

In the top-left corner, there are three overlapping circles: a small dark grey one, a medium blue one, and a large one with black diagonal hatching. The background is white with numerous thin, vertical gold lines and small gold dots, resembling a starry sky or a digital grid.

Let's wait five minutes, our
webinar is about to begin



Product Launch Announcement

JHCTECH



BRAV-7131



BRAV-7720/7721



Jun.12. 2023 16:00pm



Live

	Product Launch Announcement
Time	Agenda
16:00~16:10	Opening Cristina Zeng, Marketing manager
16:10~16:35	Introduction of New Products 《Multifunctional high computing power AI edge computing system----BRAV-7131》 Gary Shu, Product Director
16:35~17:00	Introduction of New Products 《High-performance AIoT multiple architecture Edge computing system----BRAV-7720/7721》 Reese Li, Product Director
17:00~17:10	New product promotion activities explain Cristina Zeng, Marketing manager
17:10~17:20	Q&A Gary Shu & Reese Li

Part1:Introduction of JHCTECH New Products

《Multifunctional high computing power
AI edge computing system》



BRAV-7131



01 BRAV Roadmap

**02 BRAV-7131
Product Specifications**

03 Product Features

04 Ordering Info

05 Target Market

06 Product Schedule

CONTENTS

01- BRAV ROADMAP

BRAV-7201

BRAV-7302

BRAV-7501

BRAV-7520/7521

BRAV-7220

BRAV-7720/7721



Intel® Skylake-U/
Kabylake-U

Intel® Skylake-S/
Kabylake-S

Intel® Coffee Lake

Intel® Comet lake

Intel® Tiger lake

Intel® Alder lake

Coming Soon
BRAV-7121

<New product>
BRAV-7131

BRAV-7520/7521-WP

BRAV-7601

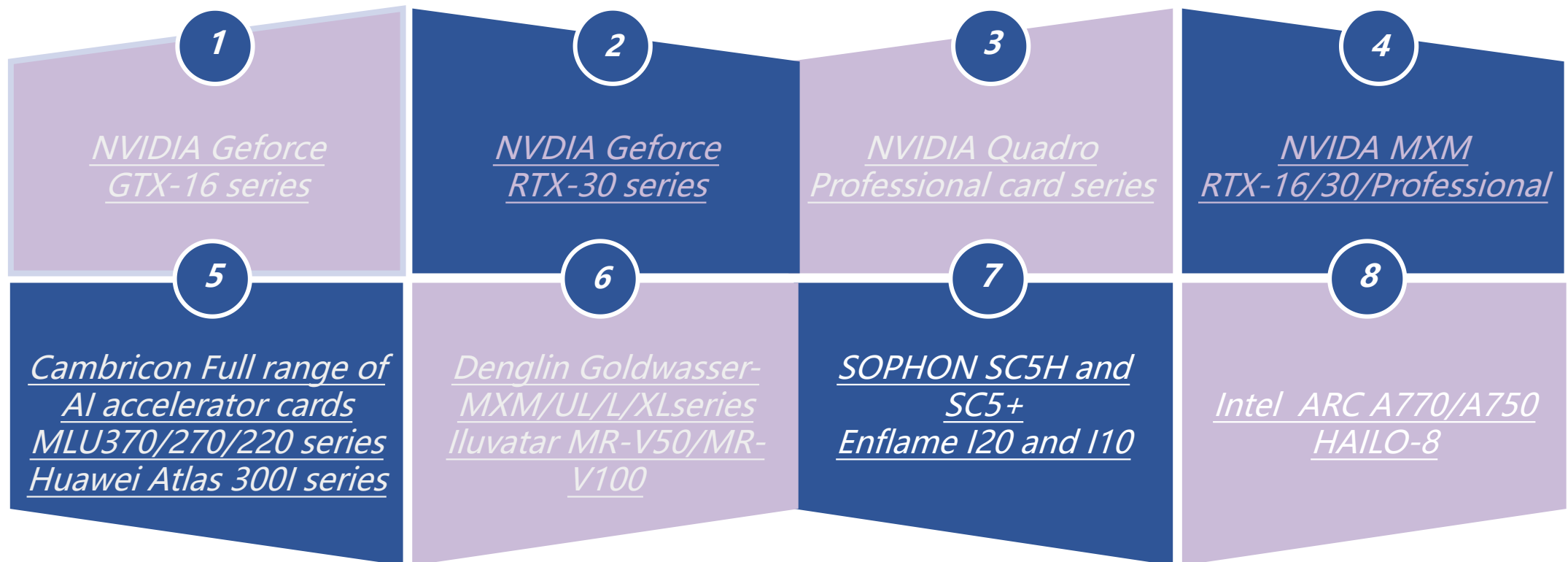
BRAV-7720/7721-WP



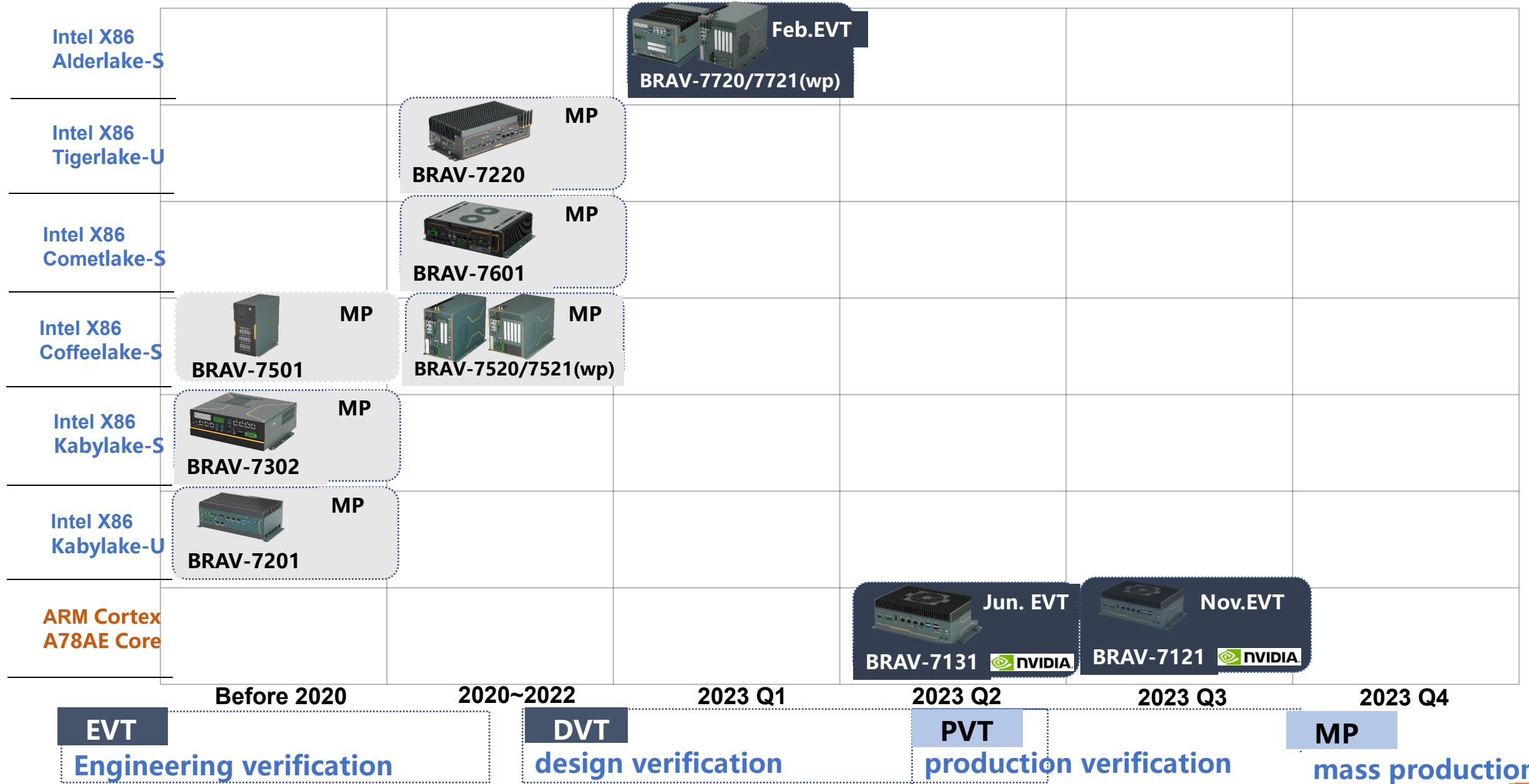
ARM Cortex®-
6/8xA78AE

ARM Cortex®-
8/12xA78AE

BRAV Series-AI accelerator card support list



BRAV line ROADMAP



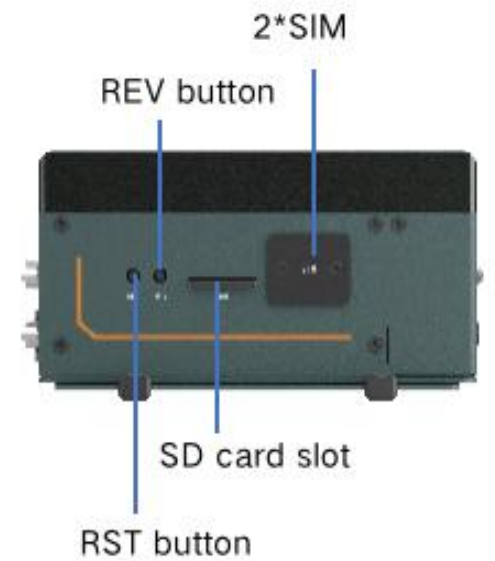
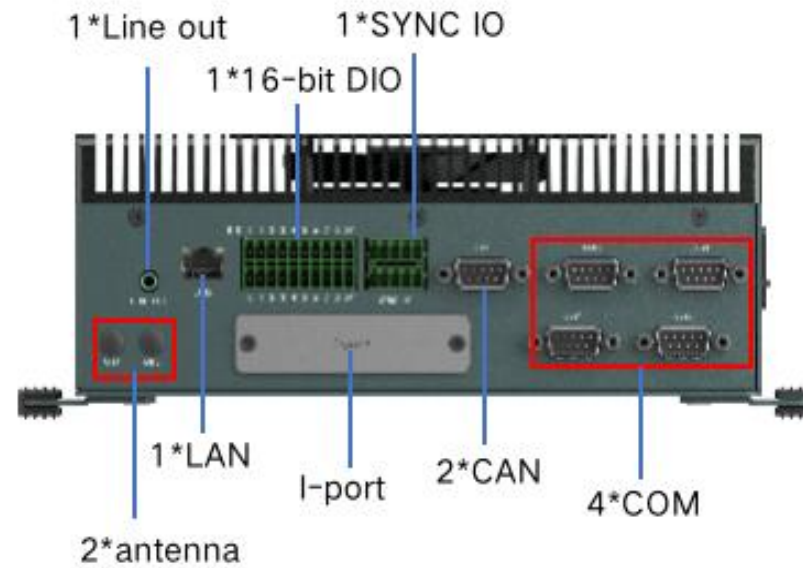
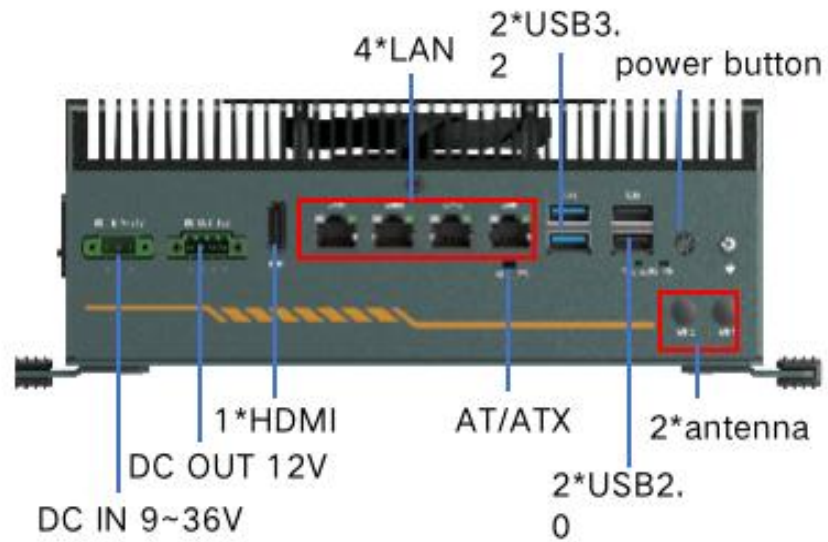
02-Product Specifications



