

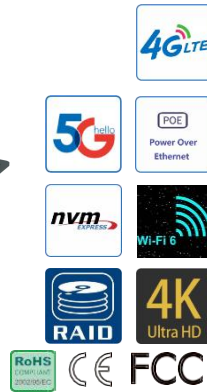
BRAV-7601-T003

Intel® Comet lake Celeron/Pentium/Core™ i9/i7/i5/i3 CPU,
3*LAN, 4*POE, 8*USB, 2*COM, 3*M.2, 24 bit DIO

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MEC System—BARV Series



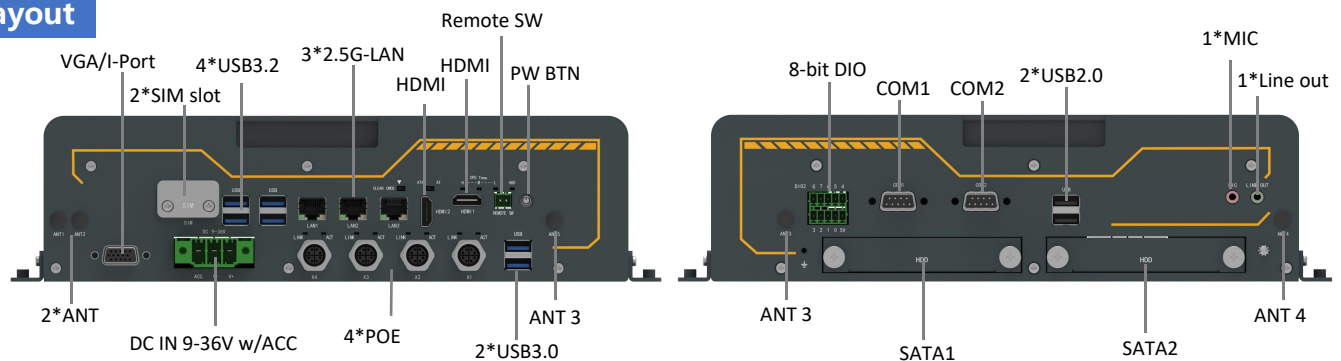
Key Features

- Intel® Comet lake 10th-Gen Celeron/Pentium/Core™ i9/i7/i5/i3 CPU
- Aluminum frame, fan-less
- 3*2.5G-LAN+4*Gig-LAN with POE
- VGA+2*HDMI, 3 independent display
- 3*M.2 support Gig-WiFi6, 4G LTE, 5G NR
- 1*MXM3.1 support MLU220-MXM AI acceleration modules
- DC9~36V wide power input, with ACC delayed on/off function

Product Overview

BRAV-7601 is a high performance fan-less AI MEC computing system, powered by Intel® Comet lake CPU, network port multi-display and multi-IO functions, including 1 POE and 3 POE, DC9~36V wide voltage power supply with ACC delay power on/off function, suitable for vehicle-road collaboration C-V2X, special vehicle on-board, machine vision, medical imaging and other industry applications.

IO Layout

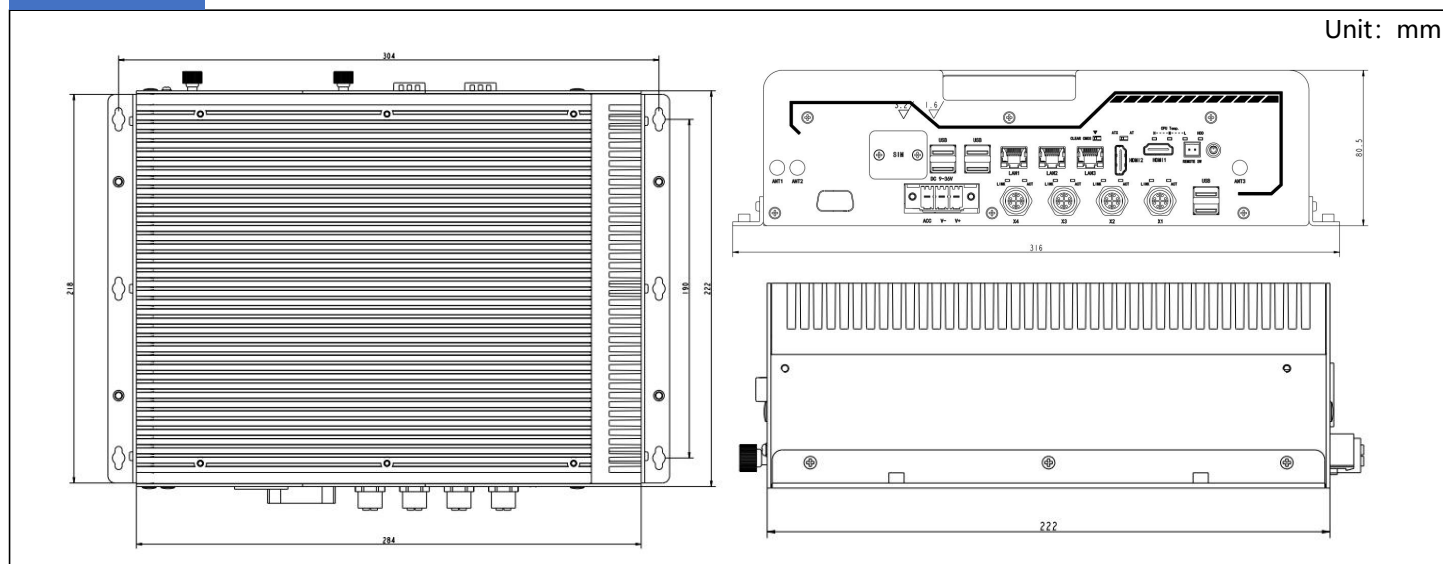


SPEC.

