



## 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 DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x 2.5" internal SATA HDD bay,  
1x mSATA (shared by 1x Mini PCIe & 1x SATA),  
1x CFast (shared by 1x mSATA & 1x SATA)
- 2x full-size Mini PCIe for communication or expansion modules
- 6x RS-232/422/485 (w/ 4x internal), 1x USB 3.0, 3x USB 2.0
- 8x DI + 8x DO with isolation
- 9 to 50VDC wide range power input supporting AT/ATX mode
- -40°C to 70°C extended operating temperature

## SPECIFICATIONS

| <b>System</b>    |  |
|------------------|--|
| Processor        | Intel® Celeron® Processor J1900, Quad Core, 2MB Cache, 2.0 GHz   |
| System Chipset   | SoC integrated   |
| LAN Chipset      | GbE1 & GbE2: 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   |
| <b>Display</b>   |  |
| VGA              | Yes (by optional split cable)  |
| DVI              | 1x DVI-I   |
| DisplayPort      | 1x DisplayPort   |
| Multiple Display | Dual Display   |
| <b>Storage</b>   |  |
| SSD/HDD          | 2x Internal 2.5" SATA HDD Bay  |
| mSATA            | 1x mSATA (shared by 1x Mini PCI Express & 1x SATA)   |
| CFast            | 1x CFast (shared by 1x mSATA & 1x SATA)  |
| <b>Expansion</b> |  |
| Mini PCI Express | 1x Full-size Mini-PCIe Socket (PCIe + USB + SATA) (Share by 1x SATA)<br>1x Full-size Mini-PCIe Socket (PCIe + USB) |

| <b>I/O</b> |   |
|------------|---|
| COM        | 2x RS-232/422/485<br>4x RS-232/422/485 (internal)                                     |
| USB        | 1x USB 3.0, 3x USB 2.0  |
| LAN        | 2x RJ45   |
| Audio      | 1x Mic-in, 1x Line-out  |
| DIO        | 8 in / 8 out (Isolated)   |
| Others     | 2x WiFi Antenna Holes<br>1x Power Switch, 1x AT/ATX Switch,<br>1x Remote Power On/Off |

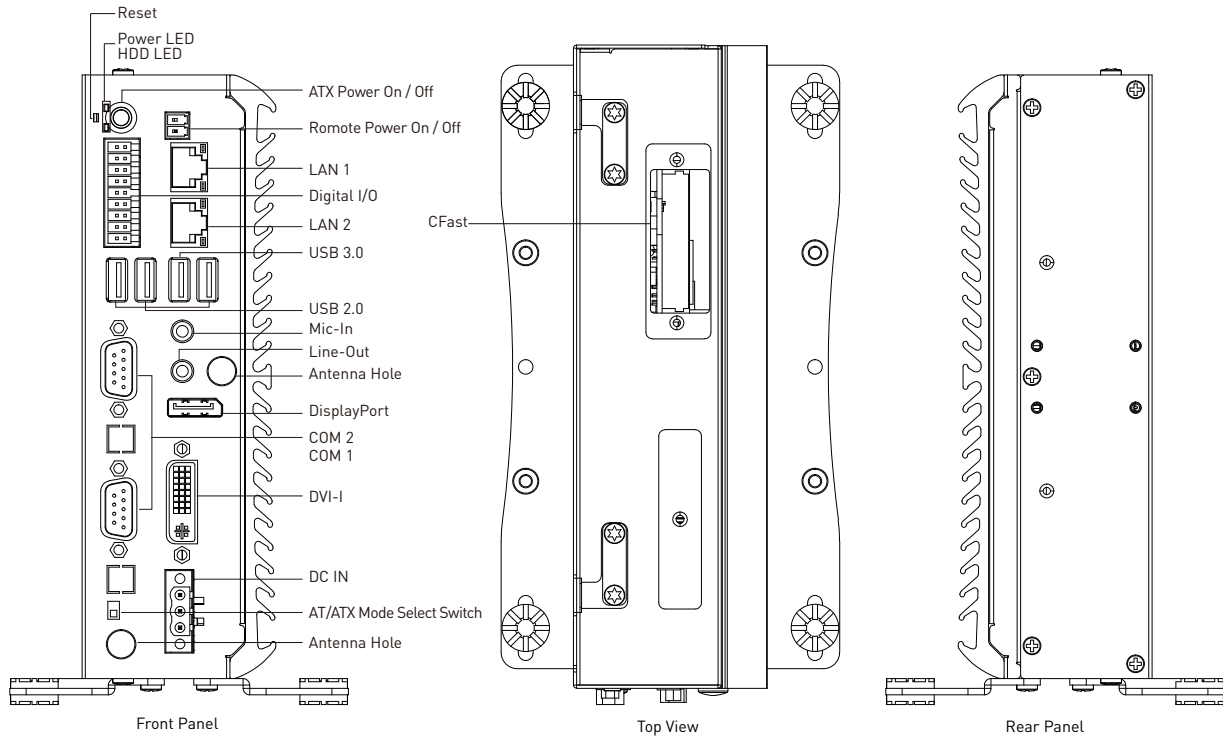
| <b>Operating System</b> |                             |
|-------------------------|-----------------------------|
| Windows                 | Windows 10, Windows 7, WES7 |
| Linux                   | Linux kernel 3.X            |