BRAV-7131

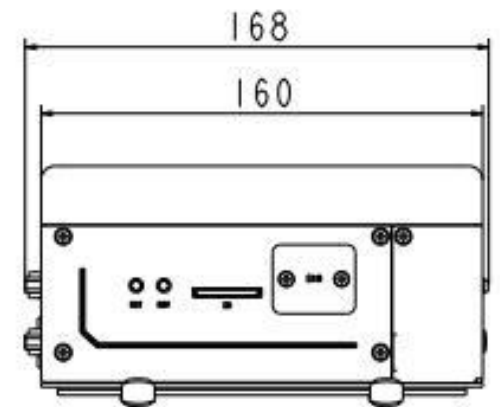
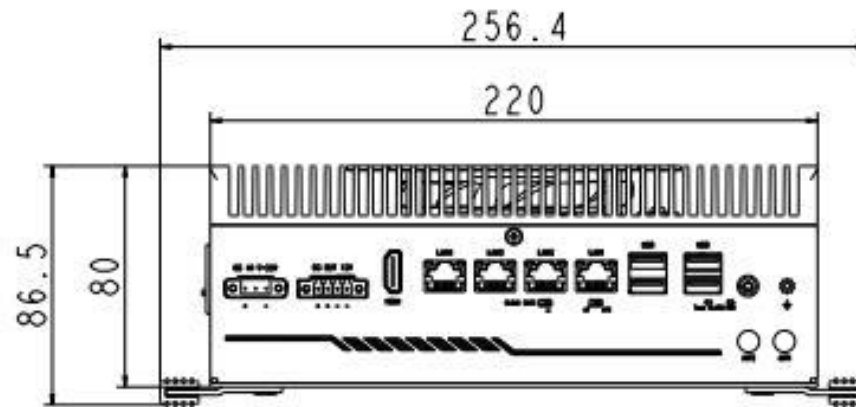
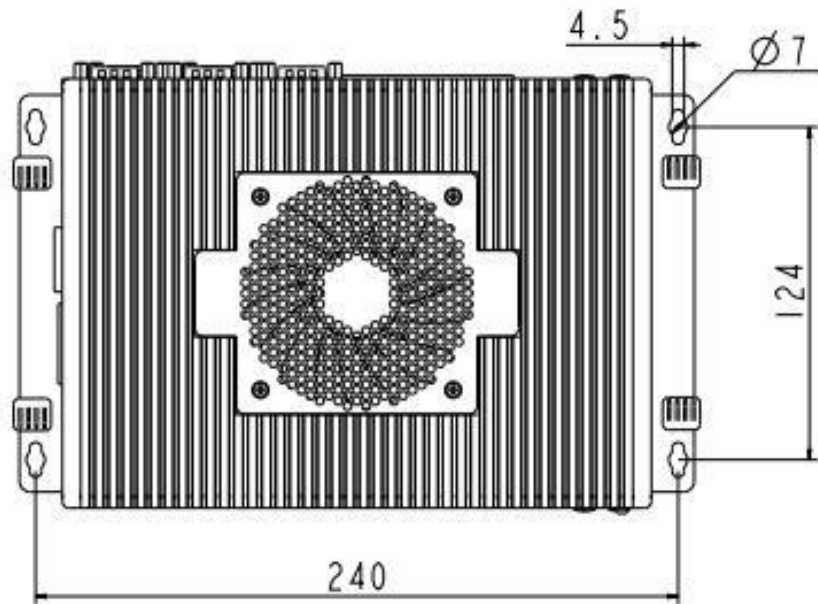
CPU	8*Cores Arm® Cortex®-A78AE v8.2 64-bit CPU 2MB L2+4MB L3, maximum frequency 2.2GHz(S001); 12*Cores Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2+6MB L3,maximum frequency 2.2 GHz(S002)
GPU	1792*Cores NVIDIA Ampere Architecture GPU 930MHz, with 56*Tensor Cores(S001) 2048*Cores NVIDIA Ampere Architecture GPU 1.3GHz, with 64*Tensor Cores(S002)
Memory	Onboard 32GB(S001)/64GB(S002) 256-bit LPDDR5, the maximum bandwidth up to 204.8GB/s
Graphics & Audio	Highest resolution of HDMI 2.0 is 4096*2304@60HzRealtek ALC564, support stereo channel output
USB	2*USB3.2(Gen2 10Gbps), 2*USB2.0
LAN	5*Intel I226V PCIe Gig. Ethernet, 10/100/1000Mbps
Expansion	1*Full size Mini PCIe, with SIM card slot, PCIe X1 + USB2.0 signal, support 4G LTE ,Ethernet port or CAN port and other function modules; 1*M.2 3052 B-key, with SIM card slot, PCIe X1 + USB2.0 signal, support 4G LTE or 5G NR wireless function module; 1*M.2 2280 M-Key , PCIe X4 signal, support NVMe high-speed memory card or edge AI computing module; 1*M.2 2230 E-Key , PCIe X1 + USB2.0 signal, support gigabit bandwidth WiFi6/BT5.0
DIO and serial port	8-bit 2.5KV Iso. DI (TTL signal), 8-bit 2.5KV Iso. DO (TTL signal); 2*2.5KV Iso. RS485, max baud rate 115200Hz; 2* Non-isolated RS232, max baud rate 230400Hz
Power Supply	DC 9~36V wide power input, 3-pin 3.81mm terminal block, with short circuit, over voltage and over current protection, TDP: 50.4W DC 12V output up to 3A, 4-pin 3.5mm terminal block

IO Layout



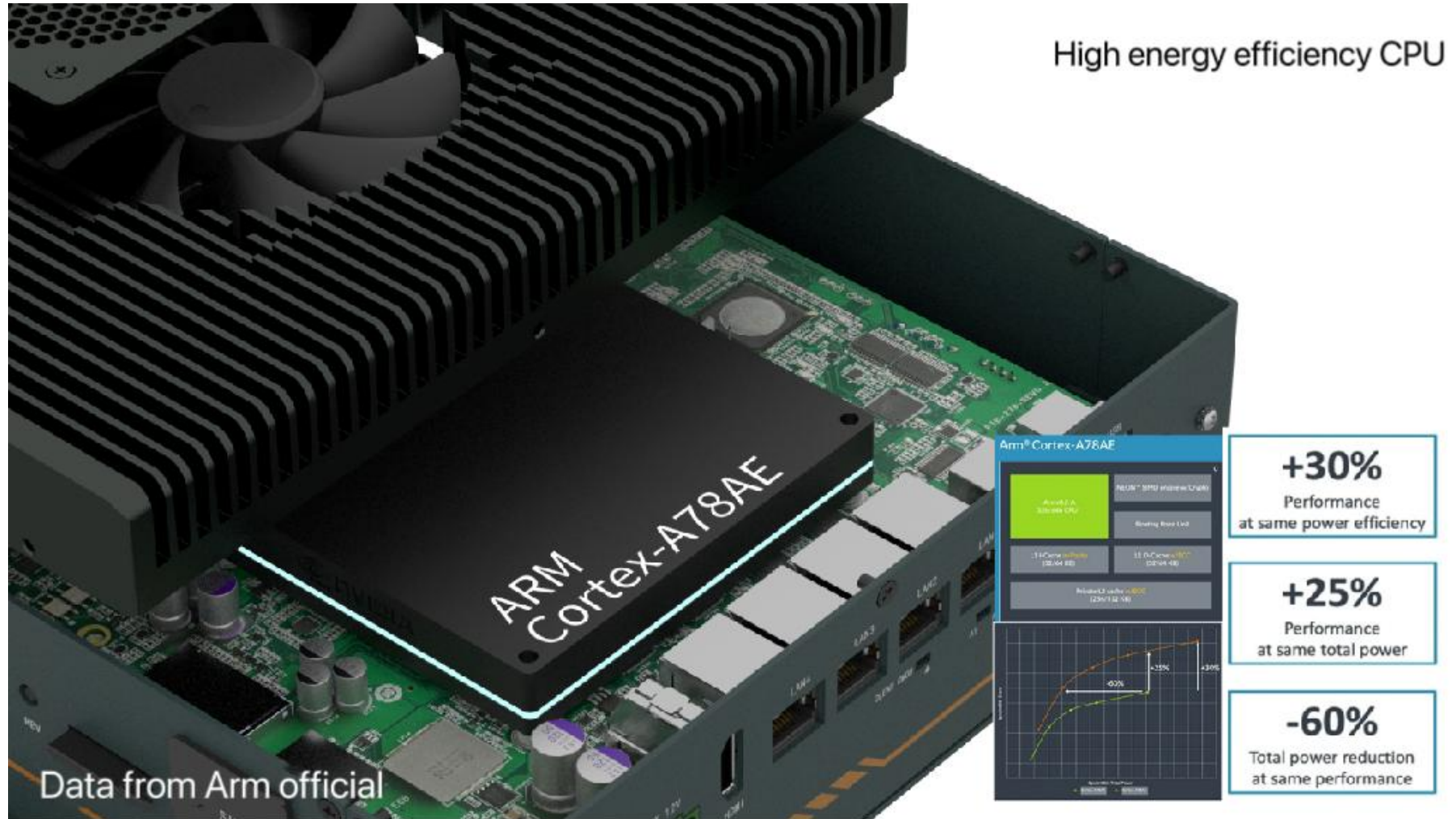
Dimension-BRAV-7131

Weight* Length *Height: 256.4*160*96.5mm(With mounting component and cushioning pads)



03-Product Features

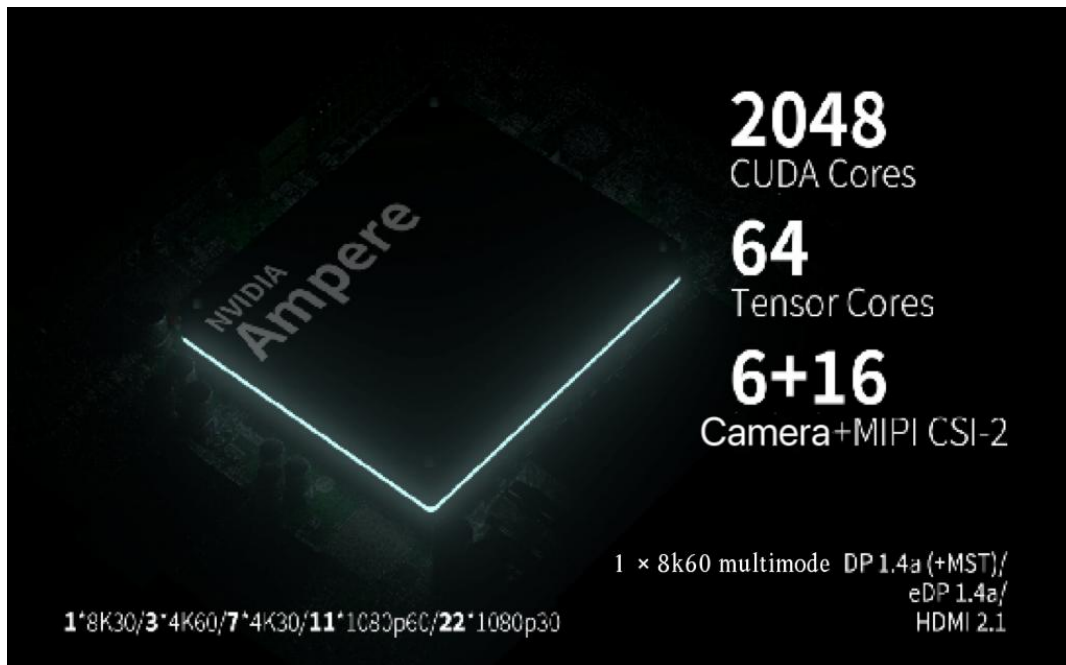
1 <i>High energy efficiency CPU</i>	2 <i>High performance GPU</i>	3 <i>High computational DLA&PVA</i>	4 <i>Onboard memory and storage</i>	5 <i>1+3 quad storage</i>
6 <i>Complete network solution</i>	7 <i>Multiple clock synchronization schemes</i>	8 <i>Multiplex isolated I/O interface</i>	9 <i>Efficient heat dissipation design</i>	10 <i>whole machine Shock absorption design</i>
11 <i>DC-OUT Power supply output</i>				



The figures are official

- 8/12*Cores ARM Cortex-A78AE CPU with 2.2GHz main frequency
- The TDP power consumption is lower than 15W

★ High performance GPU



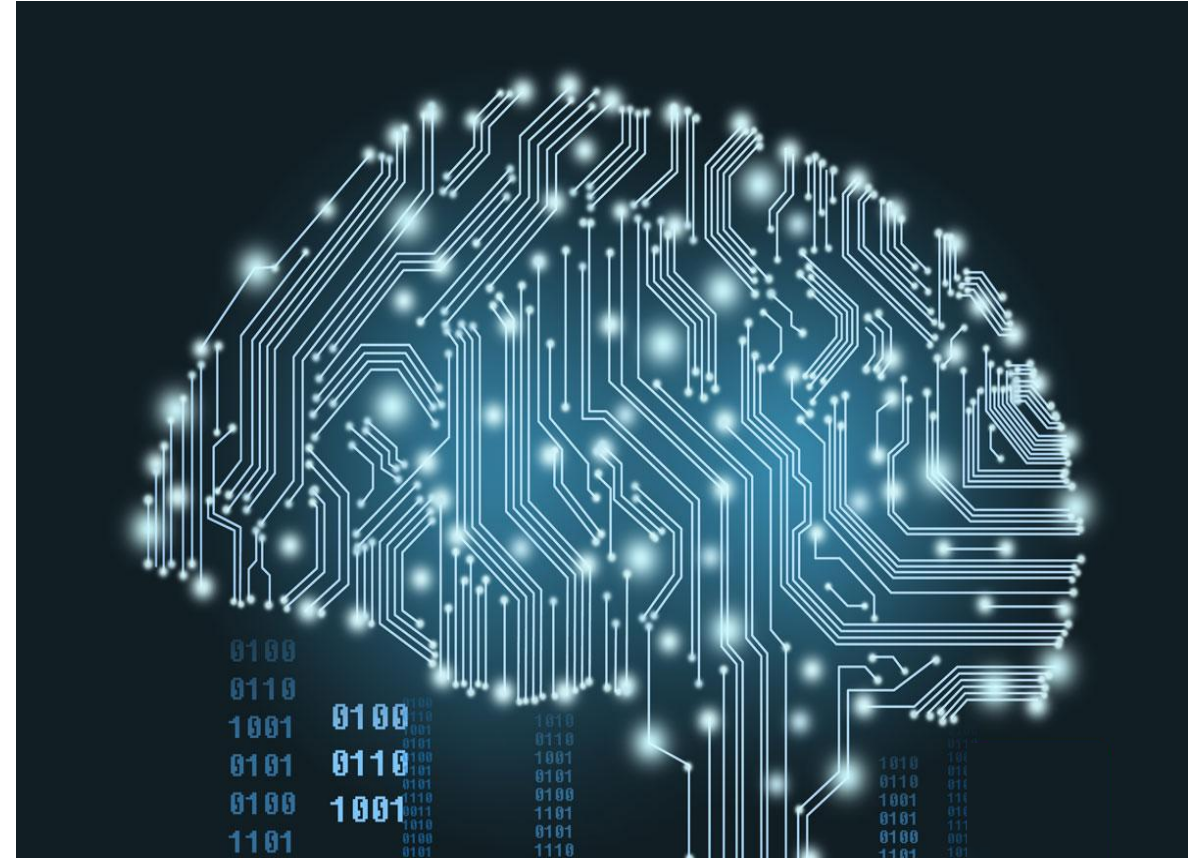
- New 7nm process NVIDIA Ampere architecture
- 56/64 Tensor Cores and 1792/2048 CUDAs
- Video coding capability (H.265)H.264, AV1:1
*4K60,3*4K30,6*1080p60,12*1080p30 (32G module);
- 2*4K60,4* 4K30,8*1080p60,16*1080p30 (64G module)
- Video decoding capability code (H.265)H.264, VP9, AV1:1
*8K30,2*4K60,4*4K30,9*1080p60,18*1080p30(32G module);
- 1*8K30,3*4K60,7*4K30,11*1080p60,22*1080p30(64G module);
- Display output: 1x 8K60 multi-mode DP 1.4a (+MST)/eDP 1.4a/HDMI 2.1
- Video input: Up to 6 cameras and 16 channels MIPI CSI-2

Compared to the NVIDIA Turing GPU architecture, the NVIDIA Ampere architecture is 1.7 times faster for traditional graphics workloads and 2 times faster for raytracing.

