



AI EDGE INFERENCE COMPUTER

BCO-6000-RPL

AI Edge Computer with Intel Raptor Lake-S/ Alder Lake-S® CPU, 3x DP, 2x COM



Features

- Support Intel® IOTG Raptor Lake-S/ Alder Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only)
- 2x DDR4 SODIMM. Max. up to 64GB (Default: 8GB)
- Triple Independent Display by 2x Display Port, 1x HDMI
- Intel® I225-V/ I225LM/ I225LV 2.5GbE LAN
- 1x M.2 (M Key (Default: 128GB SSD)), 1x M.2 (E key), 1x M.2 (B key)
- 4x COM, 6x USB 3.2 Gen2, 2 USB 3.2 Gen1, x2 USB 2.0
- 2x PCIe x8 Slot or 1x PCIe x16 Slot
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature 0°C to 50°C
- TPM 2.0 Supported
- CE, FCC Class A



Specifications

System	
Processor	Intel® IOTG Raptor Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only) Intel® IOTG Alder Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only)
System Chipset	Intel® Q670E Express Chipset
LAN Chipset	Intel® I225LM PCIe 2.5GbE LAN Intel® I225V PCIe 2.5GbE LAN Intel® I225LV PCIe 2.5GbE LAN
Audio Codec	Realtek ALC897
System Memory	2x DDR4 3200MT/s SODIMM. Max. up to 64 GB (Default: 8GB & Non- ECC supported)
BIOS	AMI UEFI BIOS
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0
Display	
Display Port	2x Dual Mode DisplayPort 1.4a Max Resolution 4096 x 2304 @60Hz
HDMI	1x HDMI 1.4b Max Resolution 4096 x 2304 @24Hz
Multiple Display	3x Independent Displays
Storage	
M.2 M-Key	1x M.2 M key Type (2242/2280): • Support PCIe x4 Gen3 NVMe SSD • PCIe x4 Gen3 signal from PCH • Support B+M Key • Default: 128GB SSD
Expansion	
M.2 B-Key	1x M.2 B key Type: 3042 with Nano SIM Holder (Support PCIe x1 + USB 3.2 Gen 2 x1 + USB 2.0, 5G/4G/LTE/AI Module)
M.2 E-Key	1x M.2 E key Type: 2230 (Support PCIe x1 + USB 2.0; Support CNVi) Devices Supported: Intel® AX210 Wi-Fi 6E & BT-5.1 (vPro Supported)
PCIe	2x PCIe x8 Slot or 1x PCIe x16 Slot 1x Default Industrial Fan Support A2000 GPU (optional)
I/O	
Audio	Line-out/Mic-in
COM	4x DB9 COM1: RS232/422/485 COM2: RS232/422/485 COM3: RS485 COM4: RS485
DIO	8 in / 8 out (Isolated)
LAN	3x RJ45 (2.5GbE)
USB	8x USB 3.2 Gen 2 x1 Type-A 2x USB 2.0 Type-A
Others	5x Antenna Holes 1x Power button 1x HD LED 1x Power LED
Operating System	
Windows	Windows 10/11
Linux	Linux Kernel

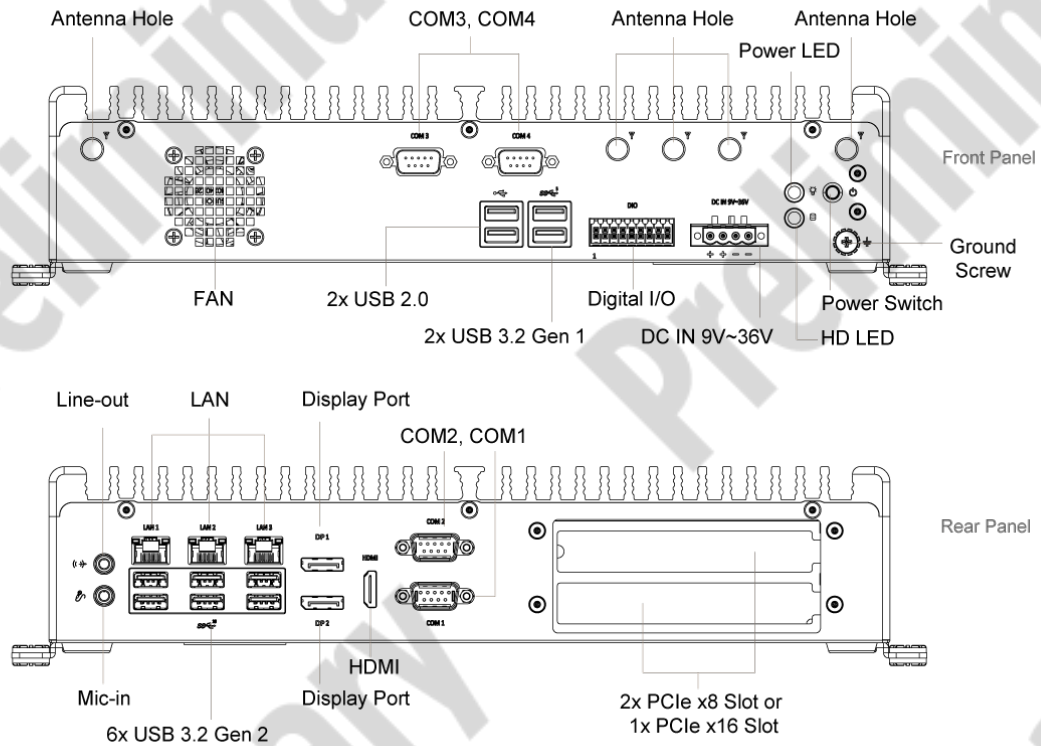
Power	
Power Adapter	Optional AC/DC 24V/9.2A, 220W for CPU and GPU Expansion
Power Mode	AT, ATX (Default ATX)
Power Supply Voltage	9~36VDC Default 24~36VDC for add GPU Card
Power Connector	4-pin Terminal Block
Environment	
Operating Temperature	0°C to 50°C (35W CPU) Tested according to: IEC60068-2-1:2007 (Cold test procedure) IEC60068-2-2:2007 (Dry heat test procedure) IEC60068-2-3:2007 (Damp heat, steady state, test procedure) IEC60068-2-14:2009 (Wide temperature range thermal shock)
Storage Temperature	-30°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Certification	EMC: • CE • FCC Class A (47 CFR part 15.109 and part 15.107) • ICES-003 • UKCA Green Product: • RoHS 3.0 (Directive 2015/863/EU) • REACH
Vibration	IEC60068-2-64:2008 With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis) Designed to comply with MIL-STD-810G Method 514.7 Procedure I
Shock	IEC60068-2-27:2008 With SSD: 50G half-sin 11ms Designed to comply with MIL-STD-810G Method 514.7 Procedure I Package Drop Test: ISTA 2A
Physical	
Dimensions (WxDxH)	330 x 240 x 69mm
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting

