

## Box PC

### FEATURES

- LGA 1151 socket for 6<sup>th</sup>/7<sup>th</sup> Gen. Intel® Core™ i7/i5/i3 or Pentium® / Celeron® Desktop Processor
- Intel® Q170 chipset
- 2x DDR4 SODIMM. max up to 32GB
- Triple independent display supported by 1x DVI-I and 2x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x 2.5" SATA HDD Bay, 2x mSATA (shared by 2x mini PCIe), and 1x CFast supporting RAID 0, 1, 5, 10
- 3x full-size mini PCIe for communication or expansion modules
- 4x RS-232/422/485 (w/ 2x internal), 4x USB 3.0
- 2x PCIe x1 and 1x PCIe x16 expansion
- 8x DI + 8x DO with isolation
- 9 to 50VDC wide range power input supporting AT/ATX mode
- -25°C to 70°C extended operating temperature



### SPECIFICATIONS

#### SYSTEM

**Processor**  
Support 6<sup>th</sup> & 7<sup>th</sup> Gen Intel® Core™ i7 / i5 / i3 / Pentium® / Celeron® Desktop Processor (LGA 1151)

- 7<sup>th</sup> Gen Intel® Core™ i7-7700T, Quad Core, 8MB cache, up to 3.8 GHz
- 7<sup>th</sup> Gen Intel® Core™ i5-7500T, Quad Core, 6MB cache, up to 3.3 GHz
- 7<sup>th</sup> Gen Intel® Core™ i3-7101TE, Dual Core, 3MB Cache, 3.4 GHz
- 6<sup>th</sup> Gen Intel® Core™ i7-6700TE, Quad Core, 8MB cache, up to 3.4 GHz
- 6<sup>th</sup> Gen Intel® Core™ i5-6500TE, Quad Core, 6MB Cache, up to 3.3 GHz
- 6<sup>th</sup> Gen Intel® Core™ i3-6100TE, Dual Core, 4MB Cache, 2.7 GHz
- Intel® Pentium® G4400TE, Dual Core, 3MB Cache, 2.4 GHz
- Intel® Celeron® G3900TE, Dual Core, 2MB Cache, 2.3 GHz

**System Chipset** Intel® Q170 Express Chipset

**LAN Chipset** GbE1: Intel® I210-AT (Support Wake-on-LAN and PXE)  
GbE2: Intel® I219LM (Support Wake-on-LAN and PXE)

**Audio Codec** Realtek ALC888S

**System Memory** 2x DDR4 1866/2133MHz SODIMM. Max. up to 32GB

**BIOS** AMI 128Mbit SPI BIOS

**Watchdog** Software Programmable Supports 1~255 sec. System Reset

#### DISPLAY

**VGA** Yes (by optional split cable)

**DVI** 1x DVI-I

**DisplayPort** 2x DisplayPort

**Multiple Display** Triple Display

#### STORAGE

**SSD/HDD** 2x Removable 2.5" SATA HDD Bay Support RAID 0, 1, 5, 10

**mSATA** 2x mSATA (shared by 2x Mini PCI Express)

**CFast** 1x CFast

#### EXPANSION

**Mini PCI Express** 3x full-size Mini PCIe (shared by 2x mSATA)

**PCI Express** 2x PCIe x4 (1-lane), 1x PCIe x16

#### I/O

**COM** 2x RS-232/422/485  
2x RS-232/422/485 (internal)

**USB** 4x USB 3.0

**LAN** 2x RJ45

**Audio** 1x Mic-in, 1x Speaker-out

**DIO** 8 in / 8 out (Isolated)

**Others** 2x WiFi Antenna Holes  
1x Power Switch, 1x AT/ATX Switch

#### OPERATING SYSTEM

**Windows** 6<sup>th</sup> Gen CPU: Windows 10, Windows 7, WES7  
7<sup>th</sup> Gen CPU: Windows 10

**Linux** Linux kernel 4.X

#### POWER

**Power Mode** AT, ATX

**Power Supply Voltage** 9~50VDC

**Power Connector** 3-pin Terminal Block

**Power Adaptor** Optional AC/DC 24V/5A, 120W

**Power Protection** OVP (Over Voltage Protection)  
OCP (Over Current Protection)  
Reverse Protection

#### ENVIRONMENT

**Operating Temp.** -25°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  
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** Extruded Aluminum with Heavy Duty Metal

