

# SuperServer 6027TR-DTQRF



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 (1x low-profile and 2x full-height full-length)
4. Intel® i350 Dual port Gigabit Ethernet
5. 6x Hot-swap 3.5" SATA3/SAS HDD Bays
6. Onboard Mellanox ConnectX QDR InfiniBand Controller, QSFP interface
7. 1280W Redundant Digital PS Platinum Level (95%)
8. Support 1 Full-height Full-length PCI-E x16 GPU card per node w/ GPU Kit

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

## Specifications

### Product SKUs

SYS-6027TR-DTQRF      ■ SuperServer 6027TR-DTQRF (Black)

### Motherboard

Super X9DRT-HIBQF

### 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      ■ 8x 240-pin DDR3 DIMM sockets  
 ■ Up to 512GB DDR3 ECC LRDIMM

### Chassis

Form Factor      ■ 2U Rackmount  
 Model      ■ CSE-827HD-R1K28B

### Dimensions

Width      ■ 17.25" (438mm)  
 Height      ■ 3.47" (88mm)  
 Depth      ■ 28.5" (724mm)  
 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)

Capacity	<ul style="list-style-type: none"> <li>Up to 256GB DDR3 ECC Registered memory (RDIMM)</li> </ul>
Memory Type	<ul style="list-style-type: none"> <li>1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs</li> </ul>
DIMM Sizes	<ul style="list-style-type: none"> <li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.5 V, 1.35 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> <li>Detects double-bit errors (using ECC memory)</li> </ul>

#### On-Board Devices

Chipset	<ul style="list-style-type: none"> <li>Intel® C602 Chipset</li> </ul>
Infiniband	<ul style="list-style-type: none"> <li>Mellanox ConnectX-3 QDR Infiniband 40Gbps Controller</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA 2.0 &amp; 3.0 with RAID 0, 1, 5, 10</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>Nuvoton WPCM450 BMC</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® i350 Dual Port Gigabit Ethernet</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8201N PHY (dedicated IPMI)</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>

#### Input / Output (per Node)

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

- 3x PCI-E 3.0 (x8) slots (1x Low-profile and 2x Full-height Full-length)

#### Drive Bays (per Node)

- Hot-swap 6x Hot-swap 3.5" SATA3/SAS HDD trays

#### System Cooling

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

#### Power Supply

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

- AC Input
  - 1000W Output @ 100-140V, 12-8A, 50-60Hz
  - 1280W Output @ 180-240V, 8-6A, 50-60Hz

- DC Output
  - 1000W: +12V/83A; +5Vsb/4A
  - 1280W: +12V/106.7A, +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-HIBQF	2	Super X9DRT-HIBQF Motherboard
	CSE-827HD-R1K28B	1	2U Chassis
Backplane	BPN-SAS-827HD	1	Sup 6x3.5" SATA hdd; hot swap
Backplane	BPN-ADPX9-6SATA-O-P	2	6-PORT SATA ADAPTER FOR TWIN
Cable 1	CBL-0473L	4	21cm 30AWG SATA S-S cable
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

#### Optional Parts List

	Part Number	Qty	Description
GPU kit	MCP-420-21709-0N	-	Complete CSE-217HD GPU kit with single packaging