* All specifications and photos are subject to change without notice.



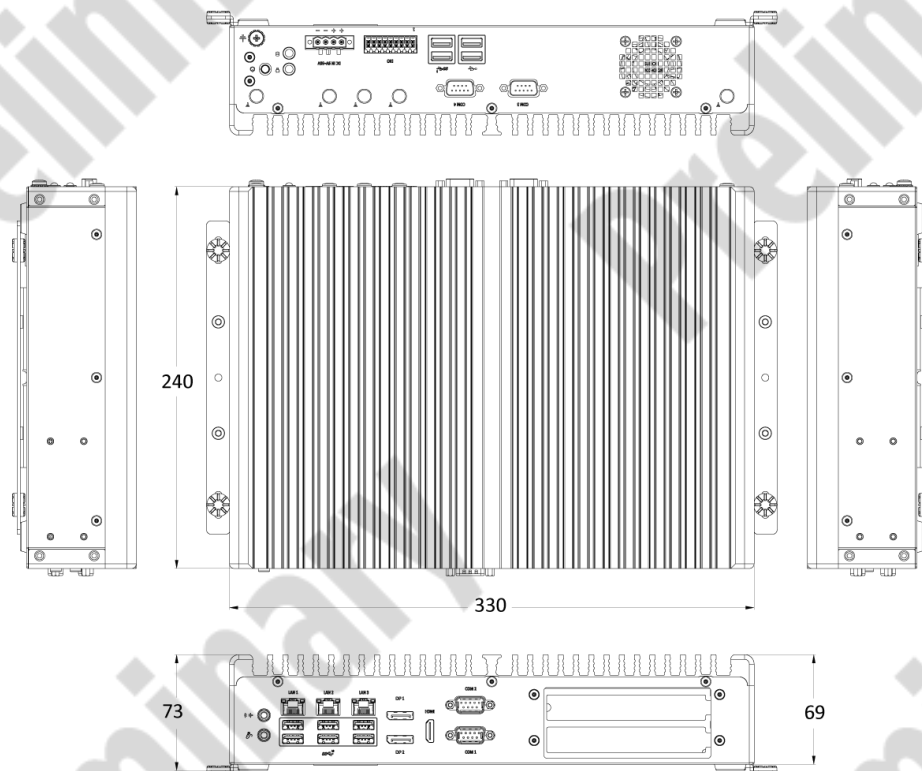
BCO-6000-RPL

External I/O Mechanical Layout



Dimension

Unit: mm





BCO-6000-RPL

Available Models

Model No.	Description
BCO-6000-RPL-1E16	AI Edge Computer with Intel Raptor Lake-S/ Alder Lake-S® CPU, 3x DP, 2x COM, 1x PCIe (16-lane)
BCO-6000-RPL-2E8	AI Edge Computer with Intel Raptor Lake-S/ Alder Lake-S® CPU, 3x DP, 2x COM, 2x PCIe (8-lane)

Optional Accessories

Model No.	Description
1-E09A22102	Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch
1-TPCD00005	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm

Packing List

1x BCO-6000-RPL
1x Wall Mount Kit
1x Accessory Kit



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Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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