* Data from NVIDIA official

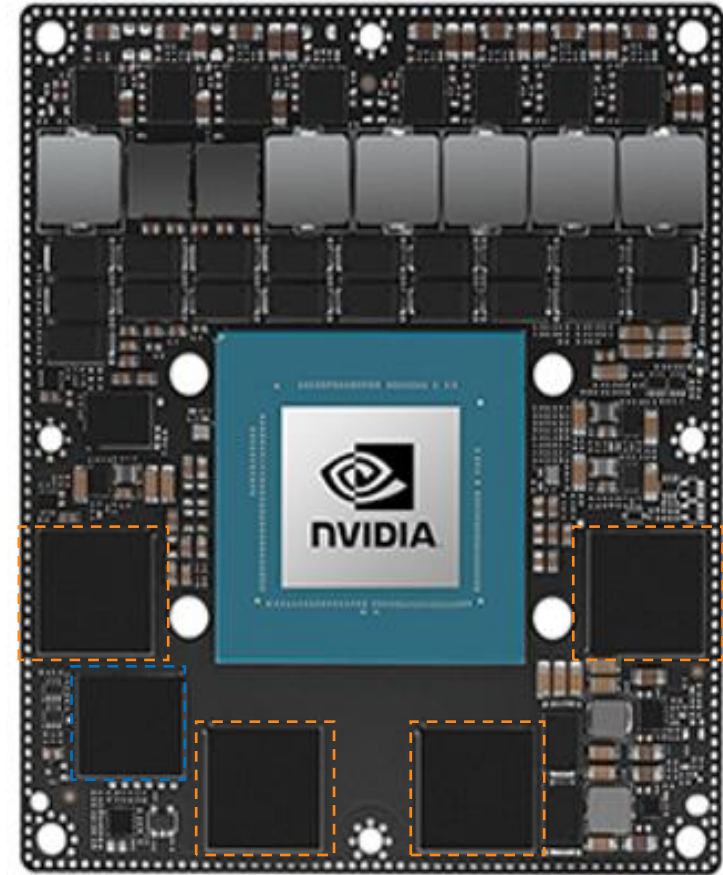
★ High computational DLA&PVA

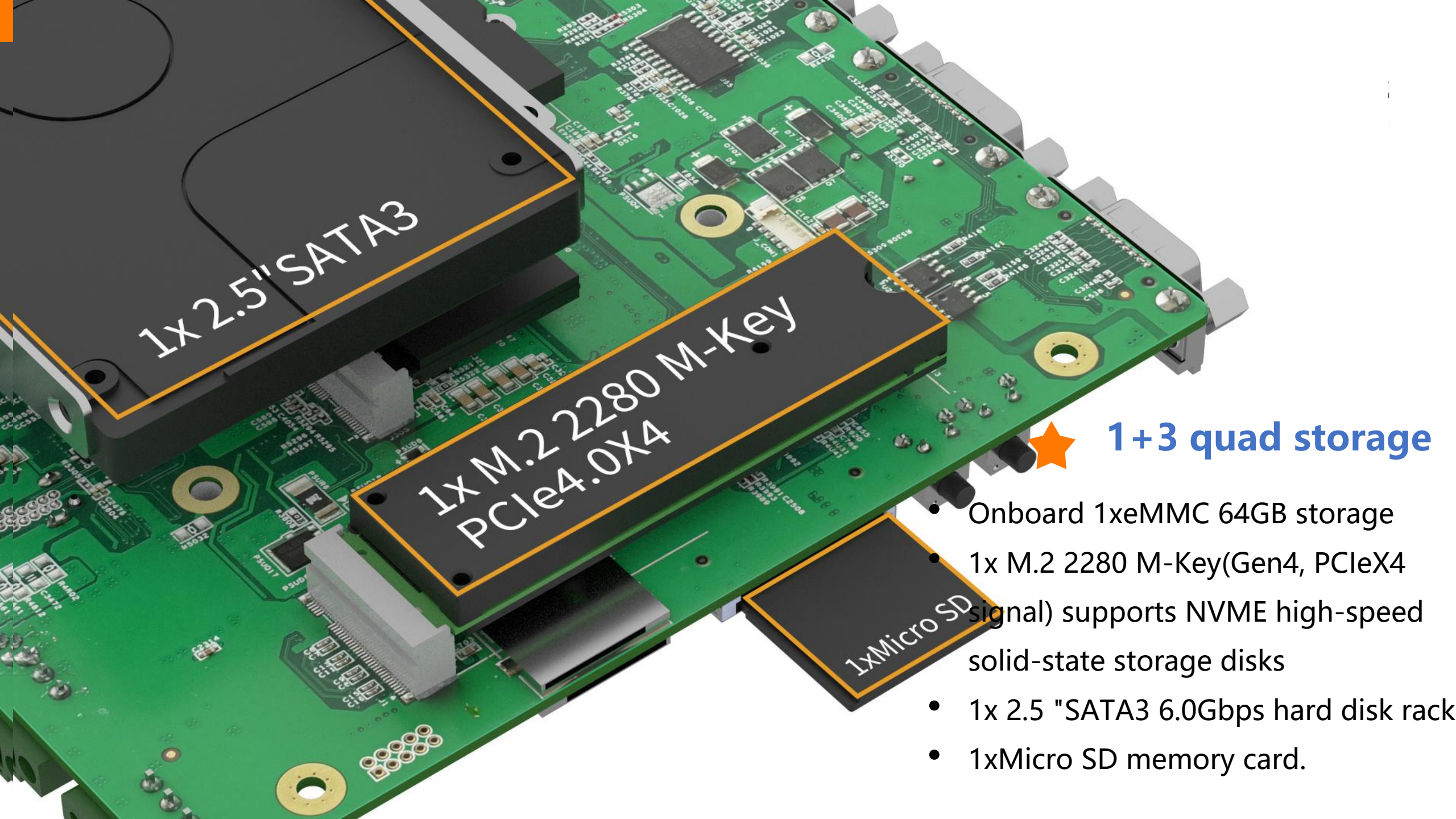
- Dual 2.0 NVDLA v2 and single 2.0 PVA v2
- 200TOPS(32G modules) & 275TOPS(64G modules)
- 1.4GHz frequency (32G module) & 1.6GHz frequency (64G module)
- More than six times the Xavier's maximum computing power



★ Onboard memory and storage

- 256-bit LPDDR5 memory, bandwidth 204.8GB/s
- The S001 is 32GB and the S002 is 64GB
- On-board 64GB eMMC 5.1 High speed storage
- No compatibility problems, and improve reliability
- The main chip design heat dissipation bridge, heat dissipation effect is more effective





1x 2.5" SATA3

1x M.2 2280 M-Key
PCIe4.0x4

1x Micro SD

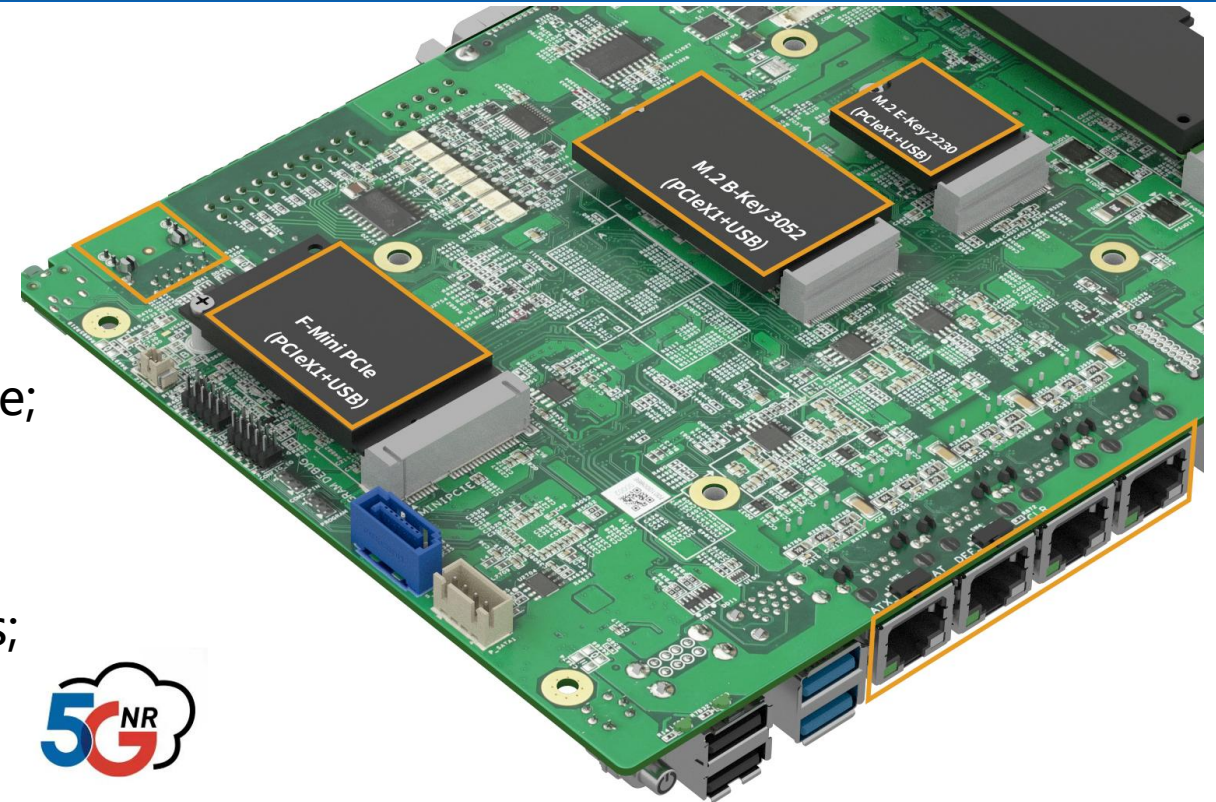


1+3 quad storage

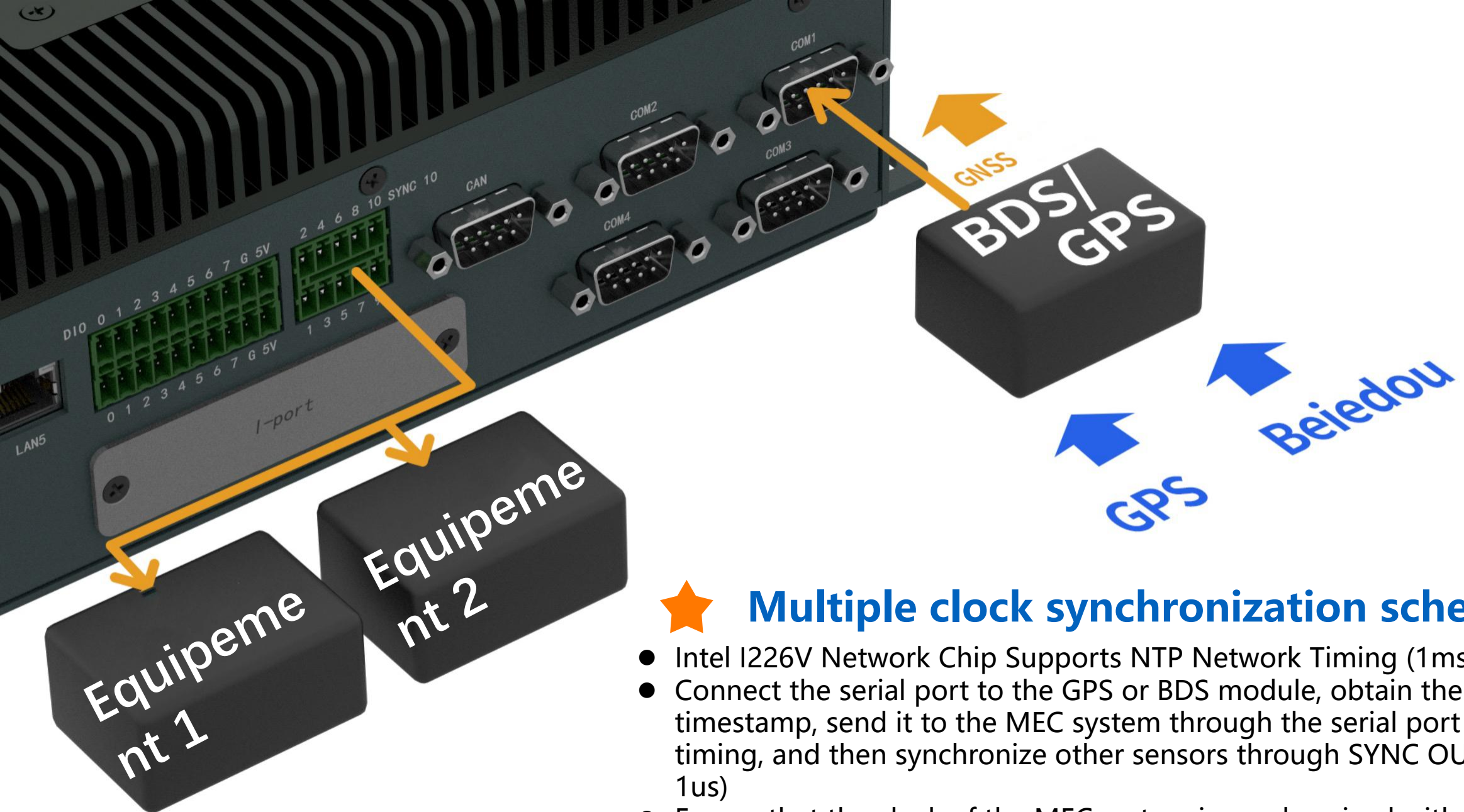
- Onboard 1xeMMC 64GB storage
- 1x M.2 2280 M-Key(Gen4, PCIeX4 signal) supports NVME high-speed solid-state storage disks
- 1x 2.5 "SATA3 6.0Gbps hard disk rack
- 1xMicro SD memory card.

★ Complete network solution

- 5x Intel I226V chip, 5 Gigabit network port;
- 1x F-Mini PCIe (PCIeX1+USB signal)
With SIM card slot, can support 4G LTE module;
- 1x M.2 B-Key 3052(PCIeX1+USB letter
With SIM card slot, support 5G NR module;
- 1x M.2 E-Key 2230(PCIeX1+USB letter
No.), support gigabit Wifi6 and BT5.0 modules;
- The above complete network scheme enables
the system to access multi-channel sensing
equipment, communicate with the cloud, and
connect wirelessly to the mobile base station at
the same time, ensuring independent bandwidth
for signal acquisition, data communication and
information release.

