

Fanless Mini Computer with 8th Gen Intel® Core™ and Celeron® Processor , 2xLAN, 4xUSB 3.2



## FEATURES

- Support 8<sup>th</sup> Gen. Intel® Core™ i5, i3 & Intel® Celeron® Processor
- 1x 260-pin DDR4 2400 SO-DIMM. Max. up to 32GB
- 2x Intel® GbE (Support Wake-on-LAN and PXE)
- Dual Independent Display by 1x DisplayPort and HDMI (Optional)
- 2x Mini PCIe (Gen3) w/ a SIM slot support
- 4x USB 3.2 Gen 2 (10Gbps), 4x RS-232/422/485 (w/ 2x Internal)
- 1x Internal 2.5" SATA HDD Bay and 1x mSATA
- Watchdog timer 1~225sec. system reset
- TPM 2.0 Supported

## SPECIFICATIONS

### System

Processor	Support 8 <sup>th</sup> Gen. Intel® WL-UE Processor (15W TDP) Intel® Core™ i5-8365UE Processor 6M Cache, up to 4.10 GHz Intel® Core™ i3-8145UE Processor 4M Cache, up to 3.90 GHz Intel® Celeron® Processor 4305UE 2M Cache, 2.00 GHz
System Chipset	SoC
LAN Chipset	GbE1: Intel® I219LM (Support Wake-on-LAN and PXE) GbE2: Intel® I210-IT (Support Wake-on-LAN and PXE)
Audio Codec	Realtek ALC888S HD Audio Codec
Memory	1x 260-Pin DDR4 2400MHz SO-DIMM slot
Max. Size	32GB
BIOS	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM 2.0 Through Infineon® SLB9665TT2.0 or Equivalent

### Display

Chipset	Intel® UHD Graphics 620 for Core series Intel® UHD Graphics 610 for Celeron series
Interface	1x DisplayPort support resolution 4096x2304 @60Hz 1x HDMI support resolution 4096x2304 @24Hz (Optional)
Multiple Display	Dual Display

### Storage

SSD/HDD	1x Internal 2.5" SATA HDD Bay (support H=9.5mm)
mSATA	1x mSATA (Shared by 1x Mini PCI Express)

### Expansion

Mini PCI Express	2x Full-size Mini PCIe (1x shared by 1x mSATA)
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### I/O

LED	1x Power LED, 1x HDD LED indicator
LAN	2x RJ45 GbE
Display	1x HDMI 1.4, 4096x2304 1x DisplayPort DP 1.2, 4096x2304
USB	4x USB 3.2 Gen 2 (10 Gbps) 2x USB 2.0 header (internal)

COM	2x RS-232/422/485 2x RS-232/422/485 (internal)
Audio	1x Mic-in, 1x Line-out (Internal connector)
GPIO	2 x4-bit DIO (4-in/4-out) with 2.0 Pitch Header
Universal I/O Bracket	2x Universal I/O Bracket (By mini PCIe interface)
Others	5x WiFi Antenna Holes 1x 4-pin PWM smart fan 1x RTC battery by cable

### Operating System

Windows	Microsoft® Windows® 10 64-bit (RS5 or above)
Linux	Linux Kernel 5.x (Fedora 30 or above / Ubuntu 19.04 or above)

### Power

Power Connector	3-pin Terminal Block
Power Input	AT/ ATX 12V
Power Management	ACPI
Power Adaptor	Optional AC/DC 12V/5A, 60W
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reserve Protection

