

# SuperStorage Server 2027R-E1CR24L



## Available Colors:

Black



## Key Features

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and **E5-2600 v2** family†
2. Up to 1TB ECC DDR3, up to 1866MHz; 16x DIMM slots
3. 6x PCI-E 3.0 x8 (LP, HL); Slots 1 & 2 occupied by HBA, JBOD expansion port
4. Intel® i350 GbE Controller; 2x ports
5. 24x 2.5" Hot-swap SAS3/SATA3 HDD Bays
6. SAS3 via LSI 3008 HBA
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 3x 8cm high-performance PWM fans
9. 920W 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

- SSG-2027R-E1CR24L** ■ SuperServer 2027R-E1CR24L (**Black**)

### Motherboard

**Super X9DRD-EF**

### Processor/Cache

- CPU** ■ Dual Socket R (LGA 2011)  
 ■ Intel® Xeon® processor E5-2600 and **E5-2600 v2** family† (up to 130W TDP)

**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** ■ 16x 240-pin DDR3 DIMM slots  
 ■ Up to 1TB DDR3 ECC LRDIMM  
 ■ Up to 512GB DDR3 ECC Registered memory (RDIMM)  
 ■ Up to 128GB DDR3 ECC Un-Buffered memory (UDIMM)

**Memory Type** ■ 1866/1600/1333/1066/800MHz ECC

### Chassis

**Form Factor** ■ 2U Rackmount

**Model** ■ **CSE-216BE1C-R920LPB**

### Dimensions

**Width** ■ 17.2" (437mm)

**Height** ■ 3.5" (89mm)

**Depth** ■ 24.8" (630mm)

**Gross Weight** ■ 61 lbs (27.7 kg)

**Available Colors** ■ Black

### Front Panel


**Buttons** ■ Power On/Off button  
 ■ System Reset button

**LEDs** ■ Power status LED  
 ■ Hard drive activity LED  
 ■ 2x Network activity LEDs  
 ■ System Overheat LED  
 ■ Power fail LED

### Expansion Slots

**PCI-Express** ■ 6x PCI-E 3.0 x8 slots (Low-profile, HL)  
 ■ Slot 1 & 2 Occupied by JBOD Expansion Port and HBA

	DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
<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>
<b>On-Board Devices</b>	
<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C602J Chipset</li> </ul>
<b>SATA</b>	<ul style="list-style-type: none"> <li>SATA 2.0 3Gbps with RAID 0, 1, 5, 10</li> <li>SATA 3.0 6Gbps with RAID 0, 1, 5, 10</li> </ul>
<b>SAS3 AOC</b>	<ul style="list-style-type: none"> <li>SAS3 via LSI 3008 AOC; IT Mode/Pass-through</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 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</b>	
<b>Serial ATA</b>	<ul style="list-style-type: none"> <li>2x SATA 3.0 ports (6Gbps)</li> <li>4x SATA 2.0 ports (3Gbps)</li> </ul>
<b>SAS</b>	<ul style="list-style-type: none"> <li>8x SAS3 ports (12Gbps)</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>9x USB 2.0 ports total (4 rear + 4 via header + 1 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>Drive Bays</b>	
<b>Hot-swap</b>	<ul style="list-style-type: none"> <li>24x 2.5" Hot-swap SAS3/SATA3 HDD bays</li> </ul>
<b>Backplane</b>	
SAS3 Backplane: SAS3 12Gbps single expander backplane, w/ 24x SAS3 2.5" drive slots and 4x HD mini-SAS3 cable connectors for SAS3 uplink/downlink	
<b>System Cooling</b>	
<b>Fans</b>	<ul style="list-style-type: none"> <li>3x 8cm 9.5K RPM, 4-pin PWM fans</li> </ul>
<b>Power Supply with Power Distributor</b>	
920W high-efficiency (94%+) AC-DC Redundant power supplies with PMBus and I2C	
<b>AC Input</b>	<ul style="list-style-type: none"> <li>100-240 V, 50-60 Hz, 11-4.5 Amp</li> </ul>
<b>DC Output</b>	<ul style="list-style-type: none"> <li>4 Amp @ +5V standby</li> <li>75 Amp @ +12V</li> </ul>
<b>Certification</b>	  <b>Platinum Certified [ Test Report ]</b>
<b>System BIOS</b>	
<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
<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>
<b>Operating Environment / Compliance</b>	
<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
<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>

## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X9DRD-EF	1	Super X9DRD-EF Motherboard
	CSE-216BE1C-R920LPB	1	2U Chassis
<b>Backplane</b>	BPN-SAS3-216EL1	1	SAS3 12Gb/s single expander backplane, with 24x SAS3 2.5" drive slots and 4x HD mini-SAS3 cable connectors for SAS3 uplink/downlink,RoHS/REACH,PBF
<b>Cable 1</b>	CBL-SAST-0532	4	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF
<b>CD</b>	CDR-X9	1	Driver CD for X9 series
<b>Heatsink / Retention</b>	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
<b>Drive Tray(s)</b>	MCP-220-00047-0B	24	Black Gen 3rd hot-swap 2.5" HDD tray
<b>Add On Card</b>	AOC-S3008L-L8E	1	12Gbps SAS3/HBA/ 2 internal HD connectors/STD Gen3 PCI/122 HD support

<b>Add On Module</b>	AOM-SAS3-16116E-LP	1	16-port Mini SAS HD Int-to-Ext cable adapter w/ LP bracket, RoHS/REACH, PBF
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#### Optional Parts List

	<b>Part Number</b>	<b>Qty</b>	<b>Description</b>
<b>Rear Window</b>	MCP-220-82609-0N	-	Rear hot-swap drive bay for 2x 2.5" drives
<b>HDD Bracket</b>	MCP-220-82611-0N	1	Dual 2.5" fixed HDD tray
	CBL-0473L	2	HDD SATA Cable
	CBL-0289L	1	HDD Power Cable