

# SuperServer 6027TR-H71FRF



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. 3x Hot-swap 3.5" SATA3/SAS2 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-6027TR-H71FRF      ■ SuperServer 6027TR-H71FRF (Black)

### Motherboard

Super X9DRT-HIBFF

### 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)  
 ■ 1866/1600/1333/1066/800MHz ECC

### Chassis

Form Factor      ■ 2U Rackmount

Model      ■ CSE-827HQ-R1620B

### 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)

PCI-Express      ■ 1x PCI-E 3.0 (x16) Low-profile slot

Memory Type	DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
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 FDR Infiniband 56Gbps Controller</li> </ul>
SAS	<ul style="list-style-type: none"> <li>LSI 2108 SAS (6Gbps) w/ Hardware RAID support</li> <li>RAID 0, 1, 5, 6, 10, 50, 60 support</li> <li>Note: In order to support the LSI RAID Controllers, both CPU socket must be populated</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>
SAS	<ul style="list-style-type: none"> <li>8x SAS2 ports (6Gbps)</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>

#### Drive Bays (per Node)

Hot-swap     3x Hot-swap 3.5" 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	<ul style="list-style-type: none"> <li>1000W Output @ 100-120V, 12-10A, 50-60Hz</li> <li>1200W Output @ 120-140V, 12-10A, 50-60Hz</li> <li>1620W Output @ 180-240V, 10.5-8A, 50-60Hz</li> </ul>	
	DC Output	<ul style="list-style-type: none"> <li>1000W: +12V/84A; +5Vsb/4A</li> <li>1200W: +12V/100A; +5Vsb/4A</li> <li>1620W: +12V/150A; +5Vsb/4A</li> </ul>

Certification



Platinum Certified  
[ [Test Report](#) ]

#### System BIOS

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

#### Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

### Parts List

#### Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X9DRT-HIBFF	4	Super X9DRT-HIBFF Motherboard
	CSE-827HQ-R1620B	1	2U Chassis
Backplane	BPN-ADP-SAS2-H6IR-O-P	4	BPN-ADP-SAS2-H6IR-O-P
Backplane	BPN-SAS-827HQ	1	SAS Backplane, x12 3.5" HDD, 2U Twin
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 and X10 Systems 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