CPU+PCH	Intel® Comet lake 10th-Gen Celeron/Pentium/Core™ i9/i7/i5/i3 CPU, Intel® Q470 PCH
System Memory	2*DDR4 SO-DIMM slot, support 2933MHz, up to 64GB
Expansion	1*Mini-PCIe Full size, PCIeX1 and SATA3 signal select via BIOS, USB2.0+SIM, support mSATA or 4G LTE 1*M.2 Type 2230 E-key, PCIeX1, USB2.0 and CNVio, support Gig+ WiFi6 & BT5.0 1* M.2 Type 3052 B-key, PCIeX1, USB2.0+SIM, support 5G NR compatible 4G LTE 1*M.2 Type 2280 M-Key(PClex4 signal), support NVME, or PCIe expansion module 1*MXM3.1, PCIeX16, support Cambricon MLU220-MXM AI acceleration cards JHCTECH-02 E/IO, 2*PCIeX4 signal, 2*USB3.0, 2*USB2.0, 160pin European standard interface
Graphics	Intel® UHD Graphics, support DirectX 12, openGL 4.5, 2*HDMI 1.4(Dual 4K ultra HD display), max res. 4096 x 2304@24Hz, 1*VGA max res. 1920*1200@60Hz;
Audio	Optional Realtek ALC controller, 1*Audio-out & 1*MIC HD Audio, support 5.1 channel
LAN	3*Intel I226V 2.5G-LAN, support iAMT 13.0, support vPro with Core I5/I7/I9 CPU 4*Intel I210AT PCIe Gig. Ethernet with POE function, 10/100/1000Mbps self-adaptive, single network port: full bandwidth of independent PCIe 3.0 X1 channel
Storage	2*2.5" HDD SATA3(support RAID0,1), max support dual15mm highly HDD, max support 6Gbps; 1*M.2 Type 2280 M-Key(PClex4 signal), support NVMe SSD; 1*mSATA(or 1*Mini PCIe both optional)
DIO	8bit, TTL signal, programmable input and output
I/O Interface	Front I/O: 3*2.5G-LAN & 4*POE Gig-LAN(both M12 X-CODE); 4*USB3.2(Type A), max10Gbps transport speed; 2*USB3.0 (Type A); CPU graphics: 2*HDMI & 1*VGA (I-Port); 2*SIM slot; Rear I/O: 2*USB2.0(Type A); 2*RS232/422/485, can select mode via BIOS (DB9 Male); 1*8-bit DIO (2*5Pin Phoenix ter); 1*Line out+1*Mic (3.5mm phone jack); Internal interface: 2*RS232(2*5pin header); 1*USB2.0(header)&1*USB2.0(type A); 1*16-bit DIO(2*10pin header) ; 1*Front Audio(2*5pin header); 1*SM Bus(4pin wafer)

I-port	Support internal 16-bit DIO、1*USB2.0、1*VGA、1*COM or M.2/Mini PCIe and ect. expansion module
LED	1*Power LED(on power button), 1*HDD LED, 3*CPU temp LED (Red is warning , Yellow is high, Green is normal)
Control SW	1* Power button w/LED, 2-pin phoenix term remote SW, 1*F-panel header, AT-ATX SW, Clear Cmos SW
Power Supply	DC 9-36V wide power input, 3-pin 7.62mm phoenix term, with short circuit, over voltage and over current protection, Maximum output power: 350W TDP: 24V/2.17A(I3-10100TE CPU, 8G memory); With ACC delay power on and off signal, the software can program the delay start and delay shutdown time
Watchdog Timer	Watchdog timeout programmable via software 1 to 255 second
OS Support	Windows 10 IoT Enterprise (64-bit), Windows Server 2019, Ubuntu, SUSE, Redhat Enterprise, Wind River Linux, Yocto Project (64-bit), Wind River VxWorks 7
Structure	Aluminum-magnesium alloy, SGCC frame
Color	Granite gray + Black
Mounting	Desktop Mounting
Dimension	(L*W*H): 284*222*80.5mm
Net weight	6.40kg
Operating temperature	-20°C ~ 60°C, airflow
Storage Temperature	-40°C~85°C
Storage Humidity	10~95%@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.	Introduction	
BRAV-7601/T003	Fan-less AI MEC system	Intel Q470 PCH, Intel CML LGA1200 CPU, 1*MXM 3.1, 3*2.5G LAN,4* POE, 2*USB3.0, 4*USB3.2, 8bit DIO, 2*USB2.0, 2*COM,1*Mini PCIe, 1*M.2 E-Key, 1*M.2 B-Key, 2*HDMI,1*VGA, 1*MIC & 1*Audio-out, 1*mSATA(Opt.), 1*M.2 M-Key, 2*2.5" SATA bay, 1*I-Port, DC 9~36V w/ACC
Recommend MXM3.1 AI module	Cambricon MLU220-MXM	
PA-120DC19	AC/DC power adapter, DC19V/6.32A,120W	
PA-220DC24	AC/DC power adapter, DC24V@12.5A ,300W	