

# 1027GR-TRFT+



Available Color:

Black



## Key Features

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and **E5-2600 v2** family†
2. Up to 1TB ECC DDR3, up to 1866MHz; 16x DIMM sockets
3. 4x PCI-E 3.0 x16 slots (supports up to 2x double width GPU/Xeon Phi cards), 1x PCI-E 3.0 x8 low-profile slot
4. Integrated IPMI 2.0 with KVM and Dedicated LAN
5. Intel® X540 Dual port 10GBase-T
6. 4x Hot-swap 2.5" SATA3 Drive Bays
7. 1800W Redundant Power Supplies **Platinum Level (94%+)**
8. 9x Counter rotating fans w/ optimal fan speed control
9. Smart server management tools

Note: Image above may show a varied configuration or optional parts, Please refer to parts list for standard parts included.

## Specifications

### Product SKUs

- SYS-1027GR-TRFT+** ■ SuperServer 1027GR-TRFT+ (**Black**)

### Motherboard

**Super X9DRG-HTF+**

### Processor/Cache

- CPU**
- Dual Socket R (LGA 2011)
  - Intel® Xeon® processor E5-2600 and **E5-2600 v2** family† (up to 130W TDP)

**Note** † BIOS version 3.0 or above is required

**Cache** ■ Up to 30MB

**System Bus** ■ QPI up to 8 GT/s

**GPU/Xeon Phi Support**

- M2090, up to 130W CPU at 30°C
- M2075, up to 130W CPU at 30°C
- Xeon Phi, up to 130W CPU at 30°C

### System Memory

- Memory**
- 16x 240-pin DDR3 DIMM sockets
  - Up to 1TB DDR3 ECC LRDIMM
  - Up to 512GB DDR3 ECC Registered

### Chassis

**Form Factor** ■ 1U Rackmount

**Model** ■ **CSE-118GQTS-R1K8BP**

### Dimensions

**Height** ■ 1.7" (43mm)

**Width** ■ 17.2" (437mm)

**Depth** ■ 31" (787mm)

**Gross Weight** ■ 48 lbs (21.8 kg)

**Available Color** ■ Black

### Front Panel

**Buttons**

- Power On/Off button
- System Reset button


**LEDs**

- Power LED
- Hard drive activity LED
- 2x Network activity LEDs
- System Overheat LED / Fan fail LED / UID LED

### Expansion Slots

**PCI-Express** ■ 4x PCI-E 3.0 x16 slots (up to 2x double)

<b>Capacity</b>	memory (RDIMM) <ul style="list-style-type: none"> <li>Up to 128GB DDR3 ECC and non-ECC UDIMM</li> </ul>
<b>Memory Type</b>	<ul style="list-style-type: none"> <li>1866/1600/1333/1066MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs</li> </ul>
<b>DIMM Sizes</b>	<ul style="list-style-type: none"> <li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB</li> </ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>1.5 V, 1.35 V</li> </ul>
<b>Error Detection</b>	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> <li>Detects double-bit errors (using ECC memory)</li> </ul>
<b>On-Board Devices</b>	
<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C602 Chipset</li> </ul>
<b>SATA</b>	<ul style="list-style-type: none"> <li>SATA 2.0 3Gbps with RAID 0, 1, 5, 10</li> <li>SATA 3.0 6Gbps with RAID 0, 1</li> </ul>
<b>IPMI</b>	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>Nuvoton WPCM450 BMC</li> </ul>
<b>Network Controllers</b>	<ul style="list-style-type: none"> <li>Intel® X540 Dual Port 10GBase-T</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>
<b>Input / Output</b>	
<b>SATA</b>	<ul style="list-style-type: none"> <li>2 SATA 3.0 ports (6Gbps)</li> <li>2 SATA 2.0 ports (3Gbps)</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>2x RJ45 10GBase-T ports</li> <li>1 RJ45 Dedicated IPMI LAN port</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>2 USB 2.0 ports</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>1 VGA Connector</li> </ul>
<b>Keyboard/Mouse</b>	<ul style="list-style-type: none"> <li>1 PS/2 Keyboard/Mouse port</li> </ul>
<b>Serial Port</b>	<ul style="list-style-type: none"> <li>1 Serial header</li> </ul>
<b>System BIOS</b>	
<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>16Mb SPI Flash EEPROM with AMI® BIOS</li> </ul>
<b>BIOS Features</b>	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>APM 1.2</li> <li>DMI 2.3</li> <li>PCI 2.2</li> <li>ACPI 1.0 / 2.0</li> <li>USB Keyboard support</li> <li>Hardware BIOS Virus protection</li> <li>SMBIOS 2.3</li> <li>UEFI</li> <li>RTC (Real Time Clock) Wakeup</li> </ul>

