

# SuperServer 6027PR-HTR



## Integrated Board



Super X9DRT-P

### 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
2. Up to 1TB ECC LRDIMM, 512GB ECC RDIMM, up to 1866MHz; 16x DIMM sockets
3. 1x PCI-E 3.0 x16 Low-profile slot
4. Intel® i350-AM2 Dual port GbE LAN
5. Integrated IPMI 2.0 with KVM and Dedicated LAN
6. 3x 3.5" Hot-swap SATA HDD Bays
7. 2000W Redundant Power Supplies  
**Titanium Level (96%)**

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

## Specifications

### Product SKUs

- SYS-6027PR-HTR** ■ SuperServer 6027PR-HTR (**Black**)

### Motherboard

#### Super X9DRT-P

### Processor/Cache

- CPU**
- Dual Socket R (LGA 2011)
  - Intel® Xeon® processor E5-2600 (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 (per Node)

- Memory Capacity**
- 16x 240-pin DDR3 DIMM slots
  - Supports up to 1TB DDR3 ECC LRDIMM
  - Supports up to 512GB DDR3 ECC Registered memory (RDIMM)

**Memory Type**

- 1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs

### Chassis

**Form Factor** ■ 2U Rackmount

**Model** ■ **CSE-827HQ+-R2K04B**

### Dimensions

**Width** ■ 17.25" (438mm)

**Height** ■ 3.47" (88mm)

**Depth** ■ 30.5" (774mm)

**Weight**

- Gross Weight: 90 lbs (40.9kg)
- Net Weight: 72 lbs (32.7 kg)

**Available Colors** ■ Black

### Front Panel

**Buttons**

- Power On/Off 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

**0 Slot**

- 1x "0 slot" (x16)
- [Compatible Listing](#)

<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 and 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>
<b>On-Board Devices</b>	
<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C602 Chipset</li> </ul>
<b>SATA</b>	<ul style="list-style-type: none"> <li>SATA3 (6Gbps) w/ RAID 0, 1, 10</li> <li>SATA2 (3Gbps) w/ RAID 0, 1, 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>
<b>Input / Output (per Node)</b>	
<b>SATA</b>	<ul style="list-style-type: none"> <li>2x SATA3 (6Gbps) ports</li> <li>1x SATA2 (3Gbps) ports</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>2x USB 2.0 ports total (2x rear)</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 (internal)</li> </ul>
<b>Others</b>	<ul style="list-style-type: none"> <li>1x <a href="#">SATADOM</a> support on the motherboard</li> </ul>

**(Both CPUs need to be installed for full access to PCI-E slots)**

#### Drive Bays (per Node)

- Hot-swap**
  - 3x 3.5" Hot-swap SATA HDD trays

#### System Cooling

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

#### Power Supply (76mm Width)

2000W Redundant Power Supplies with PMBus

- Total Output Power**
  - 1000W/2000W

- Dimension (W x H x L)**
  - 76 x 40.4 x 336 mm

- Input**
- 100-127 Vac / 12-9.5 A / 50-60 Hz
  - 200-220 Vac / 10-9.5 A / 50-60 Hz
  - 220-230 Vac / 10-9.8 A / 50-60 Hz
  - 230-240 Vac / 10-9.8 A / 50-60 Hz
  - 200-240 Vac / 11.8-10 A / 50-60 Hz (UL/cUL only)

- +12V**
- Max: 83.3A & Min: 0A (100-127 Vac)
  - Max: 150A & Min: 0A (200-220 Vac)
  - Max: 165A & Min: 0A (220-230 Vac)
  - Max: 166.7A & Min: 0A (230-240 Vac)
  - Max: 166.7A & Min: 0A (200-240 Vac)(UL/cUL only)

- +5Vsb**
  - Max: 1A / Min: 0A

- Output Type**
  - 27 Pairs Gold Finger Connector

#### Certification



UL/cUL/CB/BSMI/CE/CCC  
**Titanium Level [ 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
<b>Motherboard / Chassis</b>	MBD-X9DRT-P	4	Super X9DRT-P Motherboard
	CSE-827HQ+-R2K04B	1	2U Chassis
<b>Backplane</b>	BPN-ADP-6SATA3P	4	Backplan adapter card; 6SATA ports,RoHS/REACH,PBF
<b>Backplane</b>	BPN-SAS3-827HQ	1	12x 3.5" hard drive backplane; supports 3.5" Twin Pro Chassis; SAS-3 12Gb/s compliance, new Molex 64-pin receptacles, PWM fan control and Power delay control on HDD spin up,RoHS/REACH,PBF
<b>Riser Card</b>	RSC-R1UTP-E16R	4	,RoHS/REACH,PBF
<b>Heatsink / Retention</b>	SNK-P0057PS	4	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
<b>Heatsink / Retention</b>	SNK-P0047PSM	4	1U Passive Front CPU Heat Sink w/ a Middle Air Channel for X9, X10 2U Twin^2+ and Twin Pro^2 Series Servers

Optional Parts List			
	Part Number	Qty	Description
<b>Software</b>	SFT-OOB-LIC	1	OOB Management Package (per node license)
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)