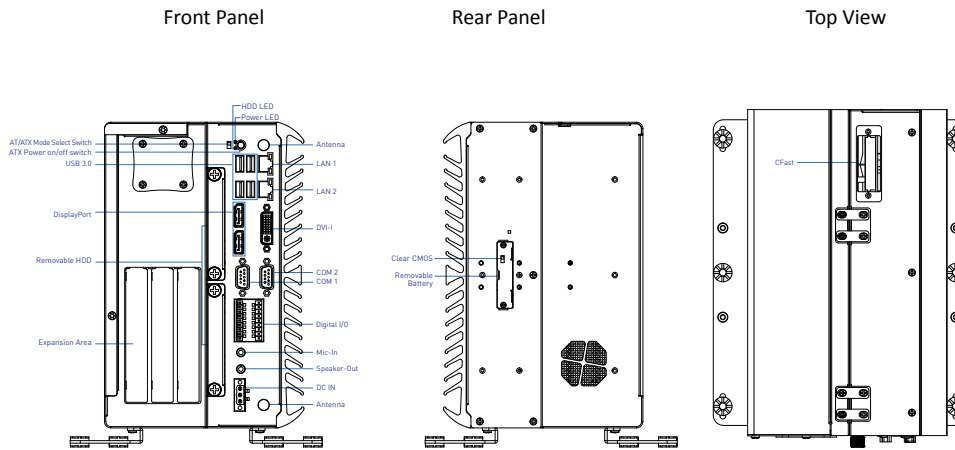
**Dimension** 157 (W) x 256 (D) x 240 (H) mm

**Weight** 5.42 kg

**Mounting** Wall / Book Mounting  
DIN-Rail Mounting (Optional)

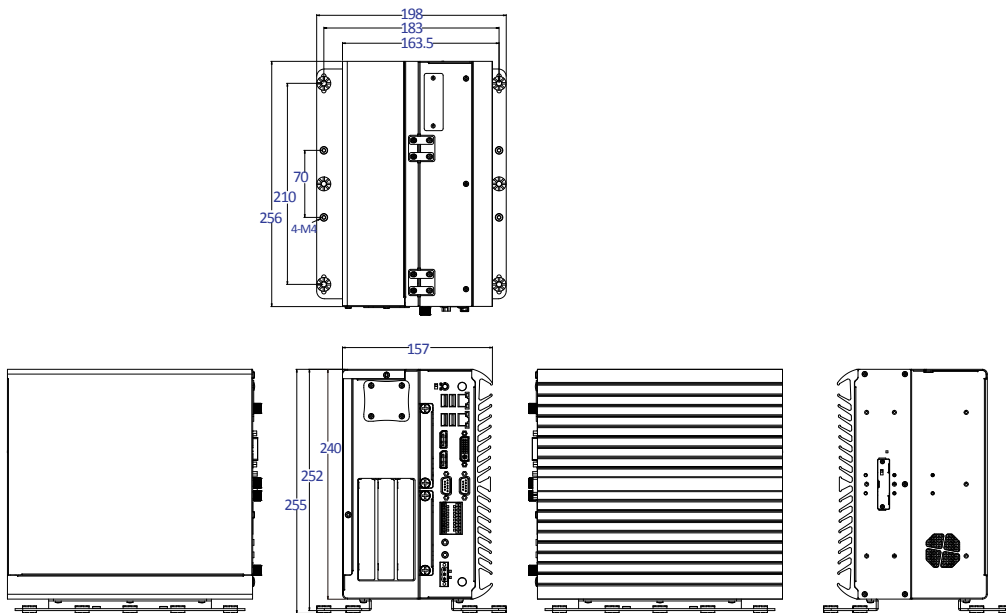
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### EXTERNAL I/O MECHANICAL LAYOUT



### DIMENSION

Unit: mm



### AVAILABLE MODELS

MODEL NO.	DESCRIPTION
VCO-6033E	Superior Machine Vision System with LGA 1151 for Intel® 6 <sup>th</sup> /7 <sup>th</sup> Gen Processor and Q170 PCH, 2x PCIe x1, 1x PCIe x16

### OPTIONAL ACCESSORIES

MODEL NO.	DESCRIPTION
1-E09A12002	Adapter AC/DC 24V 5A 120W 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-6000 Series Embedded System
• 1x Utility DVD Driver
• 1x Wall Mount Kit
• 1x Accessory Kit
• 1x DVI to VGA Adapter