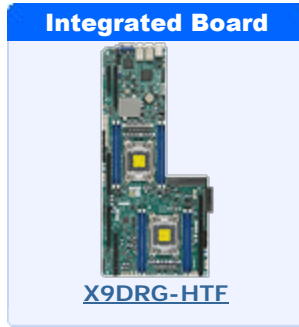


# 1027GR-TQFT



Available Colors:

Black



## Key Features

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and **E5-2600 v2** family†
2. Up to 512GB ECC DDR3, up to 1866MHz; 8x DIMM slots
3. 4x PCI-E 3.0 x16 slots (GPU card opt.)  
1x PCI-E 3.0 x8 (in x16) low-profile slot
4. Integrated IPMI 2.0 with KVM and Dedicated LAN
5. Intel® X540 10GbBase-T Controller
6. 4x Hot-swap 2.5" SATA3 Drive Bays
7. 1800W Power Supply w/ PMBus **Platinum Level (94%+)**
8. 12x Cooling Fans Total
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-TQFT** ■ SuperServer 1027GR-TQFT (**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 115W TDP)

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

- Cache**
- Up to 30MB

- System Bus**
- QPI up to 8 GT/s

- GPU**
- Supports M2090/M2075, up to 115W CPU at 30°C

### System Memory

- Memory Capacity**
- 8x 240-pin DDR3 DIMM slots
  - Up to 512GB DDR3 ECC LRDIMM
  - Up to 256GB DDR3 ECC Registered memory (RDIMM)
  - Up to 48GB DDR3 ECC and non-ECC

### Chassis

- Form Factor**
- 1U Rackmount

- Model**
- **CSE-118GQ-1800GB**

### 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 (GPU card option)
  - 1x PCI-E 3.0 x8 (in x16) low-profile slot

	Å
<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>

#### On-Board Devices

<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>

#### Input / Output

<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>

#### System BIOS

<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>

Supports 4 GPU cards (one via riser card RSC-R1UG-E16BR-X9-O-P)

#### Drive Bays

**Hot-swap** ■ 4x 2.5" Hot-swap drive bays

#### System Cooling

**Fans** ■ 12x Counter-rotating Fans with optimal fan speed control

#### Power Supply

1800W power supply with PMBus

**AC Input**

- 1000W Output @ 100-120V, 12-10A, 50-60Hz
- 1200W Output @ 120-140V, 12-10A, 50-60Hz
- 1800W Output @ 200-240V, 10-8.5A, 50-60Hz

**DC Output**

- 1000W: +12V/84A; +5Vsb/4A
- 1200W: +12V/100A; +5Vsb/4A
- 1800W: +12V/150A; +5Vsb/4A

#### Certification



**Platinum Certified**

#### PC Health Monitoring

##### CPU

- Monitors for CPU Cores, +1.5V, +3.3V, +5V, +12V, +5 Stdbv, +3.3 Stdbv, VBAT, Memory Voltages.
- CPU Core 6-Phase-switching voltage regulator

##### FAN

- Total of twelve 4-pin PWM fans
- 12x fans with tachometer monitoring
- Status monitor for speed control
- Status monitor for on/off control
- Low noise fan speed control

##### Temperature

- Monitoring for CPU and chassis environment
- CPU thermal trip support
- Thermal Control for 10x Fan Connectors
- PSU I<sup>2</sup>C temperature sensing logic
- Thermal Monitor 2 (TM2) support
- PECI

##### LED

- Power Fail / Overheat LED
- Suspend-state Indicator LED
- UID LED

##### Other Features

- SDDC Support

#### Operating Environment / Compliance

##### RoHS

- RoHS Compliant

##### Environmental Spec.

- Operating Temperature: 10°C to 35°C (50°F to 95°F)
- Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)
- Operating Relative Humidity: 8% to 90% (non-condensing)
- Non-operating Relative Humidity: 5% to 95% (non-condensing)

## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X9DRG-HTF	1	Super X9DRG-HTF Motherboard
	CSE-118GQ-1800GB	1	1U Black SC118GQ Chassis
<b>Backplane</b>	BPN-SAS-118G-4	1	SAS-118G-4; supports 4X2.5" SATA HDD,
<b>Cable 1</b>	CBL-0333L	3	6+2 pin to 8 pin GPU power extension from MB, 30cm. 18/20AWG
<b>Cable 2</b>	CBL-0333L-01	1	8 pin to 8 pin GPU power extension. 40cm. 20AWG
<b>Cable 3</b>	CBL-0460L	1	8 Pin to Two 4 Pin Backplane Power Ext. 28/22cm. 18AWG
<b>Cable 4</b>	CBL-0228L	2	55CM SATA ROUND S-RA PBF 26AWG
<b>Cable 5</b>	CBL-0157L-02	1	8 pin to 8 pin ribbon SGPIO cable, 27cm, PBF
<b>Cable 6</b>	CBL-0207L	1	59CM SATA ROUND S-S PBF.26AWG
<b>Cable 7</b>	CBL-0296L	7	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
<b>Cable 8</b>	CBL-0227L	1	48CM SATA ROUND S-RA PBF.26AWG
<b>Riser Card</b>	RSC-R1UG-E16B-X9	1	RSC-R1UG-E16B-X9-O-P
<b>Riser Card</b>	RSC-R1UG-E16A-X9	1	RSC-R1UG-E16A-X9-O-P
<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-E16BR-X9	1	RSC-R1UG-E16BR-X9-O-P
<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, X10 Systems Equipped w/ a Narrow ILM MB
<b>Heatsink / Retention</b>	SNK-P0047PSC	1	1U Passive Front CPU Heat Sink w/ a Side Air Channel for X9, X10 Systems Equipped with a Narrow ILM MB