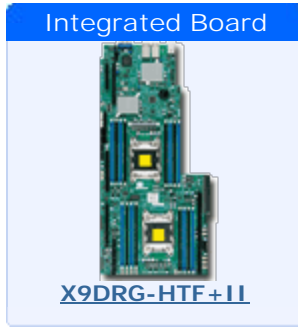


# 2027GR-TRT2



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 slots
3. 4x PCI-E 3.0 x16 slots (support GPU/Xeon Phi cards, opt.), 1x PCI-E 3.0 x8 (in x16) slot, 1x PCI-E 2.0 x4 (in x16) slot
4. Integrated IPMI 2.0 and KVM with Dedicated LAN
5. Intel® X540 Dual port 10GBase-T LAN
6. 10x Hot-swap 2.5" SAS/SATA Drive Bays
7. 1600W Redundant Power Supplies Platinum Level (94%+)
8. 5x heavy duty cooling fans
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-2027GR-TRT2      ■ SuperServer 2027GR-TRT2 (Black)

### Motherboard

Super X9DRG-HTF+II

### 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/M2075, up to 130W CPU at 35°C  
    ■ K10/K20/K20X/K1/K2/K40M (Kepler), up to 130W CPU at 35°C  
    ■ Xeon Phi 5110P, up to 130W CPU at 35°C

### System Memory

- 16x 240-pin DDR3 DIMM slots
- Up to 1TB DDR3 ECC LRDIMM

### Chassis

Form Factor           ■ 2U Rackmount  
 Model                 ■ CSE-218GHTS-R1K66B

### Dimensions

Height                ■ 3.5" (89mm)  
 Width                 ■ 17.2" (437mm)  
 Depth                ■ 31" (787mm)  
 Gross Weight       ■ 54 lbs (24.5 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!9! dfYgg...      ■ 4x PCI-E 3.0 x16 slots (support GPU/Xeon Phi cards, option)

Memory Capacity	<ul style="list-style-type: none"> <li>Up to 512GB DDR3 ECC Registered memory (RDIMM)</li> <li>Up to 128GB DDR3 ECC and non-ECC UDIMM</li> </ul>
Memory Type	<ul style="list-style-type: none"> <li>1866/1600/1333/1066MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs</li> </ul>
DIMM Sizes	<ul style="list-style-type: none"> <li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.5 V, 1.35 V</li> </ul>
Error Detection	<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

Chipset	<ul style="list-style-type: none"> <li>Intel® C602 Chipset</li> </ul>
AHCI SATA	<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, 5, 10</li> </ul>
SCU SATA	<ul style="list-style-type: none"> <li>SATA 2.0 3Gbps with RAID 0, 1, 5, 10</li> </ul>
IPMI	<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>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® X540 Dual Port 10GBase-T LAN</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>

#### Input / Output

AHCI SATA	<ul style="list-style-type: none"> <li>2x SATA 3.0 ports (6Gbps)</li> <li>4x SATA 2.0 ports (3Gbps)</li> </ul>
SCU SATA	<ul style="list-style-type: none"> <li>4x SATA 2.0 ports (3Gbps)</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2x RJ45 10GBase-T LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>2x USB 2.0 ports</li> </ul>
Video	<ul style="list-style-type: none"> <li>1x VGA Connector</li> </ul>
Serial Port	<ul style="list-style-type: none"> <li>1x Serial header</li> </ul>

#### System BIOS

BIOS Type	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI® BIOS</li> </ul>
BIOS Features	<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>

D7 Express	<ul style="list-style-type: none"> <li>Fx PCI-E 3.0 x8 (in x16) low-profile slot</li> <li>1x PCI-E 2.0 x4 (in x16) slot</li> </ul>
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#### Drive Bays

Hot-swap	<ul style="list-style-type: none"> <li>10x 2.5" Hot-swap SAS/SATA drive bays</li> </ul>
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#### System Cooling

Fans	<ul style="list-style-type: none"> <li>5x 8cm heavy duty fans with optimal fan speed control</li> </ul>
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#### Ultra Power Supply

1600W 1U Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> <li>1000W/1600W</li> </ul>
Dimension (W x H x L)	<ul style="list-style-type: none"> <li>73.5 x 40 x 265 mm</li> </ul>
Input	<ul style="list-style-type: none"> <li>100-127Vac / 12.9A Max / 47-63Hz</li> <li>200-240Vac / 9.5A Max / 47-63Hz</li> </ul>
+12V	<ul style="list-style-type: none"> <li>Max: 82A / Min: 0.1A (100-127Vac)</li> <li>Max: 132A / Min: 0.1A (200-240Vac)</li> </ul>
12V SB	<ul style="list-style-type: none"> <li>Max: 2A / Min: 0.2A</li> </ul>
Output Type	<ul style="list-style-type: none"> <li>25 Pairs Gold Finger Connector</li> </ul>
Certification	  Platinum Level [ <a href="#">Test Report</a> ]

#### PC Health Monitoring

CPU	<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>
FAN	<ul style="list-style-type: none"> <li>Total of five 4-pin PWM fans</li> <li>5x 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>
Temperature	<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>
LED	<ul style="list-style-type: none"> <li>Power Fail / Overheat LED</li> <li>Suspend-state Indicator LED</li> <li>UID LED</li> </ul>
Other Features	<ul style="list-style-type: none"> <li>SDDC Support</li> </ul>

#### Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<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 - (Items Included)**

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X9DRG-HTF+II	1	Super X9DRG-HTF+II Motherboard
	CSE-218GHTS-R1K66B	1	2U Black SC218G Chassis
Backplane	BPN-SAS-218A	1	SAS Backplane for 2U GPU, x10 2.5
Cable 1	CBL-0157L	1	8 pin to 8 pin ribbon SGPIO cable with tube , 40cm, PBF
Cable 2	CBL-0460L	1	8 Pin to Two 4 Pin Backplane Power Ext. 28/22cm. 18AWG
Cable 3	CBL-PWEX-0582	4	8 pin to two 6+2 pin 12V GPU power cable, 30 cm 16/20 AWG,HF,RoHS/REACH,PBF
Cable 4	CBL-0294L-02	2	Cross-over lpass to 4 SATA w/SB. S. 58cm. 30AWG
Cable 5	CBL-0484L	2	55cm 30AWG SATA S-S cable
Riser Card	RSC-R2UG-A2E16+II	1	RSC-R2UG-A2E16+II
Riser Card	RSC-R2UG-E8G-X9	1	RSC-R2UG-E8G-X9-O-P
Riser Card	RSC-R2UG-A2E16R+II	1	RSC-R2UG-A2E16R+II
Riser Card	RSC-R2UG-E16R-X9	1	RSC-R2UG-E16R-X9-O-P
Heatsink / Retention	SNK-P0047PS	1	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0048PS	1	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K66P-1R	2	1U 1600W Redundant Platinum Power Supply 73.5mm width,RoHS/REACH,PBF

**Optional Parts List**

	Part Number	Qty	Description
GPU Supporting Bracket	MCP-120-00070-0N	-	SC218G-4GPU INTEL-XEON-PHI GPU Supporting Bracket Set (SC218-INTEL-KNIGHTR-GPU-BKT)