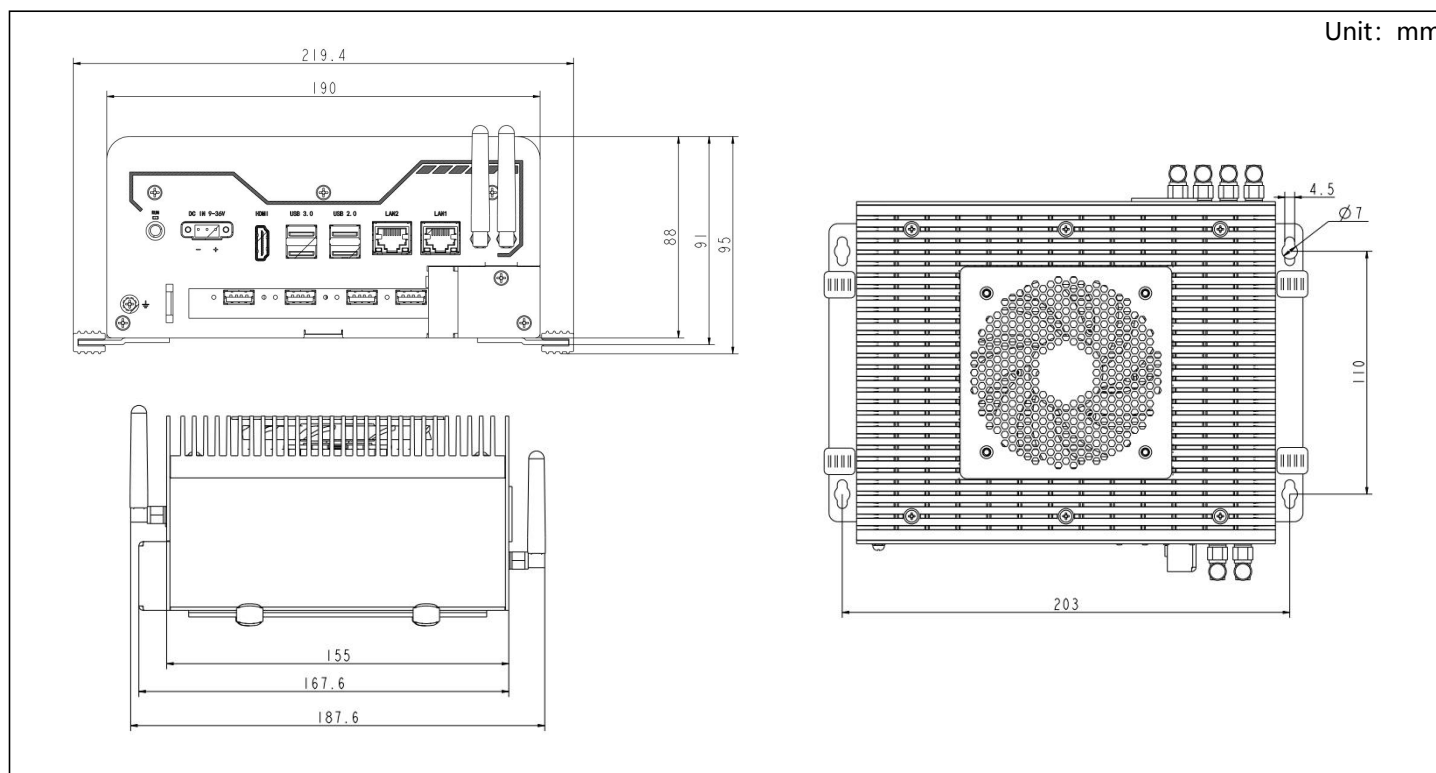


Product SPEC

CPU	6 Cores Arm® Cortex-A78AE v8.2 64 位 CPU 1.5MB/ L2 + 4MB L3 (S001) 8 Cores Arm® Cortex-A78AE v8.2 64 位 CPU 2MB L2 + 4MB L3 (S002)
GPU	1024*Cores NVIDIA Ampere Architecture GPU 765MHz, with 32*Tensor Cores(S001) 1024*Cores NVIDIA Ampere Architecture GPU 918MHz, with 32*Tensor Cores(S002)
AI performance	70TOPS (S001) , 100TOPS (S002))
Memory	Onboard 8GB(S001)/16GB(S002) 128 bit LPDDR5, the maximum bandwidth up to 102.4 GB/S
Storage	1*M.2 2280 M-Key , PCIe X4 signal, support NVMe high-speed memory card or edge AI computing module
Graphics	1*HDMI 2.0
Audio	Realtek ALC5640 audio, supports left and right channel output, with power amplification, supports 2-channel 10 watt speakersSupports 1*MIC input
LAN	2*Intel I210AT PCIe Gig. Ethernet, 10/100/1000Mbps
USB3.0	2*USB 3.0 (Type A) + PCIe X4 to 4*USB 3.0 (Optional to be replaced with 4*GBE or other methods)
USB2.0	2*USB2.0 (TYPE A), 1*USB2.0 (Type-C) debug port
CAN	2* isolation CAN FD (Phoenix terminal interface)
COM	2*2.5KV Iso. RS485
Expansion	1*M.2 3052/304 B-key, with SIM card slot, USB3.0 signal, support 4G LTE or 5G NR wireless function module, 4*ANT 1*M.2 2230 E-Key , PCIe X1 + USB2.0 signal, support gigabit bandwidth WiFi6/BT5.0, 2*ANT

LED	1*Power LED(on power button), 1* Running LED
Control SW	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: 30.12W
OS Support	Linux Ubuntu 22.04 with JetPack
Structure	Aluminum-magnesium alloy chassis, fan Cooling, SGCC frame
Color	Granite gray + Graphite black
Mounting	Desktop Mounting with anti-vibration rubber pads
Dimension	(L*W*H): Main box: 190x155x90mm; Including mounting bracket: 219.4*167.6*95mm
Net weight	2.82 KG
Operating temperature	-20°C ~ 60°C, airflow
Storage Temperature	-40°C~85°C
Storage Humidity	10~90%@40°C, Non-condensing
Vibration	5grms/5~500Hz/random/in working (SSD); 1grms/5~500Hz/random/in working (HDD)
Shock	50g peak acceleration(11ms duration)(SSD); 20g peak acceleration(11ms duration)(HDD)
Certification /EMC	CE/FCC Class A

Dimension



Ordering Info.

Model No.	Module	Introduction
BRAV-7123-S001	Jetson Orin NX 8GB	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-7123-S002	Jetson Orin NX16GB	
Expansion Card	PCIeX4 to 4*USB3.0	
PA-120DC12	AC/DC power adapter, DC19V/5A,60W	
PA-220DC19	AC/DC power adapter, DC24V/6.32A, 120W	