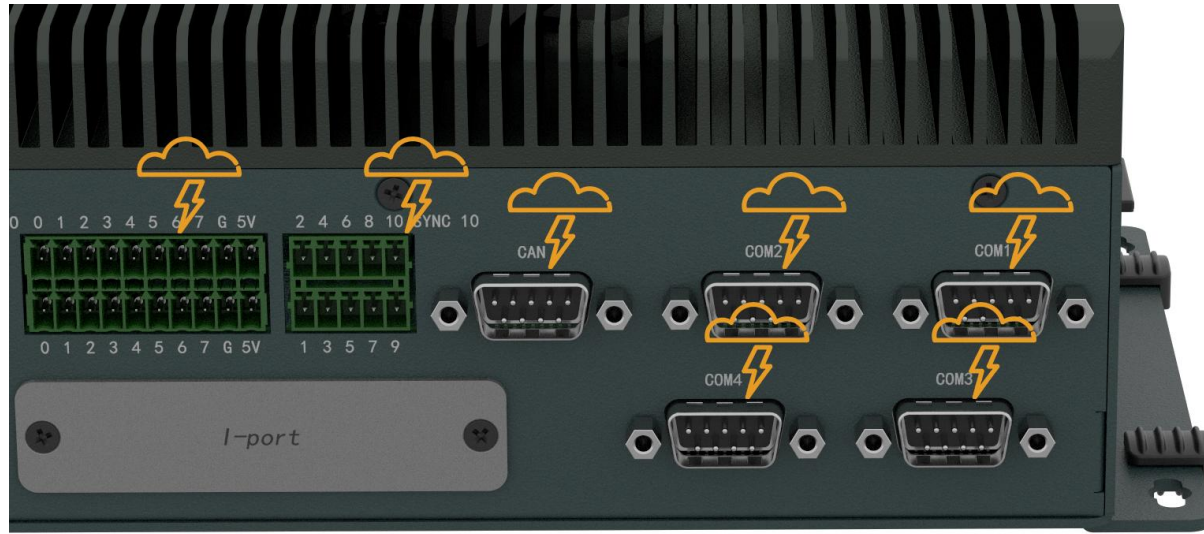


Complete network solution



★ Multiple clock synchronization schemes

- Intel I226V Network Chip Supports NTP Network Timing (1ms Class)
- Connect the serial port to the GPS or BDS module, obtain the GNSS timestamp, send it to the MEC system through the serial port for timing, and then synchronize other sensors through SYNC OUT (level 1us)
- Ensure that the clock of the MEC system is synchronized with that of the sensor connected to it to minimize the time difference between different devices.



★ Multiplex isolated I/O interface

- 8-bit 2.5KV photoelectric isolation DI, 8-bit 2.5KV photoelectric isolation DO;
- Two 2.5KV photoelectric isolation RS485 serial ports, two non-isolation RS232 high-speed serial ports;
- 2-way 2.5KV photoelectric isolation CAN2.0.
- Isolation protection improves the MEC equipment's own lightning and surge protection capabilities, thus making it more applicable and practical.

- The NVIDIA Orin module adopts the heat dissipation design of the embedded fan with the extruded aluminum profile. The operating temperature ranges from -20 °C to +60°C.

-20°C



Efficient heat dissipation design

60°C



- 70000 hours of life high temperature resistant fan, intelligent speed control through MCU, to ensure the whole machine heat dissipation target under no power level

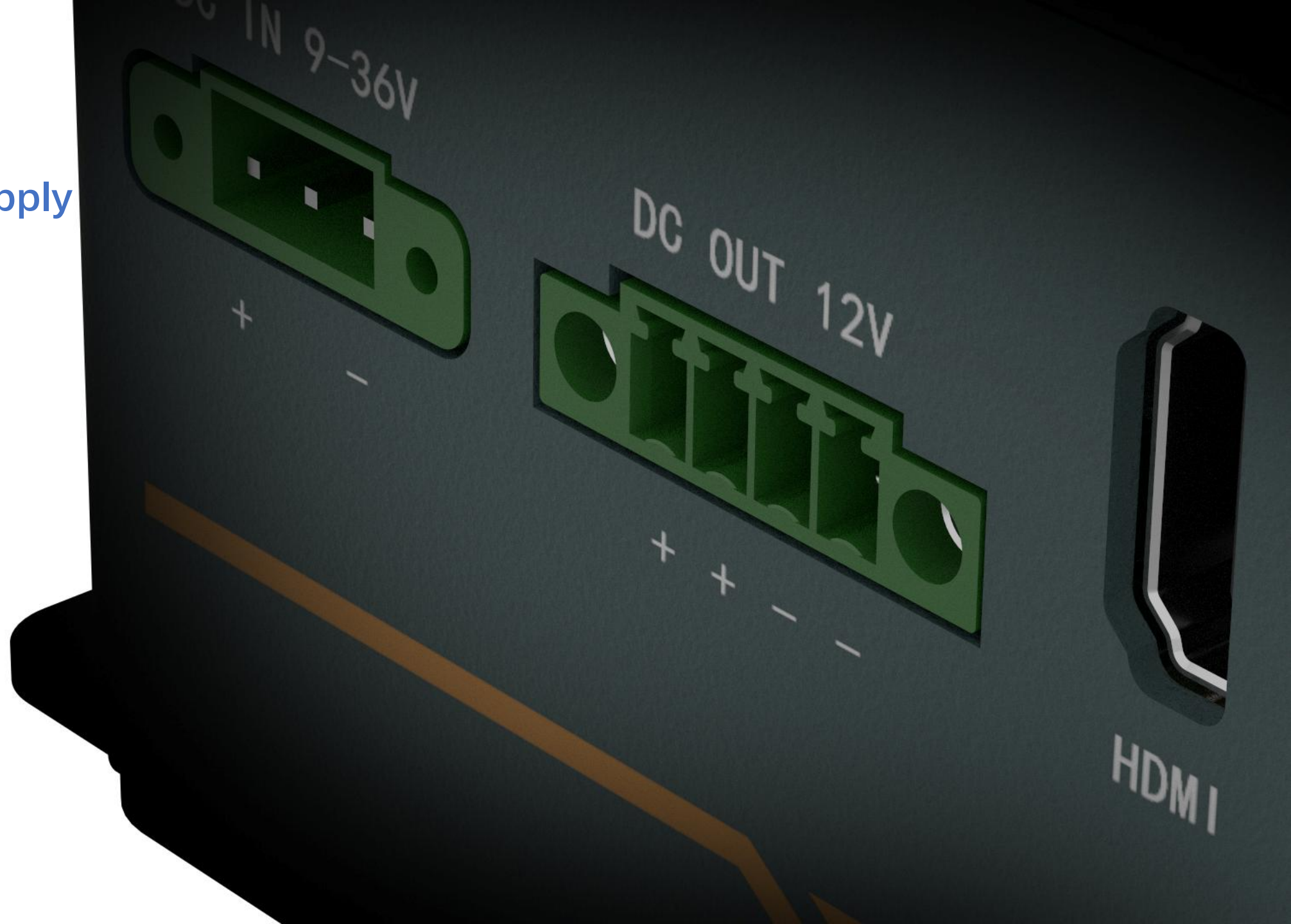


★ whole machine shock absorption design

- The main chip, memory and eMMC storage are BGA onboard;
- IO function interface board;
- The model mounting kit has 4 cushioning rubber foot pads.



External power supply
interface



04-Ordering info

BRAV-7131-S001 ***order specifications***

Model No	Module	Introduction
BRAV-7131-S001	Jetson AGX Orin 32GB memory, 64GB eMMC	1*HDMI, 5*RJ45, 2*USB3.2, 2*USB2.0, 2*Iso. RS485, 2*RS232, 2*Iso. CAN, 1*16-bit Iso. DIO, 1*SYNC IO, 1*Line out, 1*Mini PCIE w/SIM, 1*M.2 B-Key w/SIM, 1*M.2 E-key, 1*M.2 M-Key, 1*Micro SD, 1*I-port, optional 1*2.5" SATA Bay, DC-IN 9~36V, DC-OUT 12V
PA-120DC19	AC/DC power adapter, DC19V/6.32A, 120W	
PA-220DC24	AC/DC power adapter, DC24V/9.17A, 220W (When DC-OUT 12V is used.)	

BRAV-7131-S002 ***order specifications***

Model No	Module	Introduction
BRAV-7131-S002	Jetson AGX Orin 64GB memory, 64GB eMMC	1*HDMI, 5*RJ45, 2*USB3.2, 2*USB2.0, 2*Iso. RS485, 2*RS232, 2*Iso. CAN, 1*16-bit Iso. DIO, 1*SYNC IO, 1*Line out, 1*Mini PCIE w/SIM, 1*M.2 B-Key w/SIM, 1*M.2 E-key, 1*M.2 M-Key, 1*Micro SD, 1*I-port, optional 1*2.5" SATA Bay, DC-IN 9~36V, DC-OUT 12V
PA-120DC19	AC/DC power adapter, DC19V/6.32A, 120W	
PA-220DC24	AC/DC power adapter, DC24V/9.17A, 220W (When DC-OUT 12V is used.)	

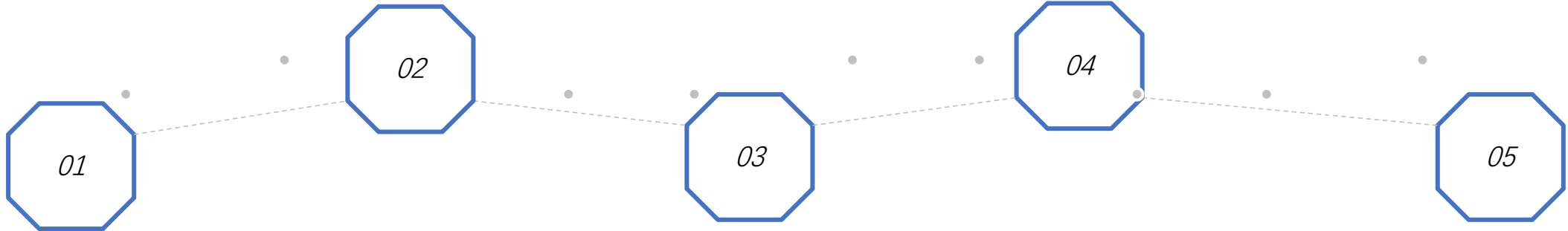
05 - Target Market

- Visual inspection of factory production line
- AI visual localization
- Visual logistics sorting

- Low speed unmanned driving (collecting card, mining card, unmanned delivery vehicle)
- Logistics sorting AGV
- Fire and power inspection AMR

Machine vision

AGV & AMR



C-V2X car networking Roadside MECs and on-board domain controllers

- Holographic intersection (AI signal control machine)
- Highway incident detection
- Unmanned driving
- Bridge and tunnel monitoring

Special vehicle onboard

- Police video enforcement vehicle
- Emergency command vehicle onboard
- Ambulance vehicle

Medical image

- CT machine
- Nuclear magnetic resonance machine
- X-ray machine
- Ai-assisted diagnosis and treatment system
- Intelligent surgical robotic arm

06-Product Schedule

Prototype test time

April 2023

Small batch release time

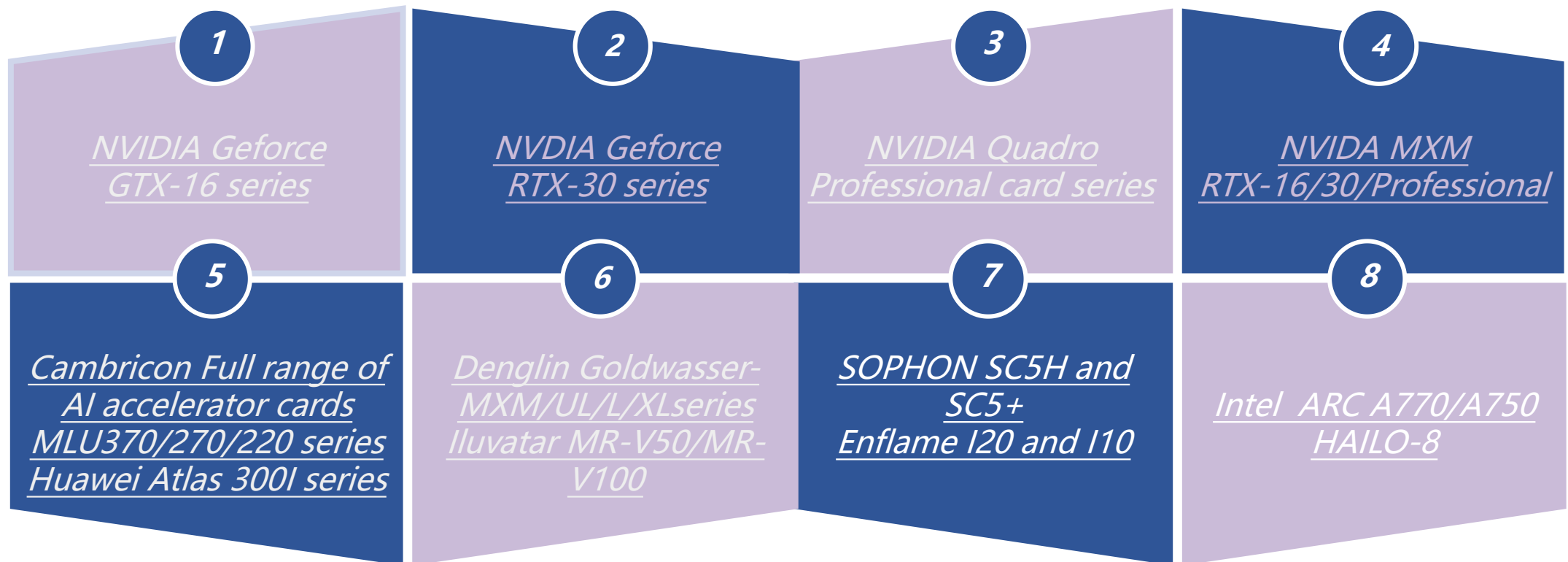
June 2023

《High-performance AIoT multiple architecture Edge computing system》



BRAV-7720/7721

BRAV Series-AI accelerator card support list



02-Product specification

BRAV-7720



CPU+PCH	Intel® Alder lake-S 12th-Gen Core™ i9/i7/i5/i3/Pentium/Celeron + Q670 PCH
Memory	2*262-Pin SODIMM, dual channel
LAN	2*Intel I226V + 1*Intel I219LM
Graphics	1*DP, 1*HDMI, 1*VGA
USB	6*USB3.2
Interface	2*RS232/422/485
Expansion	1*Full size Mini PCIe with SIM slot 1Automatic detection of SATA signals and PCIe signals 1*M.2 B-Key 3052 with a SIM slot 1*M.2 2280 M-Key Gen4.0 PCIeX4 signal 1*PCIe X16 Gen5.0 X16 signal 1*PCIe X16 Gen4.0 X4 signal
Storage	2*2.5" HDD/SSD SATA3, 1*Mini PCIe, 1*M.2 2280 M-Key
Power Supply	DC 12VPower supply DC 12V/6A Radar supply output

