

# BCO-1020C

Basic Fanless Embedded System with Intel® Celeron® J1900 Processor,  
1x DVI-I, 1x DP, 4x COM, 1x 2.5" SATA HDD Bay

## FEATURES

- Intel® Celeron® processor J1900, up to 2.0GHz
- 1x 204-pin DDR3L SODIMM. max up to 8GB
- Dual independent display supported by 1x DVI-I and 1x DisplayPort
- 1x Intel® GbE supporting Wake-on-LAN and PXE
- 1x 2.5" SATA HDD bay, 1x mSATA
- 2x full-size mini PCIe for communication or expansion modules, 1x SIM socket
- 4x RS-232/422/485, 1x USB 3.0, 1x USB 2.0
- 4x DI + 4x DO with isolation
- 9 to 30VDC wide range power input supporting AT/ATX mode
- -20°C to 50°C extended operating temperature



## SPECIFICATIONS

### SYSTEM

|                |  |
|----------------|--|
| Processor      | Intel® Celeron® Processor J1900, Quad Core, 2MB Cache, 2.0 GHz |
| System Chipset | SoC integrated   |
| LAN Chipset    | GbE1: Intel® I210-AT (Support Wake-on-LAN and PXE)             |
| Audio Codec    | Realtek ALC888S  |
| System Memory  | 1x 204-Pin DDR3L 1066/1333MHz SODIMM. Max. up to 8 GB          |
| BIOS           | AMI 64Mbit SPI BIOS  |
| Watchdog       | Software Programmable Supports 1~255 Sec. System Reset         |

### DISPLAY

|                  |                               |
|------------------|-------------------------------|
| VGA              | Yes (by optional split cable) |
| DVI              | 1x DVI-I                      |
| DisplayPort      | 1x DisplayPort                |
| Multiple Display | Dual Display                  |

### STORAGE

|            |                                   |
|------------|-----------------------------------|
| SSD/HDD    | 1x Internal 2.5" SATA HDD Bay     |
| mSATA      | 1x mSATA (shared by 1x Mini PCIe) |
| SIM Socket | 1x External SIM socket            |

### EXPANSION

|                  |  |
|------------------|--|
| Mini PCI Express | 1x Full-size Mini PCIe Socket with USIM Socket (PCIe + USB + SATA)<br>1x Full-size Mini PCIe Socket (PCIe + USB) |
|------------------|--|

### I/O

|        |   |
|--------|---|
| COM    | 2x RS-232/422/485<br>2x RS-232/422/485 (module)               |
| USB    | 1x USB 3.0, 1x USB 2.0  |
| LAN    | 1x RJ45   |
| Audio  | 1x Mic-in, 1x Line-out  |
| DIO    | 4 in / 4 out (Isolated)                                       |
| Others | 4x WiFi Antenna Holes<br>1x Power Switch,<br>1x AT/ATX Switch |

### OPERATING SYSTEM

|         |  |
|---------|--|
| Windows | Windows 10, Windows 8.1, Windows 7, WES7 |
| Linux   | Linux kernel 3.X                         |

### POWER

|                      |                               |
|----------------------|-------------------------------|
| Power Mode           | AT, ATX                       |
| Power Supply Voltage | 9~30VDC                       |
| Power Connector      | 3-pin Terminal Block          |
| Power Adaptor        | Optional AC/DC 12V/5A, 60W    |
| Power Protection     | OVP (Over Voltage Protection) |

