



### Features

- Support Intel<sup>®</sup> IOTG Raptor Lake-S/ Alder Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only)
- DDR4 SODIMM. Max. up to 64GB (Default: 8GB)
- Triple Independent Display by 2x Display Port, 1x HDMI
- Intel<sup>®</sup> 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, 2x USB 3.2 Gen1, 2x USB 2.0
- 9 to 36VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature 0°C to 50°C (35W CPU)
- TPM 2.0 Supported
- CE, FCC Class A

### Specifications

#### System

Processor	Intel <sup>®</sup> IOTG Raptor Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only) Intel <sup>®</sup> IOTG Alder Lake-S Processor Core i9/i7/i5/i3, Pentium, Celeron (35W only)
System Chipset	Intel <sup>®</sup> Q670E Express Chipset
LAN Chipset	Intel <sup>®</sup> I225LM PCIe 2.5GbE LAN Intel <sup>®</sup> I225V PCIe 2.5GbE LAN Intel <sup>®</sup> I225LV PCIe 2.5GbE LAN
Audio Codec	Realtek ALC897
System Memory	DDR4 3200MT/s SODIMM. Max. up to 64 GB (Default: 8GB)
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	1x M.2 M key Type (2242/2280): • Support PCIe x4 Gen3 NVMe SSD • PCIe x4 Gen3 signal from PCH • Support B+M Key, AI/Storage Module • Default: 128GB SSD
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#### Expansion

M2	1x M.2 E key Type: 2230 (Support PCIe x1 + USB 2.0; Support CNVi) Devices Supported: Intel <sup>®</sup> AX210 Wi-Fi 6E & BT-5.1 (vPro Supported)
	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 Module)

#### 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	6x USB 3.2 Gen2 2x USB 3.2 Gen1 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/5A, 120W
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Power Mode	AT, ATX (Default ATX)
Power Supply Voltage	9~36VDC
Power Connector	4-pin Terminal Block