BRAV-7720-WP



CPU+PCH	Intel® Alder lake-S 12th-Gen Core™ i9/i7/i5/i3/Pentium/Celeron + Q670 PCH
Memory	2*DDR5 SODIMM dual channel
LAN	2*Intel I226V + 1*Intel I219LM
Graphics	1*DP, 1*HDMI, 1*VGA
USB	6*USB3.2
Interface	2*RS232/422/485
Expansion	1*Full size Mini PCIe with SIM slot 1*Full size Mini PCIe, Automatic detection of SATA signals and PCIe signals 1*M.2 3052 B-Key with SIM slot 1*M.2 2280 M-Key Gen4.0 PCIeX4 signal 1*PCIe X16 Gen5.0 X16 signal 1*PCIe X16 Gen4.0 X4 signal
Storage	2*2.5" HDD/SSD SATA3, 1*Mini PCIe, 1*M.2 2280 M-Key
Power Supply	DC 9-55V wide voltage power supply DC 12V/6A radar supply output

BRAV-7721



CPU+PCH	Intel® Alder lake-S 12th-Gen Core™ i9/i7/i5/i3/Pentium/Celeron + Q670 PCH
Memory	2*DDR5 SODIMM dual channel
LAN	2*Intel I226V + 1*Intel I219LM
Graphics	1*DP, 1*HDMI, 1*VGA
USB	6*USB3.2
Interface	2*RS232/422/485
Expansion	1*Full size Mini PCIe with SIM slot 1*Full size Mini PCIe, Automatic detection of SATA signals and PCIe signals 1*M.2 3052 B-Key with SIM slot 1*M.2 2280 M-Key Gen4.0 PCIeX4 signal 2*PCIe X16 Gen5.0 X8 signal 2*PCIe X16 Gen4.0+Gen3.0 X4 signal
Storage	2*2.5" HDD/SSD SATA3, 1*Mini PCIe, 1*M.2 2280 M-Key
Power Supply	DC 12V power supply DC 12V/6A radar supply output

BRAV-7721-WP



CPU+PCH	Intel® Alder lake-S 12th-Gen Core™ i9/i7/i5/i3/Pentium/Celeron + Q670 PCH
Memory	2*DDR5 SODIMM dual channel
LAN	2*Intel I226V + 1*Intel I219LM
Graphics	1*DP, 1*HDMI, 1*VGA
USB	6*USB3.2
Interface	2*RS232/422/485
Expansion	1*Full size Mini PCIe with SIM slot 1*Full size Mini PCIe, Automatic detection of SATA signals and PCIe signals 1*M.2 3052 B-Key with SIM slot 1*M.2 2280 M-Key Gen4.0 PCIeX4 signal 2*PCIe X16 Gen5.0 X8 signal 2*PCIe X16 Gen4.0+Gen3.0 X4 signal
Storage	2*2.5" HDD/SSD SATA3, 1*Mini PCIe, 1*M.2 2280 M-Key
Power Supply	DC 9-55V wide voltage power supply DC 12V/6A radar supply output

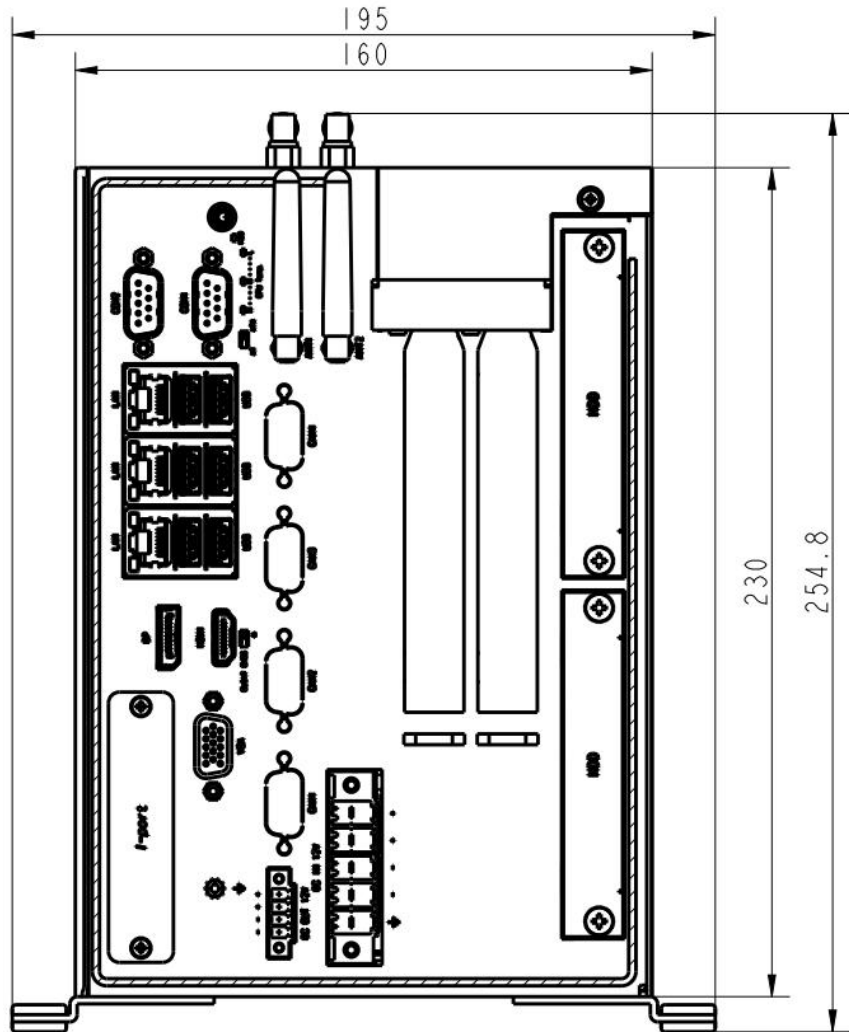
Comparison of BRAV-7720/7721 and BRAV-7520/7521 specifications

	BRAV-7720	BRAV-7721	BRAV-7520	BRAV-7521
CPU	Intel® Alder lake-S 12th-Gen Core™ i9/i7/i5/i3/Pentium/Celeron		Intel® Xeon® E or Intel® Coffeelake-R 9th/8th-Gen Core™ i7/i5/i3	
PCH	Q670		Q370 or C246	
Memory	2*DDR5		4*DDR4	
Graphics	DP+HDMI+VGA		DP+DP+VGA	
LAN	2*I226V+1*I219LM		2*I210AT+1*I219LM	
Expansion	1*Full size Mini PCIe with SIM slot 1*Full size Mini PCIe, Automatic detection of SATA signals and PCIe signals 1*M.2 3052 B-Key with SIM 1*M.2 2280 M-Key Gen4.0 PCIeX4 signal 1*PCIe X16 Gen5.0 X16 signal 1*PCIe X16 Gen4.0 X4 signal	1*Full size Mini PCIe with SIM slot 1*Full size Mini PCIe, Automatic detection of SATA signals and PCIe signals 1*M.2 3052 B-Key with SIM 1*M.2 2280 M-Key Gen4.0 PCIeX4 signal 2*PCIe X16 Gen5.0 X8 signal 2*PCIe X16 Gen4.0+Gen3.0 X4 signal	1*Full size Mini PCIe with SIM slot, can set it to mSATA using the BIOS 1*M.2 2230 E-Key with SIM slot 1*M.2 3052 B-Key 1*M.2 2280 M-Key Gen3.0 PCIeX4 signal 1*PCIe X16 X16 signal 1*PCIe X16 X4 signal	1*Full size Mini PCIe with SIM slot,can set it to mSATA using the BIOS 1*M.2 2230 E-Key with SIM slot 1*M.2 3052 B-Key 1*M.2 2280 M-Key Gen3.0 PCIeX4 signal 2*PCIe X16 X8 signal 2*PCIe X16 X4 signal

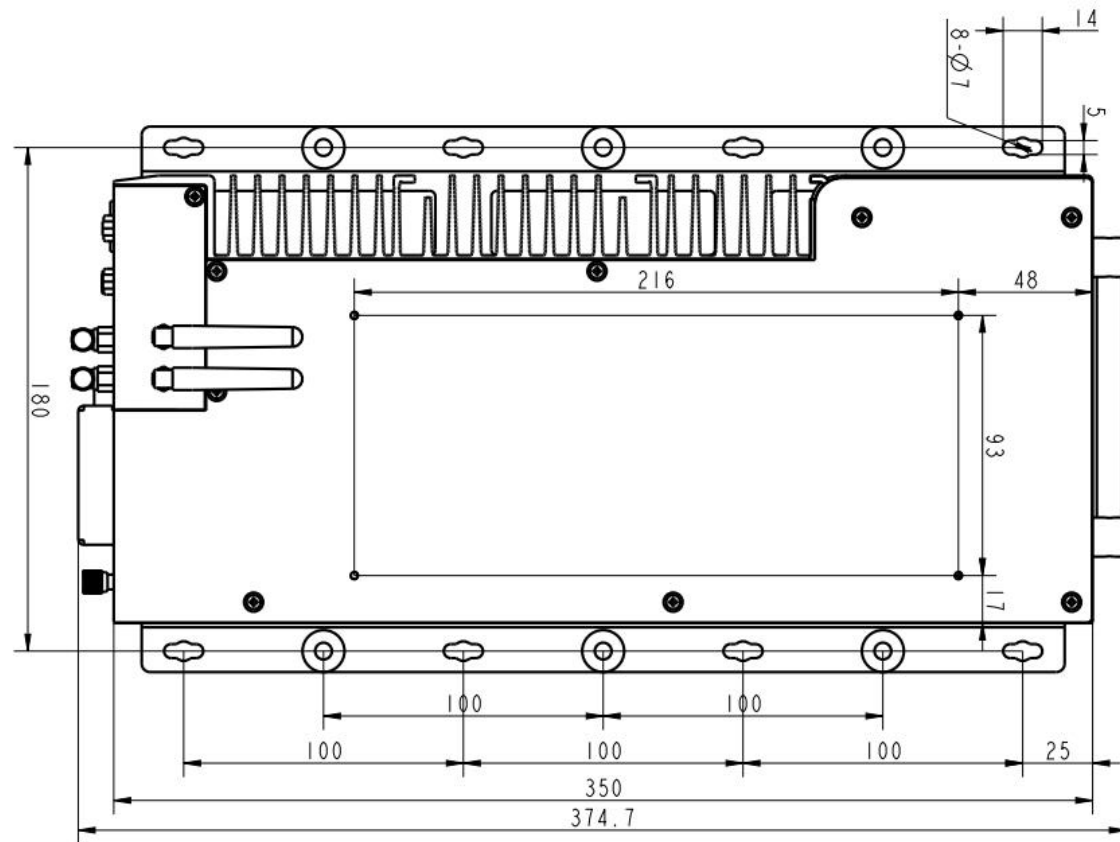
Comparison of BRAV-7720/7721 and BRAV-7520/7521 specifications

	BRAV-7720	BRAV-7721	BRAV-7520	BRAV-7521
Memory	2*2.5" HDD/SSD SATA3, 1*Mini PCIe (Automatic detection) , 1*M.2 2280 M-Key		2*2.5" HDD/SSD SATA3, 1*Mini PCIe (BIOS setting) , 1*M.2 2280 M-Key	4*2.5" HDD/SSD SATA3, 1*Mini PCIe (BIOS setting) , 1*M.2 2280 M-Key
Audio	/		Audio out + Mic	
DIO	Optional 16bit DIO, TTL signal, programmable input/output		16-bit isolation DIO	
USB	6*USB3.2		6*USB3.1 + 2*USB2.0	
COM	2*RS232/422/485		2*RS232/422/485 + 2*RS232	
OS Support	Windows 11, Windows 10 IoT Enterprise 2021 LTSC, Ubuntu, SuSe, Red Hat Enterprise, Wind River Linux, Wind River VxWorks 7		Windows7、Windows* 10 Enterprise & IOT Enterprise (64 bit)(CFL-R)、Windows* Server 2016 (Intel® Xeon® E) Ubuntu*、SuSe*、Redhat Enterprise* 1,2 (Kernel 4.14) (CFL-R) Wind River* VxWorks* 7 (CFL-R)	

