

# SuperServer 6027R-CDNRT+



## Integrated Board



**Super X9DRD-CNT+**

Available Colors:

Black



## Key Features

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
2. 8x 3.5" Hot-swap SAS/SATA + 4x 2.5" NVMe drive bays; SAS3 via LSI 3108 HW RAID
3. Up to 1.5TB ECC DDR3, up to 1866MHz; 24x DIMM slots
4. 1x PCI-E 3.0 x16 (FHHL), 2x PCI-E 3.0 x8 (FHHL), and 1x PCI-E 3.0 x8 (LP)
5. Intel® X540 Dual port 10GBase-T
6. Integrated IPMI 2.0 and KVM with Dedicated LAN
7. I/O ports: 1x VGA, 1x COM, 4x USB 2.0 (rear)
8. 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

SYS-6027R-CDNRT+	▪ SuperServer 6027R-CDNRT+ (Black)
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### Motherboard

Super X9DRD-CNT+

### 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	▪ 24x 240-pin DDR3 DIMM slots
	▪ Up to 1.5TB DDR3 ECC LRDIMM
	▪ Up to 768GB DDR3 ECC RDIMM
	▪ Up to 384GB DDR3 ECC/non-ECC UDIMM

### Chassis

Form Factor ▪ 2U Rackmount

Model ▪ CSE-826BAC4-R920WB

### Dimensions and Weight

Width ▪ 17.2" (437mm)

Height ▪ 3.5" (89mm)

Depth ▪ 25.5" (648mm)

Package ▪ 11.4" (H) x 26.7" (W) x 34.5" (D)

Weight ▪ Gross Weight: 64 lbs (29.0 kg)  
▪ Net Weight: 36 lbs (16.3 kg)

Available Colors ▪ Black

### Front Panel

Buttons ▪ Power On/Off button  
▪ System Reset button

LEDs ▪ Power status LED  
▪ HDD activity LED  
▪ 2x Network activity LEDs  
▪ Universal Information (UID) LED

### Expansion Slots

▪ 1 PCI-E 3.0 x16 slot

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> <li>Support ECC and non-ECC UDIMMs</li> </ul> <p>* Maximum memory speed may be capped by CPU. Please verify that the chosen CPU can support desired memory speed.</p>
DIMM Sizes	<ul style="list-style-type: none"> <li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB, 64GB LRDIMM</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>
SAS	<ul style="list-style-type: none"> <li>LSI 3108 8 port SAS3</li> <li>HW RAID 0, 1, 5, 6, 10, 50, 60 support w/ SuperCap option</li> </ul>
AHCI SATA	<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>
SCU SATA	<ul style="list-style-type: none"> <li>SATA 2.0 3Gbps with RAID 0, 1, 5, 10</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA3 (6Gbps); 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® X540 Dual Port 10GBase-T</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8201F PHY (dedicated IPMI)</li> </ul>
Video	<ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>

#### Input / Output

SAS	<ul style="list-style-type: none"> <li>8x SAS3 (12Gbps) ports</li> </ul>
SATA	<ul style="list-style-type: none"> <li>2x SATA3 (6Gbps) ports</li> <li>8x SATA2 (3Gbps) ports</li> </ul>
NVMe	<ul style="list-style-type: none"> <li>4x Internal NVMe ports</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2x RJ45 10GBase-T ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>4x USB 2.0 ports total (rear)</li> </ul>
Video	<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 serial; 1 COM port (rear)</li> </ul>
DOM	<ul style="list-style-type: none"> <li>2x SuperDOM (Disk on Module) ports</li> </ul>

(Full-height, Half-length)

- 2 PCI-E 3.0 x8 slots (Full-height, Half-length)
- 1 PCI-E 3.0 x8 slot (Low-profile)

PCI-Express

(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and [AOC Support](#) for details.)

#### Drive Bays

- Hot-swap
- 8x 3.5" Hot-swap SAS/SATA drive trays
  - 4x 2.5" NVMe drive trays

#### System Cooling

- Fans
- 3x 80x80x38mm heavy duty counter-rotating fans with optimal fan speed control

#### Power Supply

920W Redundant High-Efficiency Power Supplies w/ Power Distributor, PMBus 1.2, I<sup>2</sup>C, and PFC

- AC Input
- 100-240 V, 50-60 Hz, 11-4.5 Amp

- DC Output
- +5V standby: 4A
  - +12V: 75A

- With Power Distributor
- +5V: 45A
  - +3.3V: 24A
  - 12V: 0.6A

- 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
  - DMI 2.3
  - PCI 2.3
  - ACPI 1.0 / 2.0 / 3.0 / 4.0
  - BIOS rescue hot keys
  - USB Keyboard support
  - SMBIOS 2.7.1
  - UEFI 2.3.1

#### 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-X9DRD-CNT+	1	Super X9DRD-CNT+ Motherboard
	CSE-826BAC4-R920WB	1	2U Chassis
<b>Backplane</b>	BPN-SAS3-826A-N4	1	2U Backplane for 3.5
<b>Cable 1</b>	CBL-SAST-0532	2	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF
<b>Cable 2</b>	CBL-SAST-0623	4	Internal Mini-SAS HD cable for PCIe SSD NVMe, 12Gb/s, 45cm,30AWG,RoHS/REACH
<b>Riser Card</b>	RSC-R2UW-2E8E16+	1	RSC-R2UW-2E8E16+
<b>Riser Card</b>	RSC-R2UW-E8R-UP	1	2U RHS WIO Riser Card with a PCI-E x8 for UP MBs (Rev 1.02)
<b>Heatsink / Retention</b>	SNK-P0048PT	1	2U Passive CPU Heat Sink for SYS-6027R-TDT+ (X9DRD-iT+ in SC825TQ-600WB) Rear CPU,RoHS/REACH
<b>Heatsink / Retention</b>	SNK-P0048PS	1	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
<b>Rail Set</b>	MCP-290-00053-0N	1 set	Rail set, quick/quick, default for 2,3U 17.2"W
<b>Tray</b>	MCP-220-00116-0B	4	NVMe Drive Tray
<b>Riser Card Bracket</b>	MCP-240-00146-0N	1	2U Half Length riser card bracket

### Optional Parts List

	Part Number	Qty	Description
<b>Network Card(s)</b>	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel® i350AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel® i350
	AOC-SG-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel® 82575EB
	AOC-SG-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel® 82576EB
	AOC-STG-b4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom® BCM57840S
	AOC-STGN-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82599ES
	AOC-STGN-i1S	-	Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel® 82599ES
	AOC-STG-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel® X540
	AOC-STG-i2	-	Standard LP, 2x 10GbE CX4, PCI-E x8, Intel® 82598EB
<b>Onsite Service Program</b>	<u>QS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
<b>Onsite Service Program</b>	<u>QSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
<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)