

# SuperServer 6027TR-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. 3x Hot-swap 3.5" SATA3/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-6027TR-H70FRF** ■ SuperServer 6027TR-H70FRF (**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)

### 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

<b>Memory Type</b>	<ul style="list-style-type: none"> <li>1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs</li> </ul>
<b>DIMM Sizes</b>	<ul style="list-style-type: none"> <li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB</li> </ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>1.5 V, 1.35 V</li> </ul>
<b>Error Detection</b>	<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

<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C602 Chipset</li> </ul>
<b>Infiniband</b>	<ul style="list-style-type: none"> <li>Mellanox ConnectX-3 FDR Infiniband 56Gbps Controller</li> </ul>
<b>SAS</b>	<ul style="list-style-type: none"> <li>LSI 2008 SAS (6Gbps)</li> <li>RAID 0, 1, 10 support</li> <li>(Optional: AOC-SAS2-RAID5-KEY) RAID 5 support</li> <li>Note: In order to support the LSI RAID Controllers, both CPU socket must be populated</li> </ul>
<b>SATA</b>	<ul style="list-style-type: none"> <li>SATA 2.0 &amp; 3.0 with RAID 0, 1, 5, 10</li> </ul>
<b>IPMI</b>	<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>
<b>Network Controllers</b>	<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>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>

#### Input / Output (per Node)

<b>Serial ATA</b>	<ul style="list-style-type: none"> <li>2x SATA 3.0 ports (6Gbps)</li> <li>5x SATA 2.0 ports (3Gbps)</li> </ul>
<b>SAS</b>	<ul style="list-style-type: none"> <li>8x SAS ports (6Gbps)</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>2x RJ45 Gigabit Ethernet LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>3x USB 2.0 ports total (2x rear + 1x Type A)</li> </ul>
<b>VGA</b>	<ul style="list-style-type: none"> <li>1x VGA port</li> </ul>
<b>Serial Port / Header</b>	<ul style="list-style-type: none"> <li>1x Fast UART 16550 port / 1 Header</li> </ul>
<b>Infiniband</b>	<ul style="list-style-type: none"> <li>1 external QSFP Infiniband connector</li> </ul>

#### Drive Bays (per Node)

<b>Hot-swap</b>	<ul style="list-style-type: none"> <li>3x Hot-swap 3.5" SATA3/SAS2 HDD trays</li> </ul>
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#### System Cooling


<b>Fans</b>	<ul style="list-style-type: none"> <li>4x 8cm heavy duty PWM fans with optimal fan speed control</li> </ul>
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#### Power Supply

1620W high-efficiency redundant power supply w/ PMBus

<b>AC Input</b>	<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>
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<b>DC Output</b>	<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>
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<b>Certification</b>	  <b>Platinum Certified [ Test Report ]</b>
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#### System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
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<b>BIOS Features</b>	<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>
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#### Operating Environment / Compliance

<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
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<b>Environmental Spec.</b>	<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>
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### Parts List

#### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X9DRT-HIBFF	4	Super X9DRT-HIBFF Motherboard
	CSE-827HQ-R1620B	1	2U Chassis
<b>Backplane</b>	BPN-ADP-SAS2-L6I-O-P	4	BPN,BPN-ADP-SAS2-L6i,LSI2008,PBF
<b>Backplane</b>	BPN-SAS-827HQ	1	SAS Backplane, x12 3.5" HDD, 2U Twin
<b>CD</b>	CDR-X9	1	Driver CD for X9 series
<b>Riser Card</b>	RSC-R1U-E16R-O-P	4	RSC-R1U-E16R
<b>Heatsink / Retention</b>	SNK-P0047PS	4	1U Passive CPU Heat Sink for X9 and X10 Systems w/ Narrow ILM
<b>Heatsink / Retention</b>	SNK-P0047PW	4	1U Passive Customized Rear CPU Heat Sink for X9 Twin Series Motherboards
<b>Power Supply</b>	PWS-1K62P-1R	2	1620W REDUNDANT POWER MODULE