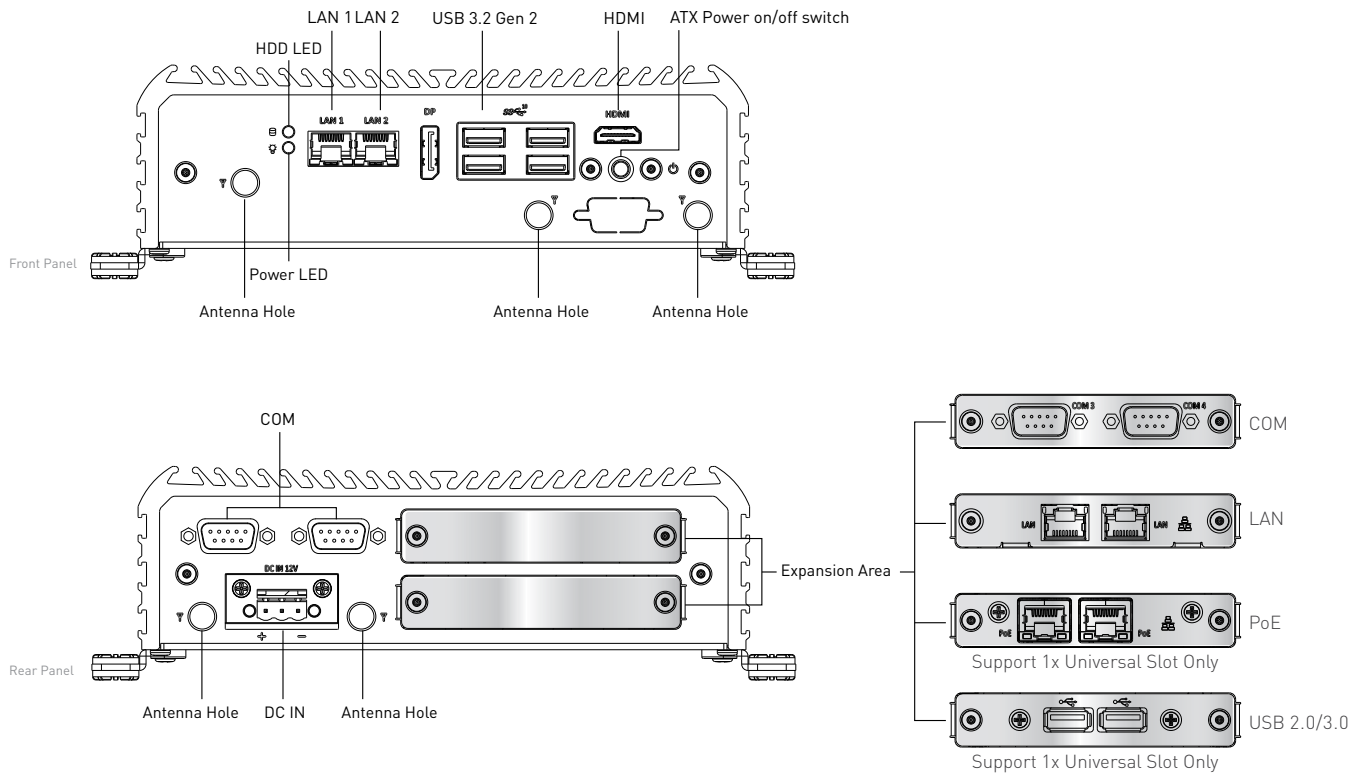
### Environment

Operating Temp.	-20°C to 60°C (15W CPU)
Storage Temp.	-30°C to 85°C
Relative Humidity	10% to 95% (non-condensing)
Vibration	With SSD: 3 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
Shock	With SSD: 20G, half sine, 11ms
Standards / Certification	CE, FCC Class A

### Physical

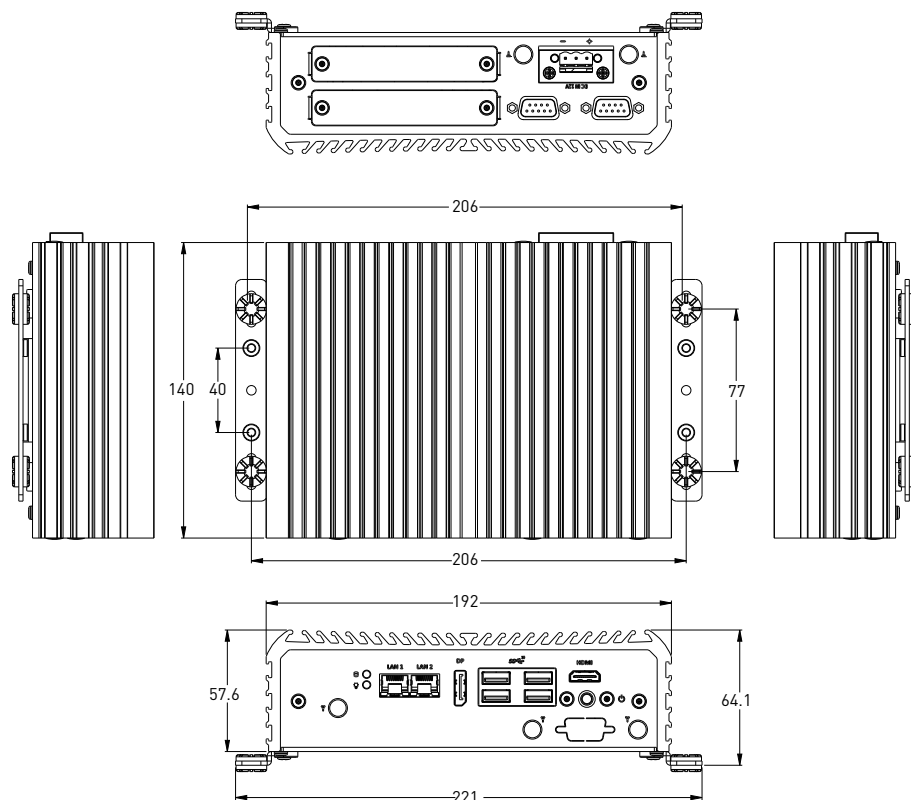
Construction	Extruded Aluminum with Heavy Duty Metal
Dimension	140 (D) x 192 (W) x 61 (H) mm

## EXTERNAL I/O MECHANICAL LAYOUT



## DIMENSION

Unit: mm



## ORDERING INFORMATION

MODEL NO.	DESCRIPTION
1-E09A06007	Adapter AC/DC 12V 5A 60W 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 Mount Kit
3-BC20002LKIT-SO	Module Kit with 2x LAN for BCO-2000 Series
3-BC20002PKIT-SO	Module Kit with 2x PoE for BCO-2000 Series
3-BC2000CMKIT-SO	Module Kit with 4x COM for BCO-2000 Series
3-BC20002CKIT-SO	Module Kit with 2x COM for BCO-2000 Series
3-BC2000U2KIT-SO	Module Kit with 2x USB 2.0 for BCO-2000 Series
3-BC2000U3KIT-SO	Module Kit with 2x USB 3.0 for BCO-2000 Series

## PACKING LIST

- 1x BCO-2000 BOX PC Series Embedded System
- 1x Utility DVD Driver
- 1x Wall Mount Kit
- 1x Accessory Kit

## AVAILABLE MODELS

MODEL NO.	DESCRIPTION
BCO-2000-8365UE	Basic Fanless Embedded System with Intel Core i5-8365UE, 1x DP, 2x COM, 2xLAN, 4x USB, 1x 2.5" SATA HDD
BCO-2000-4305UE	Basic Fanless Embedded System with Intel Celeron 4305UE, 1x DP, 2x COM, 2xLAN, 4x USB, 1x 2.5" SATA HDD