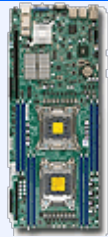


SuperServer 2027TR-D70QRF



Integrated Board



Super X9DRT-HIBQF

Available Colors:

Black



Key Features

Two **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. 3x PCI-E 3.0 (x8) slots via riser card (1x Low-profile and 2x Full-height Full-length)
4. Intel® i350 Dual port Gigabit Ethernet
5. 12x Hot-swap 2.5" SAS HDD Bays
6. Onboard Mellanox ConnectX QDR InfiniBand Controller, QSFP interface
7. 1280W Redundant Digital PS Platinum Level (95%)

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-D70QRF	■ SuperServer 2027TR-D70QRF (Black)
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Motherboard

Super X9DRT-HIBQF

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

- 8x 240-pin DDR3 DIMM sockets

Chassis

Form Factor	■ 2U Rackmount
Model	■ CSE-217HD-R1K28B

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

Memory Capacity	<ul style="list-style-type: none"> Up to 512GB DDR3 ECC LRDIMM Up to 256GB DDR3 ECC Registered memory (RDIMM)
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
SAS	<ul style="list-style-type: none"> LSI 2008 SAS (6Gbps) IT mode only 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)

SAS	<ul style="list-style-type: none"> 12x SAS ports (6Gbps) IT mode SAS option
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

Expansion Slots (per Node)

PCI-Express	<ul style="list-style-type: none"> 3x PCI-E 3.0 (x8) slots via riser card (1x Low-profile, 2x Full-height, Full-length slots)
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Drive Bays (per Node)

Hot-swap	<ul style="list-style-type: none"> 12x Hot-swap 2.5" HDD trays
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System Cooling

Fans	<ul style="list-style-type: none"> 4x 11K RPM cooling fans
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Power Supply

1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2

AC Input	<ul style="list-style-type: none"> 1000W Output @ 100-140V, 12-8A, 50-60Hz 1280W Output @ 180-240V, 8-6A, 50-60Hz
DC Output	<ul style="list-style-type: none"> 1000W: +12V/83A; +5Vsb/4A 1280W: +12V/106.7A, +5Vsb/4A

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	2	Super X9DRT-HIBQF Motherboard
	CSE-217HD-R1K28B	1	2U Chassis
Backplane	BPN-ADP-E16-L	2	BPN-ADP-E16-L
Backplane	BPN-SAS-217HD	1	24pcs 2.5" HDD for two node CSE-217HD
CD	CDR-X9	1	Driver CD for X9 series
Riser Card	RSC-R2UT-3E8R-O-P	2	2U RHS Riser Card with 3 PCI-E x8 for X9DRT-HF Twin MBs
Heatsink / Retention	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9 Generation Motherboards w/ Narrow ILM
Heatsink / Retention	SNK-P0048PW	2	2U Passive Rear CPU Heat Sink for X9 2U Twin Series Servers
Power Supply	PWS-1K28P-SQ	2	1U 1280W, redundant single output power supply