

# VCO-6020-1050TI

GPU Computing System with LGA 1151 for Intel® 6<sup>th</sup>/7<sup>th</sup> Gen Processor and Q170 PCH,  
GTX 1050Ti Integrated

## FEATURES

- Support 6<sup>th</sup> & 7<sup>th</sup> Gen Intel® Core™ i7 / i5 / i3 / Pentium® / Celeron® Desktop Processor (LGA 1151)
- Intel® Q170 chipset
- NVIDIA GeForce® GTX 1050 Ti Graphics engine based on NVIDIA Pascal™ GPU architecture
- 2x DDR4 SODIMM. max up to 32GB
- 6x display interface supported by 2x DVI-I, 3x DisplayPort, 1x HDMI
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 2x 2.5" SATA HDD Bay, 2x mSATA (shared by 2x mini PCIe), 1x CFast
- 3x full-size mini PCIe for communication or expansion modules
- 4x RS-232/422/485 (w/ 2x internal), 4x USB 3.0
- 8x DI + 8x DO with isolation
- 9 to 50VDC wide range power input supporting AT/ATX mode
- -25°C to 60°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

Graphics Intel® HD Graphics 530 / 630 or  
NVIDIA GeForce® GTX 1050 Ti

DVI 2x DVI-I

DisplayPort 3x DisplayPort

HDMI 1x HDMI

Multiple Display 6 Display Interfaces

### STORAGE

SSD/HDD 2x Removable 2.5" SATA HDD Bay

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

CompactFlash/  
CFast 1x CFast

### EXPANSION

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

### 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/9.2A, 220W
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) Reverse Protection

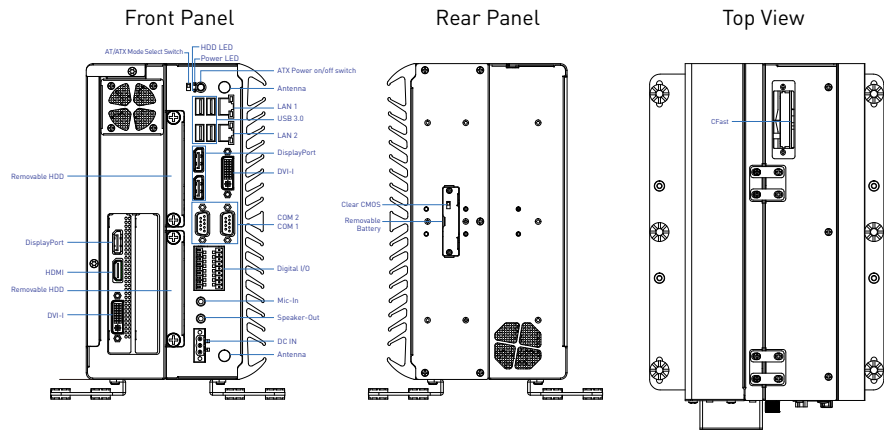
### ENVIRONMENT

Operating Temp.	-25°C to 60°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

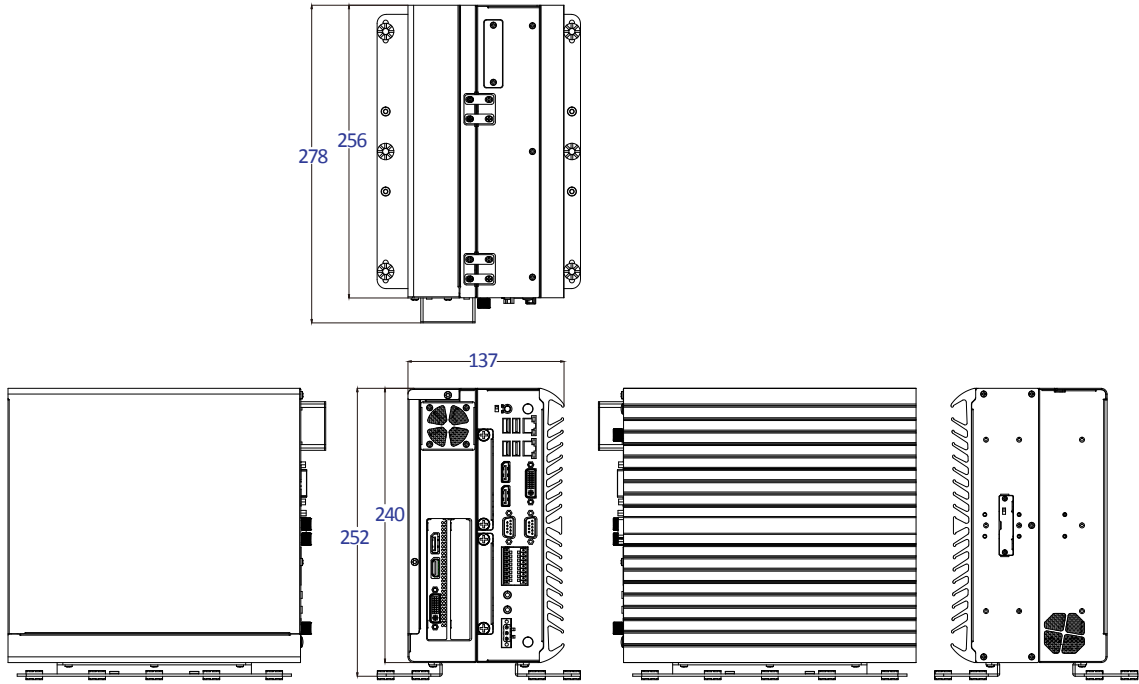
Construction	Extruded Aluminum with Heavy Duty Metal
Dimension	137(W) x 256(D) x 240(H) mm
Weight	TBD
Mounting	Wall Mounting DIN-Rail Mounting (Optional)

EXTERNAL I/O MECHANICAL LAYOUT



DIMENSION

Unit: mm



AVAILABLE MODELS

MODEL NO.	DESCRIPTION
VCO-6020-1050TI	GPU Computing System with LGA 1151 for Intel® 6 <sup>th</sup> /7 <sup>th</sup> Gen Processor and Q170 PCH, GTX 1050Ti Integrated

OPTIONAL ACCESSORIES

MODEL NO.	DESCRIPTION
1-E09A22102	Adapter AC/DC 24V 9.2A 220W 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-6020-1050TI Embedded System
- 1x Utility DVD Driver
- 1x Wall Mount Kit
- 1x Accessory Kit
- 1x DVI to VGA Adapter