

SuperServer 2027TR-H70FRF



Available Colors:

Black



Integrated Board



Super X9DRT-HIBFF

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/SAS HDD Bays
6. Onboard Mellanox ConnectX FDR 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-H70FRF	<ul style="list-style-type: none"> SuperServer 2027TR-H70FRF (Black)
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Motherboard

Super X9DRT-HIBFF

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>
Note	† BIOS version 3.0 or above is required

Cache	<ul style="list-style-type: none"> Up to 30MB
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System Bus	<ul style="list-style-type: none"> QPI up to 8 GT/s
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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	<ul style="list-style-type: none"> 2U Rackmount
Model	<ul style="list-style-type: none"> CSE-217HQ-R1620B

Dimensions

Width	<ul style="list-style-type: none"> 17.25" (438mm)
Height	<ul style="list-style-type: none"> 3.47" (88mm)
Depth	<ul style="list-style-type: none"> 26.75" (679mm)
Gross Weight	<ul style="list-style-type: none"> 85 lbs (38.6kg)
Available Colors	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 FDR Infiniband 56Gbps Controller
SAS	<ul style="list-style-type: none"> LSI 2008 SAS (6Gbps) RAID 0, 1, 10 support (Optional: AOC-SAS2-RAID5-KEY) RAID 5 support Note: In order to support the LSI RAID Controllers, both CPU socket must be populated
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)
SAS	<ul style="list-style-type: none"> 8x SAS ports (6Gbps)
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
 - 6x Hot-swap 2.5" SATA3/SAS2 HDD trays

System Cooling

- Fans
 - 4x 8cm heavy duty PWM fans with optimal fan speed control


Power Supply

1620W high-efficiency redundant power supply w/ PMBus

- AC Input
 - 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

- DC Output
 - 1000W: +12V/84A; +5Vsb/4A
 - 1200W: +12V/100A; +5Vsb/4A
 - 1620W: +12V/150A; +5Vsb/4A

Certification



Platinum Certified [[Test Report](#)]

System BIOS

- BIOS Type
 - 128Mb SPI Flash EEPROM with AMI BIOS
- BIOS Features
 - 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
 - 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
Motherboard / Chassis	MBD-X9DRT-HIBFF	4	Super X9DRT-HIBFF Motherboard
	CSE-217HQ-R1620B	1	2U Chassis
Backplane	BPN-ADP-SAS2-L6I-O-P	4	BPN,BPN-ADP-SAS2-L6i,LSI2008,PBF
Backplane	BPN-SAS-217HQ	1	Support 24x2.5ö SAS/SATA hard drives
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