| <b>Power</b>         |  |
|----------------------|--|
| Power Mode           | AT, ATX  |
| Power Supply Voltage | 9~50VDC  |
| Power Connector      | 3-pin Terminal Block   |
| Power Adaptor        | Optional AC/DC 12V/5A, 60W   |
| Power Protection     | OVP (Over Voltage Protection)<br>OCP (Over Current Protection)<br>Reverse Protection |

| <b>Environment</b>        |  |
|---------------------------|--|
| Operating Temp.           | -40°C to 70°C  |
| Storage Temp.             | -40°C to 85°C  |
| Relative Humidity         | 10% to 95% (non-condensing)  |
| Vibration                 | With SSD: 3 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  |

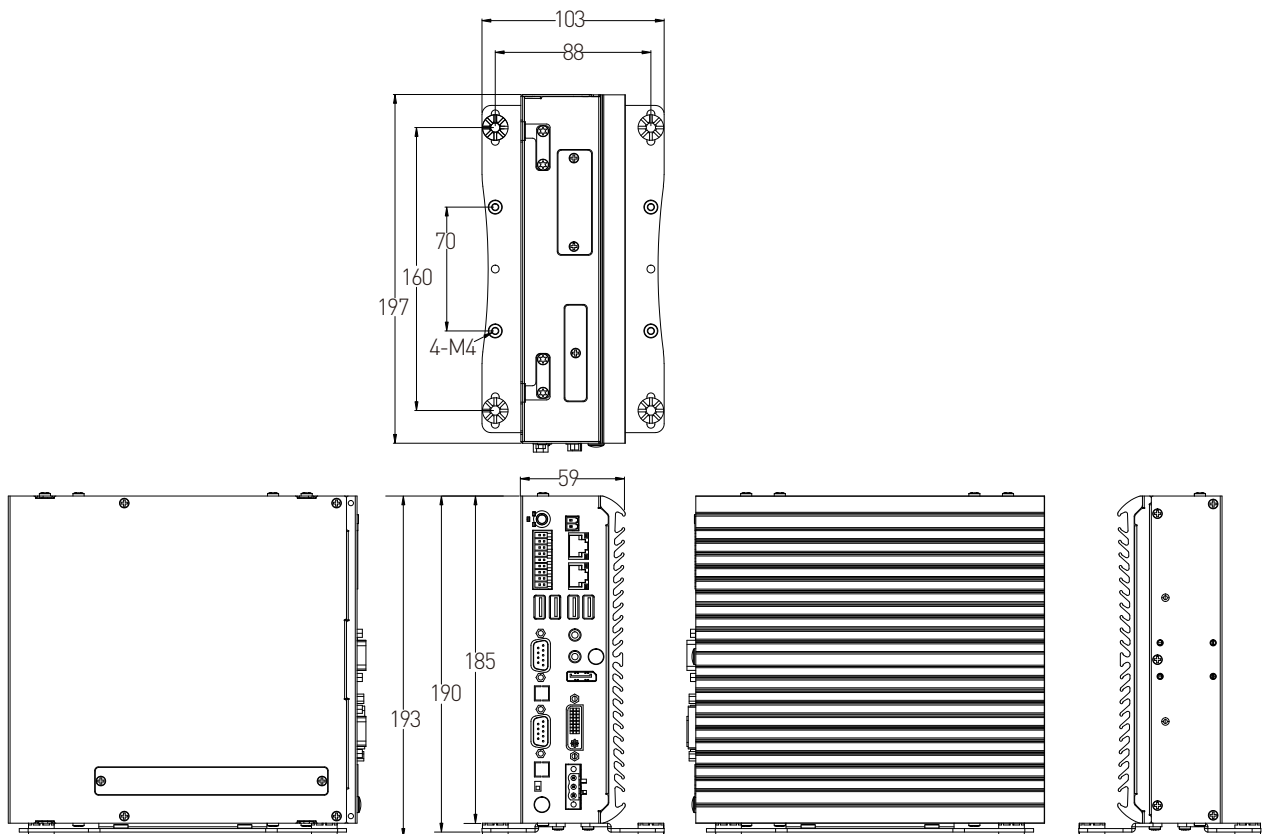
| <b>Physical</b> |   |
|-----------------|---|
| Construction    | Extruded Aluminum with Heavy Duty Metal |
| Dimension       | 59 (W) x 197 (D) x 185 (H) mm           |
| Weight          | 3.28 kg                                 |
| Mounting        | Wall / Book Mounting                    |

## 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  |
| 1-TPCD00001 | Power Cord, 3-pin UK Type, 180cm                                   |

## PACKING LIST

- 1x VCO-3100 Series Embedded System
- 1x Utility DVD Driver
- 1x Wall Mount Kit
- 1x Accessory Kit
- 1x DVI to VGA Adapter

## AVAILABLE MODELS

| MODEL NO.      | DESCRIPTION  |
|----------------|--|
| VCO-3100-J1900 | Machine Vision System with Intel® Celeron® Processor J1900 |