SuperServer 2027TR-H70RF

Integrated Board

Super X9DRT-HF

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/SAS HDD Bays

6. 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-H70RF	SuperServer 2027TR-H70RF (**Black**)

Motherboard

Super X9DRT-HF

Processor/Cache

CPU	• Dual Socket R (LGA 2011) • Intel® Xeon® processor E5-2600 and **E5-2600 v2** family† (up to 135W TDP *) * Please contact your Supermicro sales representative for additional details
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	• 8x 240-pin DDR3 DIMM sockets • Up to 512GB DDR3 ECC LRDIMM • Up to 256GB DDR3 ECC Registered memory (RDIMM)

Chassis

Form Factor	• 2U Rackmount
Model	• CSE-217HQ-R1620B

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	• Power On/Off button • System Reset button • UID button
LEDs	• 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

Memory Type	1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	32GB, 16GB, 8GB, 4GB, 2GB, 1GB
Memory Voltage	1.5 V, 1.35 V
Error Detection	■ Corrects single-bit errors ■ Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset	Intel® C602 Chipset
SAS	■ 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	■ SATA 2.0 & 3.0 with RAID 0, 1, 5, 10
IPMI	■ 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	■ 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	■ Matrox G200eW

Input / Output (per Node)

Serial ATA	■ 2x SATA 3.0 ports (6Gbps) ■ 5x SATA 2.0 ports (3Gbps)
SAS	■ 8x SAS ports (6Gbps)
LAN	■ 2x RJ45 Gigabit Ethernet LAN ports ■ 1x RJ45 Dedicated IPMI LAN port
USB	■ 3x USB 2.0 ports total (2x rear + 1x Type A)
VGA	■ 1x VGA port
Serial Port / Header	■ 1x Fast UART 16550 port / 1 Header

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	80 PLUS PLATINUM 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-HF	4	Super X9DRT-HF 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