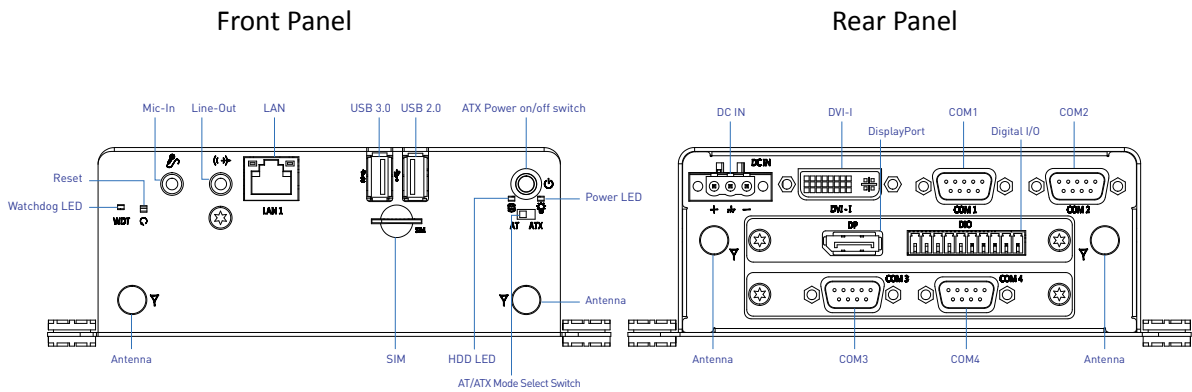
### ENVIRONMENT

|                           |  |
|---------------------------|--|
| Operating Temp.           | -20°C to 50°C  |
| Storage Temp.             | -30°C to 70°C  |
| Relative Humidity         | 10% to 95% (non-condensing)  |
| Vibration                 | With SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis<br>With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis |
| Shock                     | With SSD: 50G, half sine, 11ms   |
| Standards / Certification | CE, FCC Class A  |

### PHYSICAL

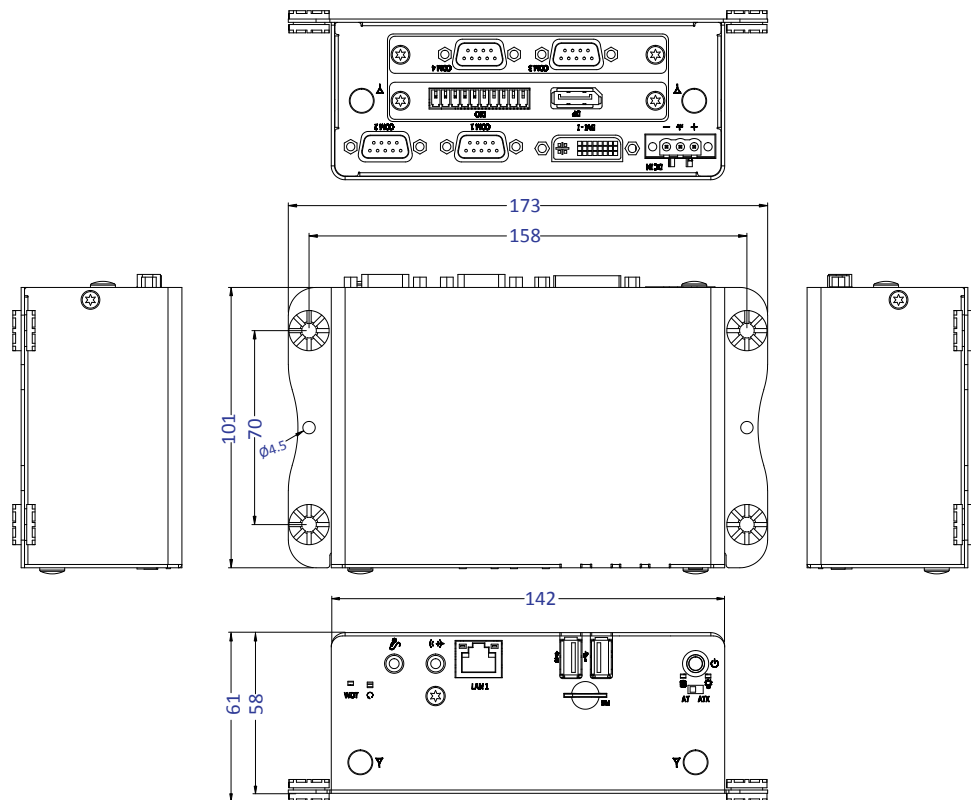
|              |                               |
|--------------|-------------------------------|
| Construction | Fanless Design                |
| Dimension    | 142 (W) x 101 (D) x 58 (H) mm |
| Weight       | TBC                           |
| Mounting     | Wall Mounting                 |

## EXTERNAL I/O MECHANICAL LAYOUT



## DIMENSION

Unit: mm



### AVAILABLE MODELS

| MODEL NO.       | DESCRIPTION   |
|-----------------|---|
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### OPTIONAL ACCESSORIES

| MODEL NO.   | DESCRIPTION  |
|-------------|--|
| 1-E09A06002 | 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                                   |

### PACKING LIST

- 1x BCO-1000 Series Embedded System
- 1x Utility DVD Driver
- 1x Accessory Kit
- 1x DVI to VGA Adapter