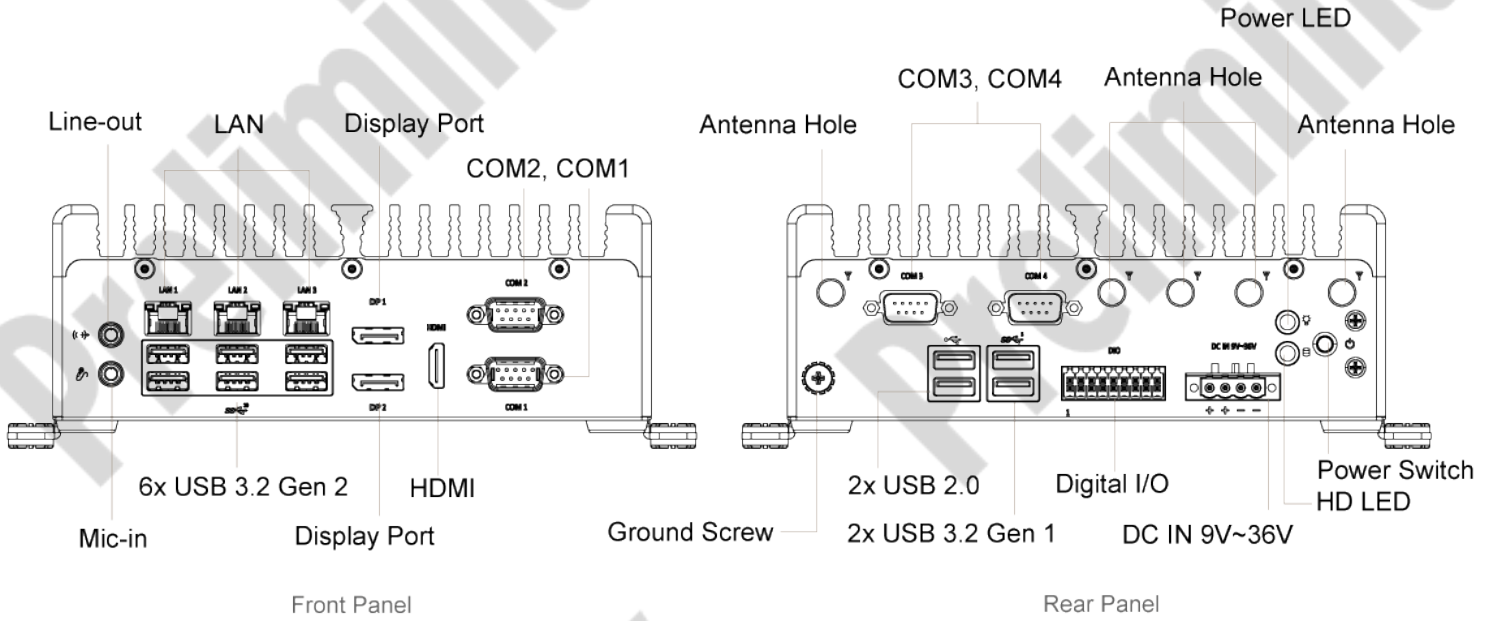
#### Environment

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

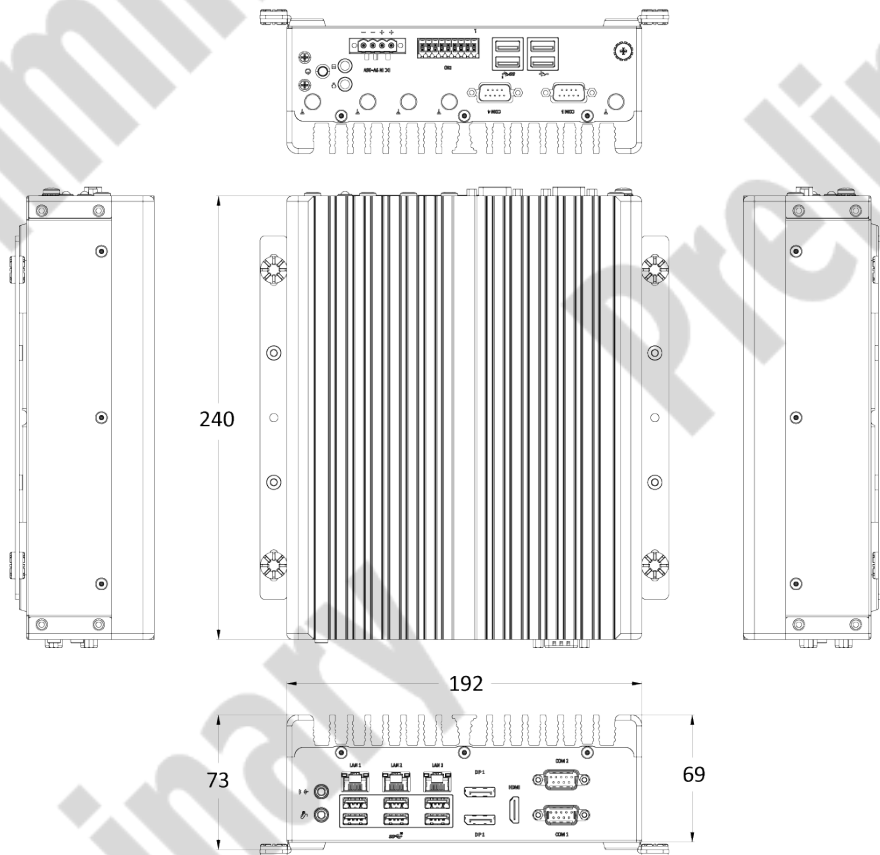
Dimensions (WxDxH)	192 x 240 x 69mm
Construction	Extruded Aluminum with Heavy Duty Metal
Mounting Options	Wall Mounting DIN-Rail Mounting (Optional)

## External I/O Mechanical Layout



## Dimension

Unit: mm



#### Available Models

Model No.	Description
BCO-3000-RPL	Small Form Factor Computer with Intel Raptor Lake-S/ Alder Lake-S® CPU, 3x DP, 2x COM

#### Optional Accessories

Model No.	Description
1-E09A12002	Adapter AC/DC 12V 5A 120W with 3pin Terminal Block Plug 5.0mm Pitch
SFICBL022	Power Cord, 3-pin US Type, 180cm
1-TPCD00002	Power Cord, European Type, 180cm
1-TPCD00001	Power Cord, 3-pin UK Type, 180cm
3-DINR-0004	Din Rail-2 Mounting Kit

#### Packing List

1x BCO-3000-RPL SMALL FORM FACTOR COMPUTER  
1x Wall Mount Kit  
1x Accessory Kit