Dimension of BRAV-7720

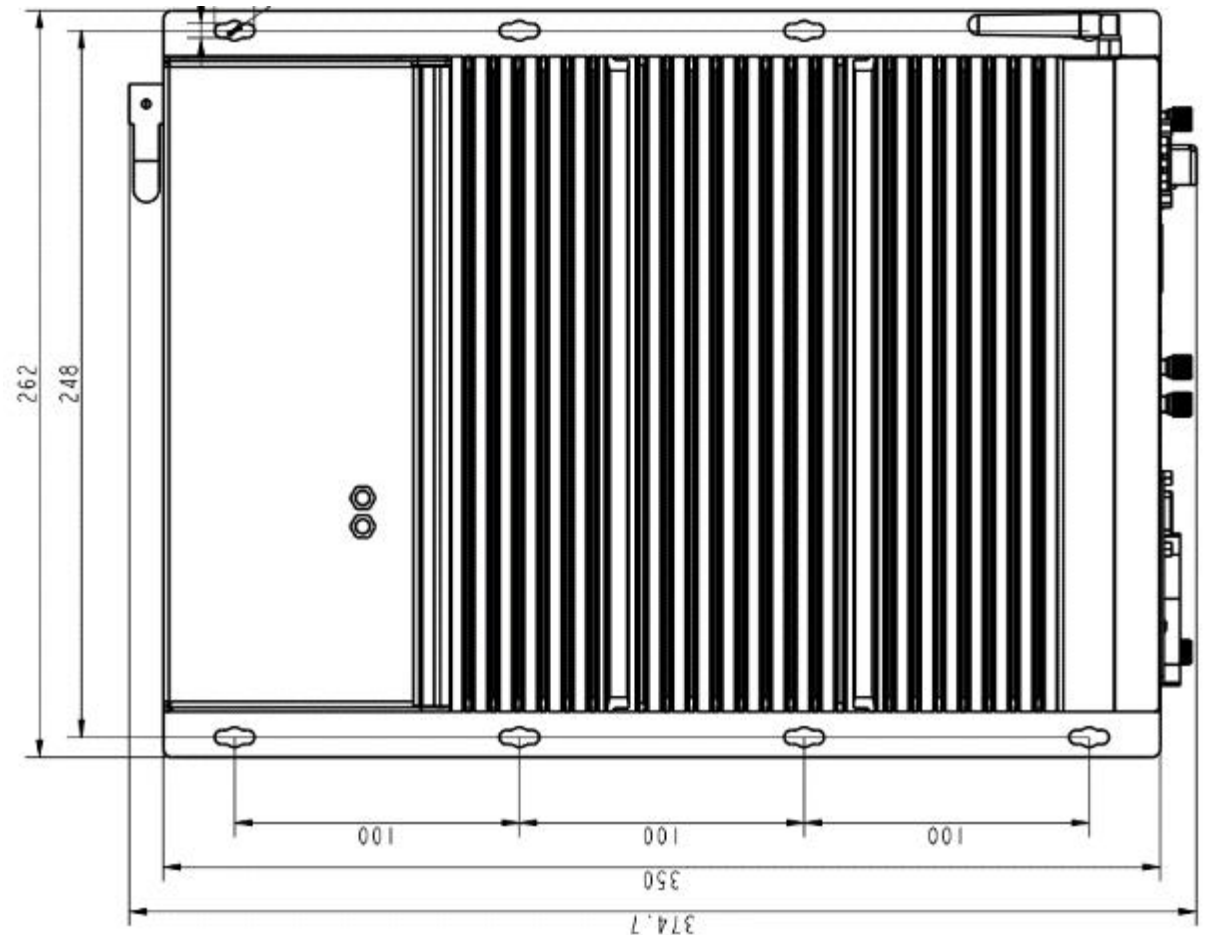
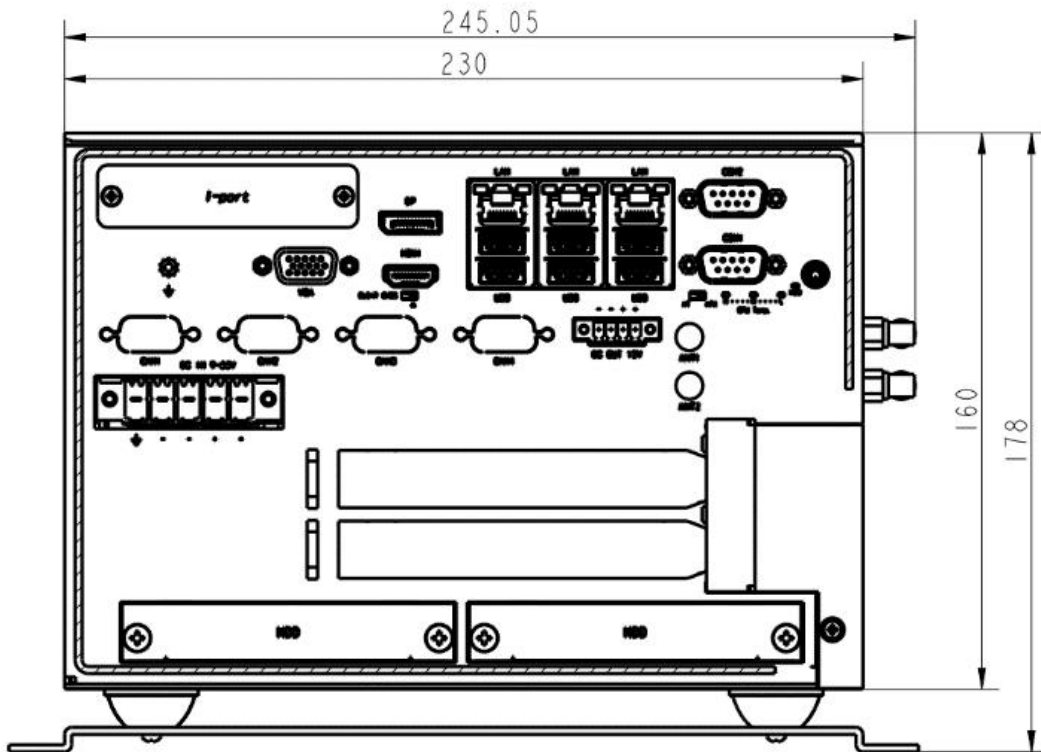


Length *Width * Height: 374.7*195*239.8mm(with mounting parts, handle)



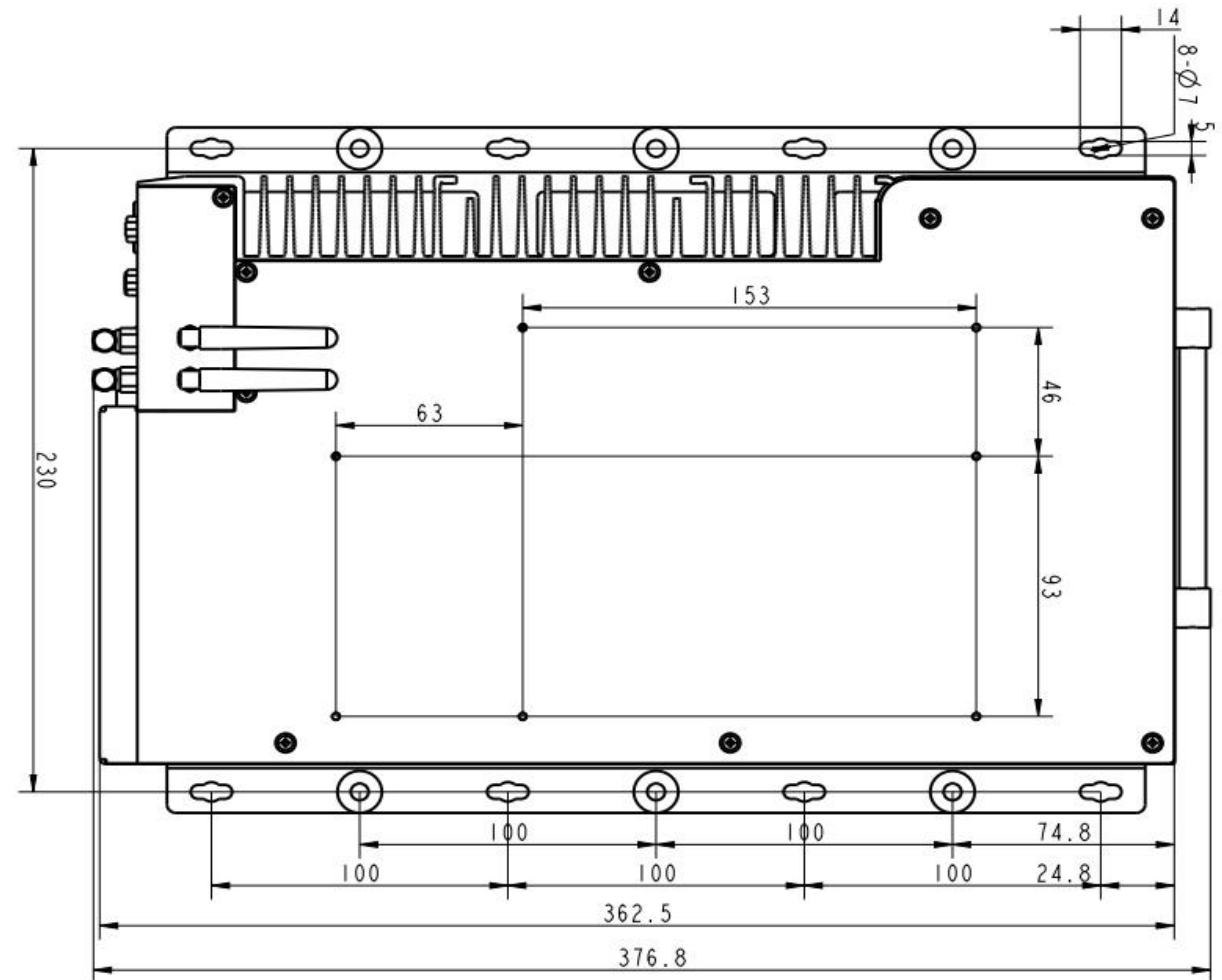
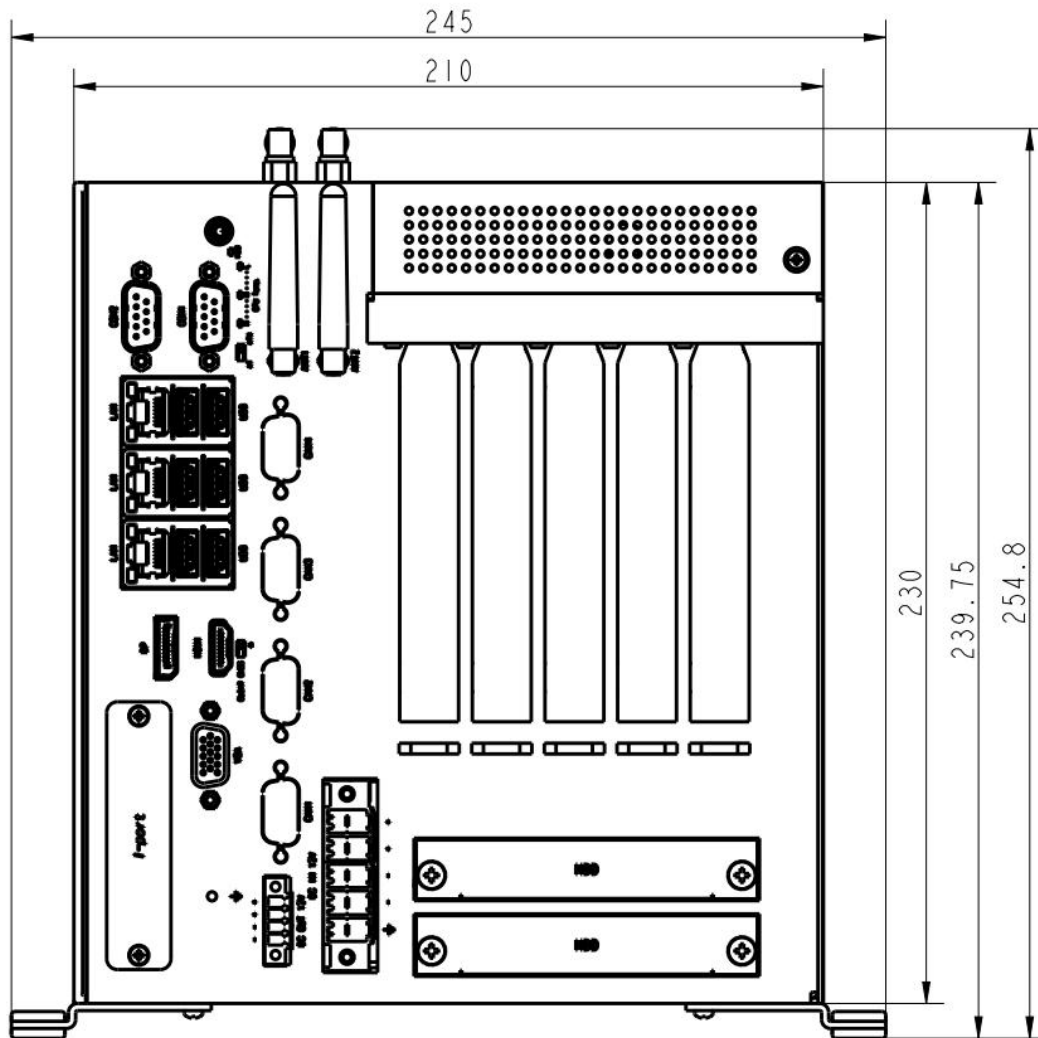
Dimension of BRAV-7720-WP

Length * Width * Height: 374.7*195*239.8mm(with mounting parts, handle)



Dimension of BRAV-7721 and 7721-WP

Length * Width * Height: 374.7*195*239.8mm
(with mounting parts, handle)



03-Product Features

1 <i>High energy efficiency CPU</i>	2 <i>High performance GPU</i>	3 <i>High frequency memory support</i>	4 <i>1+3 quad storage</i>	5 <i>Complete network solution</i>
6 <i>vPro remote management</i>	7 <i>Various PCIe/PCI extensions are available</i>	8 <i>Support gradient computation GPU or AI accelerator card</i>	9 <i>Practical power supply design</i>	10 <i>Efficient heat dissipation design</i>
11 <i>Overall shock absorption</i>	12 <i>DC-OUT Power supply output</i>			

★ High energy efficiency CPU

Twelfth generation desktop processor Alder Lake-S

Maximum support 19-12900k 16 core 24 threads, Turbo boost frequency accelerated to 5.2Ghz

Twelfth generation Intel Core desktop processor

Compared to the 10th generation

up to

1.36x

Single-threaded performance gains

up to

1.35x

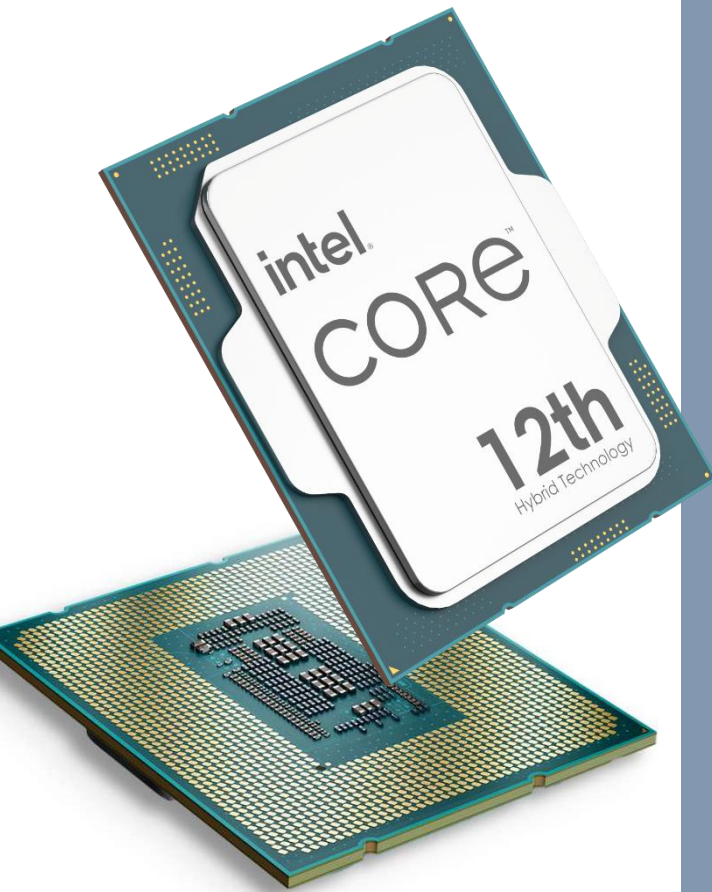
multithreaded performance gains

- P-core & E-core Hybrid architecture'
- The cache of p-core & E-core is added
- The 12 Core Alder Lake's P-core CPU is about 28% better than the 10 generation

