

SuperServer 4027GR-TRT



Available Colors: Black

Key Features

8x GPUs in 4U

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
2. Up to 1.5TB ECC DDR3, up to 1866MHz; 24x DIMM slots
3. Expansion slots: 8 PCI-E 3.0 x16 (double-width) slots, 2 PCI-E 3.0 x8 (in x16) slot, 1 PCI-E 2.0 x4 (in x16) slot
4. Intel® X540 Dual port 10GBase-T
5. I/O ports: 2x 10Gb LAN, 1x Dedicated LAN for IPMI Remote Management, 1x VGA, 10x USB 2.0
6. 24x 2.5" Hot-swap SAS2/SATA3 HDD Bays
7. 1600W Redundant Power Supplies Platinum Level (94%+)

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

Specifications

Product SKUs

SYS-4027GR-TRT ■ SuperServer 4027GR-TRT (Black)

Motherboard

Super X9DRG-OTF-CPU

Processor/Cache

CPU ■ Intel® Xeon® processor E5-2600 and E5-2600 v2 family† (up to 150W TDP **)
 ■ Dual Socket R (LGA 2011)

Cache ■ Up to 30MB

System Bus ■ QPI up to 8 GT/s

Note † BIOS version 3.0 or above is required

Note ** Motherboard supports this maximum TDP. Please verify your system can thermally support

GPU/Xeon Phi Support ■ K80, up to 150W CPU at 30°C
 ■ K40 (Atlas), up to 150W CPU at 30°C
 ■ K10/K20/K20X/K1/K2 (Kepler), up to 150W CPU at 30°C

Chassis

Form Factor ■ 4U Rackmountable
 Model ■ CSE-418GTS-R3200B

Dimensions

Height ■ 7.0" (178mm)
 Width ■ 17.2" (437mm)
 Depth ■ 29" (737mm)
 Weight ■ Net Weight: 80 lbs (36.2 kg)
 ■ Gross Weight: 135 lbs (61.2 kg)
 Available Colors ■ Black

Drive Bays

Hot-swap ■ 24x 2.5" Hard drive bays

Expansion Slots

PCI-Express ■ 8x PCI-E 3.0 x16 (double-width) slots
 ■ 2x PCI-E 3.0 x8 (in x16) slot
 ■ 1x PCI-E 2.0 x4 (in x16) slot

Backplane

SAS/SATA HDD Backplane

System Memory

Memory Capacity	<ul style="list-style-type: none"> 24x 240-pin DDR3 DIMM slots Up to 1.5TB DDR3 ECC LRDIMM Up to 768GB DDR3 ECC RDIMM Up to 192GB DDR3 ECC/non-ECC UDIMM
Memory Type	<ul style="list-style-type: none"> 1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs Support ECC and non-ECC UDIMMs
DIMM Sizes	<ul style="list-style-type: none"> 32GB, 16GB, 8GB, 4GB, 2GB, 1GB
Memory Voltage	<ul style="list-style-type: none"> 1.5 V, 1.35 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C602 chipset
AHCI SATA	<ul style="list-style-type: none"> SATA 2.0 3Gbps with RAID 0, 1, 5, 10 SATA 3.0 6Gbps with RAID 0, 1
SCU SATA	<ul style="list-style-type: none"> SATA 2.0 3Gbps with RAID 0, 1, 10
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support Nuvoton WPCM450 BMC
Network Controllers	<ul style="list-style-type: none"> Intel® X540 Dual Port 10GBase-T Virtual Machine Device Queues reduce I/O overhead Supports 10GBase-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8201N PHY (dedicated IPMI)
Graphics	<ul style="list-style-type: none"> Matrox G200 (Nuvoton WPCM450 BMC)
Super I/O	<ul style="list-style-type: none"> Nuvoton W83527HG

Input / Output

AHCI SATA	<ul style="list-style-type: none"> 2x SATA 3.0 ports (6Gbps) 4x SATA 2.0 ports (3Gbps)
SCU SATA	<ul style="list-style-type: none"> 4x SATA 2.0 ports (3Gbps)
LAN	<ul style="list-style-type: none"> 2x RJ45 10GBase-T ports 1x dedicated LAN port for IPMI
USB	<ul style="list-style-type: none"> 10x USB 2.0 ports total (4x rear + 4x via header + 2x Type A)
Serial Port / Header	<ul style="list-style-type: none"> 1x Fast UART 16550 ports: 1 header

System BIOS

BIOS Type	<ul style="list-style-type: none"> 16MB SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) PCI 2.2 ACPI up to 3.0 USB Keyboard support

System Cooling

Fans	<ul style="list-style-type: none"> 8x 92mm RPM Hot-Swappable Cooling Fans
Shrouds	<ul style="list-style-type: none"> 1x Air Shroud (MCP-310-84806-0B) 1x Air Shroud (MCP-310-84807-0B)

Ultra Power Supply

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

Certification	  Platinum Level [Test Report]
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PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, +1.2V, 1.5V, +3.3V, +12V, (+3V, 1.0V, 1.2V, 1.8V, 1.1V) Standby, VBAT, Memory, Chipset Voltages. 4-Phase-switching voltage regulator with auto-sense from 0.6V-1.35V
FAN	<ul style="list-style-type: none"> 4-pin fan headers with tachometer status monitoring Low noise fan speed control mode
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and system environment Thermal Control for 8x fan connectors
Other Features	<ul style="list-style-type: none"> Chassis intrusion detection

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> 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
Motherboard / Chassis	MBD-X9DRG-OTF-CPU	1	Super X9DRG-OTF-CPU Motherboard
	CSE-418GTS-R3200B	1	CSE-418GTS-R3200B 4U Chassis with 24x HDD trays
Air Shroud	MCP-310-41806-0B	1	Mylar CPU air shroud for SC418G (X9DRG-OF-CPU),PBF
Air Shroud	MCP-310-41807-0B	1	Mylar PCIe air shroud for SC418G (X9DRG-O-PCIE),PBF
Backplane	BPN-SAS3-216A	1	24x 2.5"HDD backplane, support SAS-3 12Gb/s,mini-SAS HD connector,new 29-pin SAS-3 receptacles,support power control stagger spin,pre-charge resistor,fuse protect and SGPIO encl mgmt,RoHS/REACH,PBF
Cable 1	CBL-0449L	2	HDD power extension for X8OBN, special 8 pin to 4 HDD. 45cm. 18AWG
Cable 2	CBL-PWEX-0582	8	8 pin to two 6+2 pin 12V GPU power cable, 30 cm 16/20 AWG,HF,RoHS/REACH,PBF
Cable 3	CBL-SAST-0591	2	cross-over mini SAS HD to 4 SATA w/SB, S. 75cm. 30AWG,HF,RoHS/REACH,PBF
Riser Card	RSC-X9DRG-O	4	RSC-X9DRG-O
Heatsink / Retention	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB

Optional Parts List

	Part Number	Qty	Description
Top Cover	MCP-230-41803-0N	-	Top cover for SC418G with GTX card support
AOC Dummy Assembly	MCP-240-00096-0N	-	SC747B GPU / Add-on Card Dummy Assembly (2 Slots)-Single Pack