

SuperServer 2027TR-HTQRF



Available Colors:

Black



Key Features

Four **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following:

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 sockets
3. 1x PCI-E 3.0 (x16) low-profile slot
4. Intel® i350 Dual port Gigabit Ethernet
5. 6x Hot-swap 2.5" SATA HDD Bays (2x SATA3 & 4x SATA2)
6. Onboard Mellanox ConnectX QDR InfiniBand Controller, QSFP interface
7. 1620W 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-2027TR-HTQRF	■ SuperServer 2027TR-HTQRF (Black)
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Motherboard

Super X9DRT-HIBQE

Processor/Cache

CPU	<ul style="list-style-type: none"> ■ Dual Socket R (LGA 2011) ■ Intel® Xeon® processor E5-2600 and E5-2600 v2 family† (up to 135W TDP *) <p>* Please contact your Supermicro sales representative for additional details</p>
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Note † BIOS version 3.0 or above is required

Cache ■ Up to 30MB

System Bus ■ QPI up to 8 GT/s

System Memory

Memory Capacity	<ul style="list-style-type: none"> ■ 8x 240-pin DDR3 DIMM sockets ■ Up to 512GB DDR3 ECC LRDIMM ■ Up to 256GB DDR3 ECC Registered memory (RDIMM)
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Chassis

Form Factor	■ 2U Rackmount
Model	■ <u>CSE-217HQ-R1620B</u>

Dimensions

Width	■ 17.25" (438mm)
Height	■ 3.47" (88mm)
Depth	■ 26.75" (679mm)
Gross Weight	■ 85 lbs (38.6kg)
Available Colors	■ Black

Front Panel

Buttons	<ul style="list-style-type: none"> ■ Power On/Off button ■ System Reset button ■ UID button
LEDs	<ul style="list-style-type: none"> ■ Power status LED ■ HDD activity LED ■ 2x Network activity LEDs ■ Universal Information (UID) LED

Expansion Slots (per Node)

PCI-Express	■ 1x PCI-E 3.0 (x16) Low-profile slot
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Memory Type	<ul style="list-style-type: none"> 1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
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
Infiniband	<ul style="list-style-type: none"> Mellanox ConnectX-3 QDR Infiniband 40Gbps Controller
SATA	<ul style="list-style-type: none"> SATA 2.0 & 3.0 with RAID 0, 1, 5, 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® i350 Dual Port Gigabit Ethernet Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8201N PHY (dedicated IPMI)
Graphics	<ul style="list-style-type: none"> Matrox G200eW

Input / Output (per Node)

Serial ATA	<ul style="list-style-type: none"> 2x SATA 3.0 ports (6Gbps) 5x SATA 2.0 ports (3Gbps)
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 3x USB 2.0 ports total (2x rear + 1x Type A)
VGA	<ul style="list-style-type: none"> 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> 1x Fast UART 16550 port / 1 Header
Infiniband	<ul style="list-style-type: none"> 1 external QSFP Infiniband connector

Drive Bays (per Node)

Hot-swap	<ul style="list-style-type: none"> 6x Hot-swap 2.5" SATA3/SAS HDD trays
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System Cooling

Fans	<ul style="list-style-type: none"> 4x 8cm heavy duty PWM fans with optimal fan speed control
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Power Supply

1620W high-efficiency redundant power supply w/ PMBus

AC Input	<ul style="list-style-type: none"> 1000W Output @ 100-120V, 12-10A, 50-60Hz 1200W Output @ 120-140V, 12-10A, 50-60Hz 1620W Output @ 180-240V, 10.5-8A, 50-60Hz
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DC Output	<ul style="list-style-type: none"> 1000W: +12V/84A; +5Vsb/4A 1200W: +12V/100A; +5Vsb/4A 1620W: +12V/150A; +5Vsb/4A
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Certification	  Platinum Certified [Test Report]
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System BIOS

BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) APM 1.2 PCI 2.2 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI

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-X9DRT-HIBQF	4	Super X9DRT-HIBQF Motherboard
	CSE-217HQ-R1620B	1	2U Chassis
Backplane	BPN-SAS-217HQ	1	Support 24x2.5ö SAS/SATA hard drives
Backplane	BPN-ADPX9-6SATA-O-P	4	6-PORT SATA ADAPTER FOR TWIN
Cable 1	CBL-0473L	8	21cm 30AWG SATA S-S cable
CD	CDR-X9	1	Driver CD for X9 series
Riser Card	RSC-R1U-E16R-O-P	4	RSC-R1U-E16R
Heatsink / Retention	SNK-P0047PS	4	1U Passive CPU Heat Sink for X9 Generation Motherboards w/ Narrow ILM
Heatsink / Retention	SNK-P0047PW	4	1U Passive Customized Rear CPU Heat Sink for X9 Twin Series Motherboards
Power Supply	PWS-1K62P-1R	2	1620W REDUNDANT POWER MODULE

Optional Parts List

	Part Number	Qty	Description
QSFP Cable	CBL-0417L	-	39.37" (100cm) QSFP to QSFP QDR
QSFP Cable	CBL-0325L	-	78.74" (200cm) QSFP TO QSFP QDR
QSFP Cable	CBL-0446L	-	118.11" (300cm) QSFP to QSFP QDR
QSFP Cable	CBL-0422L	-	196.85" (500cm) QSFP to QSFP QDR
QSFP Cable	CBL-0467L	-	275.59" (700cm) QSFP to QSFP QDR
QSFP Cable	CBL-0468L	-	590.55" (1500cm) QSFP TO QSFP Fiber QDR