Data is obtained from Intel officials



HIGH PERFORMANCE CPU



* Data is obtained from
Intel officials

Twelfth
generation Intel
Core desktop
processor

Compared to the
10th generation

up to

1.94X

Video card
performance
improved

up to

2.81X

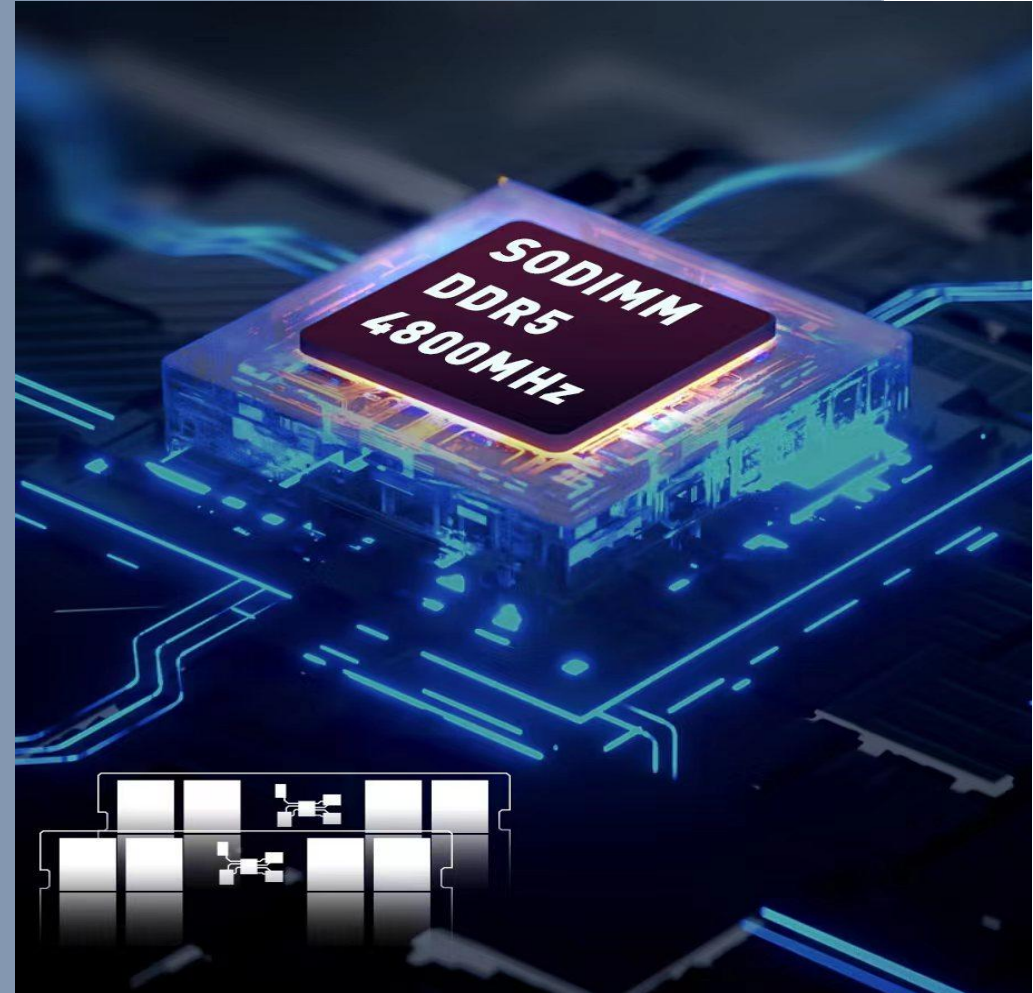
GPU image classification
reasoning performance
improved

Xe Architecture Intel® Hypercore graphics Card 770, up to 32 EUs
1 resolution up to 4K and 1 resolution 8K display output
Windows implements Genlock (synchronous phase lock) video
synchronization
Graphics and display virtualization, 2 Video decoders (VDbox)
VNNI instruction Intel® DL Boost and int8/dp4 instruction +Open
VINO,
Improve image AI reasoning performance



High frequency memory Supports

- The dual-channel DDR5 SODIMM frequency is 4800MHz
- Maximum memory capacity 64GB
- High compatibility supports most mainstream memory manufacturers in the market





★ (1+1+2) quad storage

- 1x M.2 2280 M-Key(Gen4, PCIeX4 signal), supports NVME high-speed solid-state storage disks
- 1x F-Mini PCIe (PCIeX1 or SATA signal) automatically detects mSATA

15mm

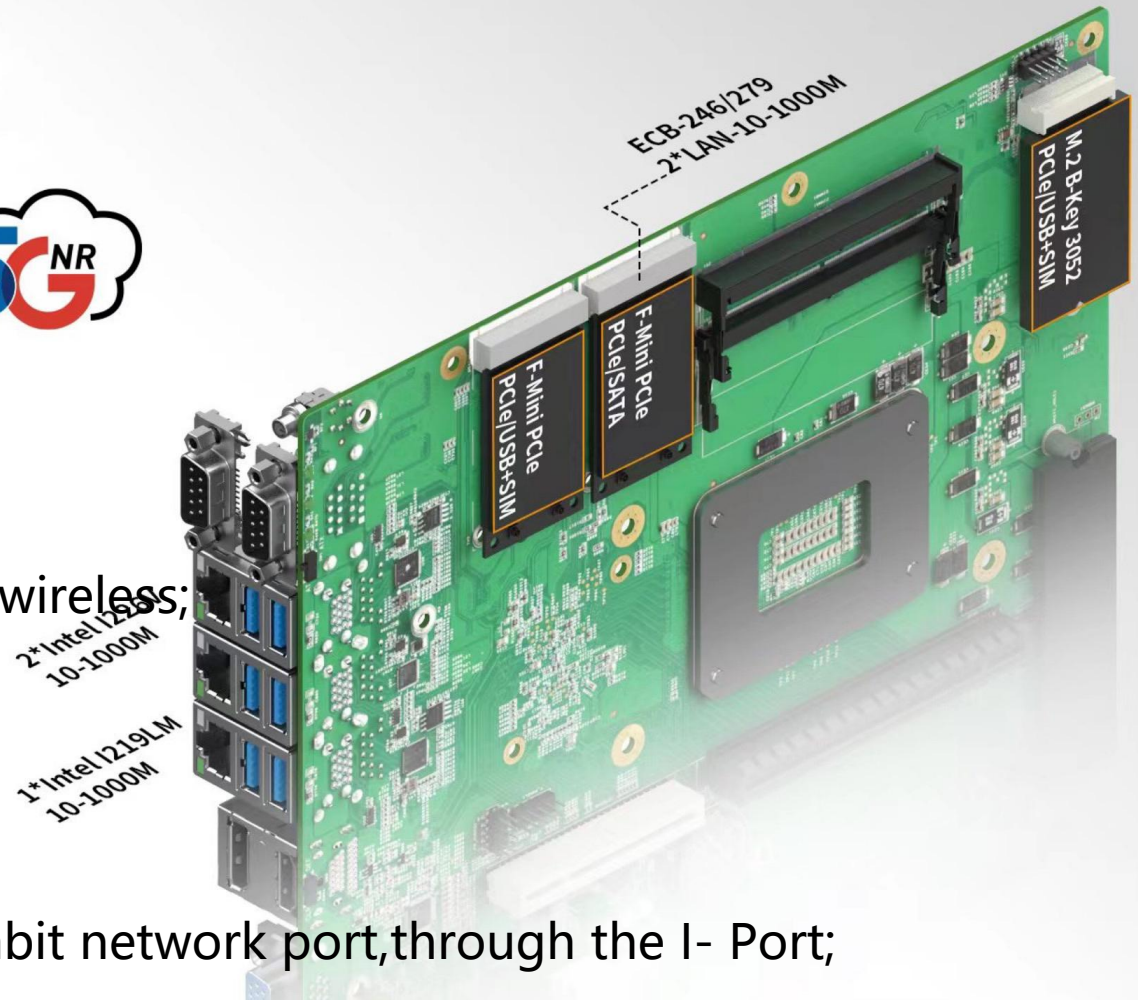
- 2x 2.5 "SATA3 hot-swappable hard disk rack supports 15mm HDDS and RAID 0/1



Complete network solution



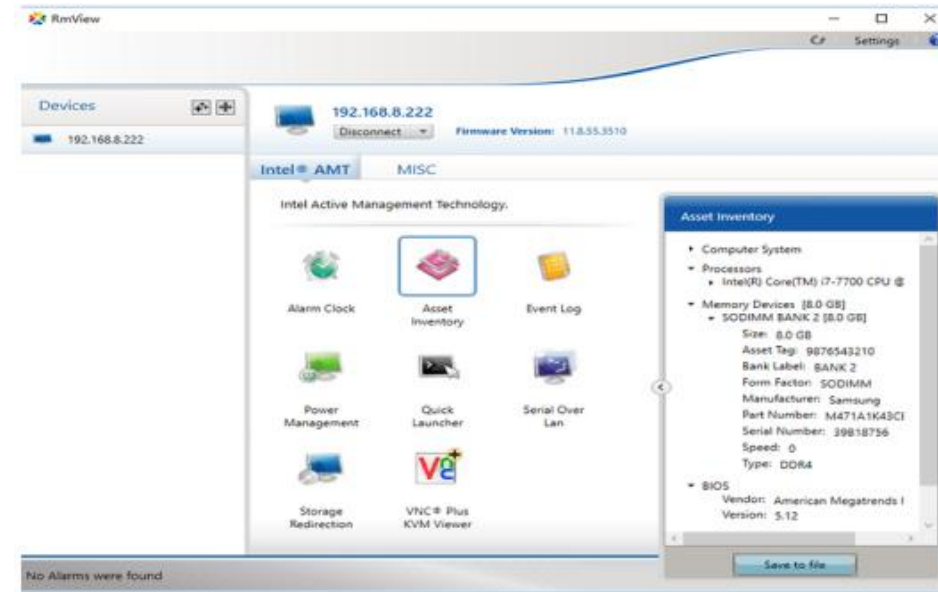
- 2x Intel I226V+1x Intel I219LM Chip, 3 megabit network port;
- 1x F-Mini PCIe (PCIeX1+USB signal)
With SIM card slot, can support 4G LTE or Wifi wireless;
- 1x M.2 B-Key 3052(PCIeX1+USB letter
With SIM card slot, support 5G NR module;
- 1x F-Mini PCIe (PCIeX1 or SATA)
Number), optional ECB-246 or 279 double gigabit network port,through the I- Port;
Multiple Gigabit or 10-gigabit network ports are available through PCIe slots.
- The above complete network scheme enables the system to access multi-channel sensing equipment, communicate with the cloud, and connect wirelessly to the mobile base station at the same time, ensuring independent bandwidth for signal acquisition, data communication and information release.



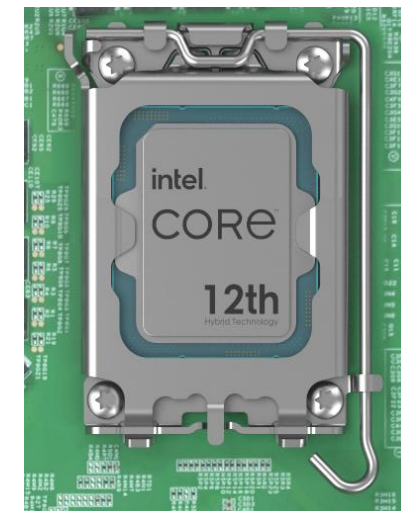


vPro remote management

JHCTECH REMOTE MANAGEMENT VIEW REMOTE MANAGEMENT SOFTWARE



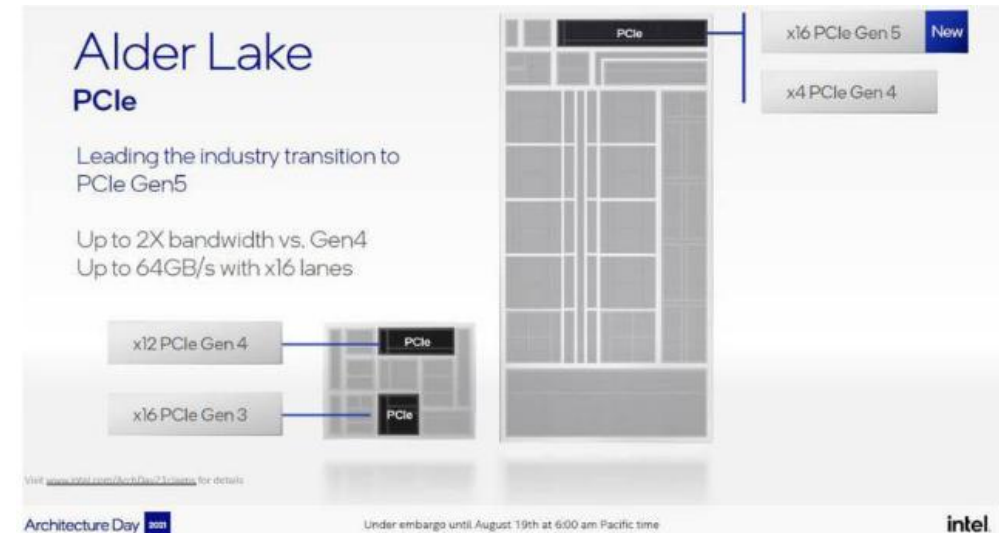
I219LM network chip +
Core I5/I7/I9 CPU



★ Multiple extensions

- The PCIe signal pulled from the CPU is Gen5.0/Gen4.0.
- The BRAV-7720 is a standard dual-expansion design, while the BRAV-7721 is a standard 4-expansion design.
- It can implement four channels of full PCIe expansion (2xPCIeX8+2xPCIeX4), partial PCIe and partial PCI, or all PCI.
- In addition to the five expansion subcards listed in the following table, you can also customize other expansion specifications as required.