	width GPU/Xeon Phi cards, optional) <ul style="list-style-type: none"> <li>1x PCI-E 3.0 x8 low-profile slot</li> </ul>
<b>Drive Bays</b>	
<b>Hot-swap</b>	<ul style="list-style-type: none"> <li>4x 2.5" Hot-swap drive bays</li> </ul>
<b>System Cooling</b>	
<b>Fans</b>	<ul style="list-style-type: none"> <li>9x counter-rotating fans with optimal fan speed control</li> </ul>
<b>Power Supply</b>	
	1800W (1+1) Redundant 1800W power supply with PMBus
<b>AC Input</b>	<ul style="list-style-type: none"> <li>1000W Output @ 100-120V, 12-10A, 50-60Hz</li> <li>1200W Output @ 120-140V, 12-10A, 50-60Hz</li> <li>1800W Output @ 200-240V, 10-8.5A, 50-60Hz</li> </ul>
<b>DC Output</b>	<ul style="list-style-type: none"> <li>1000W: +12V/84A; +5Vsb/4A</li> <li>1200W: +12V/100A; +5Vsb/4A</li> <li>1800W: +12V/150A; +5Vsb/4A</li> </ul>
<b>Certification</b>	 <b>Platinum Certified</b>
<b>PC Health Monitoring</b>	
<b>CPU</b>	<ul style="list-style-type: none"> <li>Monitors for CPU Cores, +1.5V, +3.3V, +5V, +12V, +5 Stdby, +3.3 Stdby, VBAT, Memory Voltages.</li> <li>CPU Core 6-Phase-switching voltage regulator</li> </ul>
<b>FAN</b>	<ul style="list-style-type: none"> <li>Total of ten 4-pin PWM fans</li> <li>10x fans with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Status monitor for on/off control</li> <li>Low noise fan speed control</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>CPU thermal trip support</li> <li>Thermal Control for 10x Fan Connectors</li> <li>PSU I<sup>2</sup>C temperature sensing logic</li> <li>Thermal Monitor 2 (TM2) support</li> <li>PECI</li> </ul>
<b>LED</b>	<ul style="list-style-type: none"> <li>Power Fail / Overheat LED</li> <li>Suspend-state Indicator LED</li> <li>UID LED</li> </ul>
<b>Other Features</b>	<ul style="list-style-type: none"> <li>SDDC Support</li> </ul>
<b>Operating Environment / Compliance</b>	
<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
<b>Environmental Spec.</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

## Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X9DRG-HTF+	1	Super X9DRG-HTF+ Motherboard
	CSE-118GQTS-R1K8BP	1	1U Black SC118GQ Chassis
<b>Air Shroud</b>	MCP-310-11802-0N	1	Air Shroud for X9DRG used in SC118GQ-R1800B
<b>Backplane</b>	BPN-SAS-118G-4	1	SAS-118G-4; supports 4X2.5" SATA HDD,
<b>Cable 1</b>	CBL-0157L	1	8 pin to 8 pin ribbon SGPIO cable with tube , 40cm, PBF
<b>Cable 2</b>	CBL-0207L	1	59CM SATA ROUND S-S PBF.26AWG
<b>Cable 3</b>	CBL-0227L	1	48CM SATA ROUND S-RA PBF.26AWG
<b>Cable 4</b>	CBL-0228L	2	55CM SATA ROUND S-RA PBF 26AWG
<b>Cable 5</b>	CBL-0296L	5	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
<b>Cable 6</b>	CBL-0333L	4	6+2 pin to 8 pin GPU power extension from MB, 30cm. 18/20AWG
<b>Cable 7</b>	CBL-0460L	1	8 Pin to Two 4 Pin Backplane Power Ext. 28/22cm. 18AWG
<b>Riser Card</b>	RSC-R1UG-A2E16-X9	1	RSC-R1UG-A2E16-X9
<b>Riser Card</b>	RSC-R1UG-E16-X9	1	RSC-R1UG-E16-X9
<b>Riser Card</b>	RSC-R1UG-E16AR-X9	1	A Right Hand Side Riser Card with PCI-E x16
<b>Riser Card</b>	RSC-R1UG-E16R-X9	1	A 1U Right Hand Side Riser Card with PCI-E x16
<b>Heatsink / Retention</b>	SNK-P0047PS	1	1U Passive CPU Heat Sink for X9 Generation Motherboards w/ Narrow ILM
<b>Heatsink / Retention</b>	SNK-P0047PSC	1	1U Passive Front CPU Heat Sink for X9DRG-HF 1U GPU Server
<b>Power Supply</b>	PWS-1K81P-1R	2	1800W Platinum Redundant Single Output
<b>Cable 8</b>	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
<b>Fan 1</b>	FAN-0141L4	9	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
<b>Drive Tray(s)</b>	MCP-220-00047-0B	4	Black gen 3rd hot-swap 2.5inch HDD tray
<b>Mounting Rails</b>	MCP-290-00054-0N	1 set	Rail set, quick/quick, optional for 1U 17.2