Board name	Extension interface
ECX-255	1*PCIeX16 (X16 signal) + 1*PCIeX16 (X4 signal)
ECX-271	1*PCIeX16 (X16 signal) + 1*32bit PCI
ECX-254	2*PCIeX16 (X8 signal) + 2*PCIeX16 (X4 signal)
ECX-275	1*PCIeX16 (X16 signal) + 1*PCIeX16 (X4 signal) + 2*32bit PCI
...	



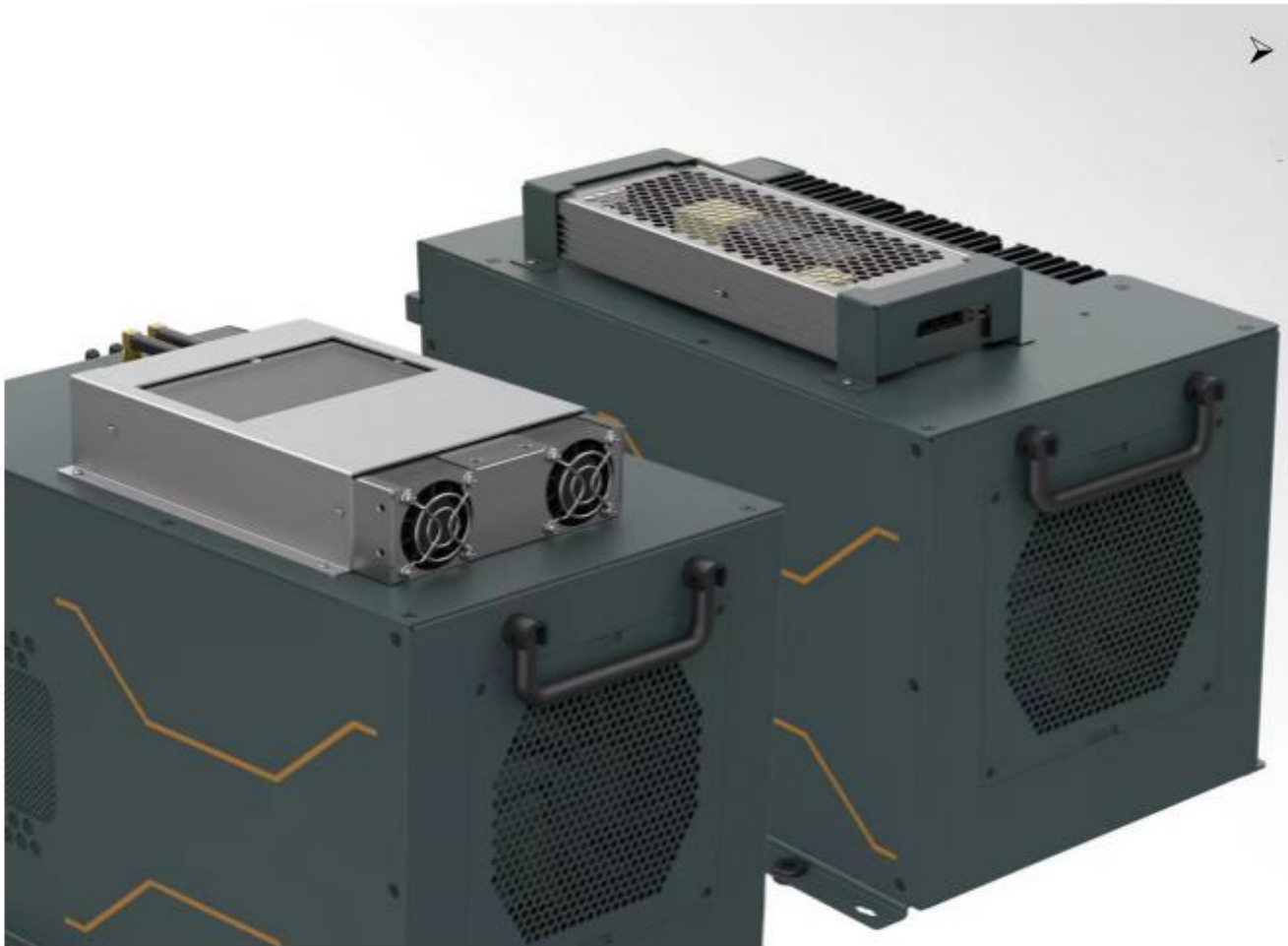
★ Supports GPU cards or AI accelerator cards with different computing power

- 362.5mm deep body length, can accommodate the length of less than 300-320mm cards;
- The power supply with the maximum power output of 1000W can ensure the power supply requirements of dual 350W Gpus (or single 450W+ single 350W).
- The unique power supply design of the expansion card ensures the power supply stability of 75W and 150W acceleration cards and GPU cards of different power levels.
- Passive acceleration cards or GPU cards with different power are equipped with different air duct components to dissipate heat. If the acceleration card or GPU card is active with a fan, no air duct component is required.

Video card series	Model number
NVIDIA GTX 16 series GeForce GPU card	GeForce GTX 1660 Ti、 GeForce GTX 1660 Super、 GeForce GTX 1660、 GeForce GTX 1650 Super、 GeForce GTX 1650 (G5)、 GeForce GTX 1650 (G6)、 GeForce GTX 1630
NVIDIA RTX 30 series GeForce GPU card	GeForce RTX 3090 Ti、 GeForce RTX 3090、 GeForce RTX 3080 Ti、 GeForce RTX 3080、 GeForce RTX 3070 Ti、 GeForce RTX 3070、 GeForce RTX 3060 Ti、 GeForce RTX 3060、 GeForce RTX 3050
NVIDIA Professional	NVIDIA A10 GPU、 NVIDIA A16 GPU、 NVIDIA T4 GPU、 NVIDIA RTX A6000、 NVIDIA RTX A5000、 NVIDIA RTX A4000、 NVIDIA RTX A2000
Domestic AI accelerator card	DENGLIN Goldwasser-L128、 DENGLINGoldwasser-L256、 DENGLINGoldwasser-UL32、 DENGLIN Goldwasser-UL64、 Iluvatar MR-50、 Iluvatar MR-100、 Cambricon MLU370-S4、 Cambricon MLU370-X4



Practical power supply design



- Four models with two power (600W and 1000W), three sets of power supply design
- (DC 12V/1000W, DC 9-55V/600W and DC 9-55V/1000W);
- DC-IN 12V non-wide-voltage power supply solution, equipped with high PFC wide-temperature AC-DC switching power supply
- The DC-IN 9-55V wide-voltage power supply solution applies to the DC power supply environment and mobile vehicle scenarios.
- More than 96% DC-DC conversion efficiency, with under voltage protection UVP, over voltage protection OVP, over current protection OCP and high temperature protection OTP.

- CPU and PCH adopt large aluminum extruded profiles without fan passive heat dissipation design, operating temperature range $-20\sim+60^{\circ}\text{C}$;

-20°C

60°C

- 70,000-hour life of high temperature fan, sensor collection of the inner ring temperature of the chassis, through the MCU intelligent speed control, to ensure the acceleration of the heat dissipation card and achieve energy saving and noise reduction.



- IO function cards, acceleration cards and GPU cards adopt active air cooling design and rely on chassis fans to achieve heat dissipation through linear air ducts.



Efficient heat dissipation design



★ Overall shock absorption

- WP model adopts shock-absorbing chassis as mounting bracket to ensure seismic effect in mobile environment;
- Non - wide - press models have 6 cushioning rubber foot pads.





★ DC12v/6a external power supply interface

Synchronizing the power supply timing of radars, Rsus and other equipment

04-Order Info



BRAV-7720-S001 04-Order specification

model	Description	Extend
BRAV-7720-S001	Edge computing system, Intel® 12th generation Alderlake-S LGA1700 CPU, Q670 PCH, 2*DDR5 SODIMM, 3*LAN, 6*USB3.2, 2*USB2.0, 2*COM, 1*VGA, 1*DP, 1*HDMI, 16bit DIO, 1*I-Port, 2*2.5" SATA bay, 2*Mini PCIe, 1*M.2 B-Key, 1*M.2 M-Key, DC-OUT 12V, DC-IN 12V.	Standard: Dual expansion card, 1*PCIeX16 (X16 signal) + 1*PCIeX16 (X4 signal) Optional: ECX-271 Dual expansion card, 1*PCIeX16 (X16 signal) + 1*32bit PCI
recommend Graphics card /AI accelerator card	the higher proforman1*450W GPU or 2*75W/ AI accelerator card (Video .card/accelerator card length required)	
	Recommended graphics card /AI accelerator card Supports a maximum of 1 x 450W GPU or 2 x 75W/150W AI accelerator card (the length of the graphics card/accelerator card must be less than 320mm).	



BRAV-7720-WP-S001 04-Order specification

model	description	Extend
BRAV-7720-WP-S001	Edge computing system Intel® 12th generation Alderlake-S LGA1700 CPU, Q670 PCH, 2*DDR5 SODIMM, 3*LAN, 6*USB3.2, 2*USB2., 2*COM, 1*VGA, 1*DP, 1*HDMI, 16bit DIO, 1*I-Port, 2*2.5" SATA bay, 2*Mini PCIe, 1*M.2 B-Key, 1*M.2 M-Key, DC-OUT 12V, DC-IN 9-55V.	Standard: ECX-255 Dual Expansion Card, 1*PCIeX16 (X16 signal) + 1*PCIeX16 (X4 signal) Optional: ECX-271 Dual expansion card, 1*PCIeX16 (X16 signal) + 1*32bit PCI
recommend Graphics card /AI accelerator card	Maximum support: 1*450W GPU or 2*75W/150W AI acceleration card (the length of the graphics card/acceleration card must be less than 320mm)	
UHP-500DC12	AC/DC Switching power supply, DC12V@41.7A, 90-264V AC input, DC12V output, wide temperature without fan, 500W	



BRAV-7721-S001 Order specification



BRAV-7721-WP-S001 Order specification

04-Order specification

model	description	extend
BRAV-7721-S001	Edge Computing System, Intel® 12th generation Alderlake-S LGA1700 CPU, Q670 PCH, 2*DDR5 SODIMM, 3*LAN, 6*USB3.2, 2*USB2.0, 2*COM, 1*VGA, 1*DP, 1*HDMI, 16bit DIO, 1*I-Port, 2*2.5" SATA bay, 2*Mini PCIe, 1*M.2 B-Key, 1*M.2 M-Key, DC-OUT 12V, DC-IN 12V	Standard configuration: ECX-254 Quad Expansion Card, 2*PCIeX16 (X8 signal) + 2*PCIeX16 (X4 signal) Optional: ECX-275 Quad expansion card, 1*PCIeX16 (X16 signal) + 1*PCIeX16 (X4 signal) + 2*32bit PCI
recommend Graphics card /AI accelerator card	Maximum support: 2*450W GPU+2*75W/150W AI acceleration card (the length of the graphics card/acceleration card must be less than 320mm)	
UHP-500DC12	AC/DC Switching power supply, DC12V@41.7A, 90-264V AC input, DC12V output, wide temperature without fan, 500W	
LMF1000-20B12	AC/DC switching power supply, DC12V@80A 90-264V AC input or 120-370V DC input, DC12V output, 1000W low noise	

model	description	extend
BRAV-7721-WP-S001	Edge Computing System, Intel® 12th generation Alderlake-S LGA1700 CPU, Q670 PCH, 2*DDR5 SODIMM, 3*LAN, 6*USB3.2, 2*USB2.0, 2*COM, 1*VGA, 1*DP, 1*HDMI, 16bit DIO, 1*I-Port, 2*2.5" SATA bay, 2*Mini PCIe, 1*M.2 B-Key, 1*M.2 M-Key, DC-OUT 12V, DC-IN 9-55V	Standard configuration: ECX-254 Quad Expansion Card, 2*PCIeX16 (X8 signal) + 2*PCIeX16 (X4 signal) Optional: ECX-275 Quad expansion card, 1*PCIeX16 (X16 signal) + 1*PCIeX16 (X4 signal) + 2*32bit PCI
recommend Graphics card /AI accelerator card	Maximum support: 2*450W GPU+2*75W/150W AI accelerator card (the length of the graphics card/accelerator card must be less than 300mm)	
UHP-500DC12	AC/DC Switching power supply, DC12V@41.7A, 90-264V AC input, DC12V output, wide temperature without fan, 500W	
LMF1000-20B12	AC/DC switching power supply, DC12V@80A 90-264V AC input or 120-370V DC input, DC12V output, 1000W low noise	

05-Target Market

- Visual inspection of factory production line
- AI machine vision
- Visual logistics sorting

Machine vision

- Multi-channel AI inspection machine
- Portable face recognition analysis

Intelligent security

Medical image

C-V2X car networking Roadside MECs and on-board domain controllers

- Holographic intersection (AI signal control machine)
- Highway incident detection
- Unmanned driving
- Low speed unmanned driving (collecting card, mining card, unmanned delivery vehicle)

Special vehicle onboard

- Police video enforcement vehicle
- Emergency command vehicle onboard
- Ambulance vehicle

- CT machine
- Nuclear magnetic resonance machine
- X-ray machine
- Ai-assisted diagnosis and treatment system

Special Offer for BRAV-7131,BRAV-7720/7721

Rules description:

This Order	Next Order	Deducted price from next order
For any distributor having attended our today webinar and completed the order for the bare sample machine (BRAV-7131,BRAV-7720/7721) before June 30.	Over \$10,000	\$500
	Over \$15,000	\$900

- 1. The valid period for sample orders is counted from 6/12-6/30.
- 2. Screenshots must be joined to the order as proof of attendance at the webinar.
- 3. JHCTECH reserves the right of final approval for this commercial offer.

SPECIAL OFFER



BUY NOW

Q: What is the DC output voltage and current of the BRAV-7131?What's the computing power of the BRAV-7131?

A:The DC output voltage and current of the BRAV-7131 is 12V/3A.
S001--200TOPS;S002--275TOPS(INT8)

Q: Can BRAV-7720/7721 support RAID function?

A: Yes,it can support 2*2.5 inch 15mm HDD/SSD,support RAID0 and RAID1.

Stay in Touch



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Thank you!