

# SuperServer 7048R-C1R



## Integrated Board



**Super X10DRH-C**

Available Colors:

Black



## Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB reg. ECC DDR4 2133MHz; 16x DIMM sockets
3. 1x PCI-E 3.0 x16, 6x PCI-E 3.0 x8 slot
4. Intel® i350 Dual port GbE LAN
5. I/O ports: 2x SuperDOM, 1x VGA, 2x COM, 2x USB 3.0, 4x USB 2.0
6. 8x 3.5" Hot-swap SATA3 HDD Bays; 8x 2.5" Hot-swap SAS3 drives in mobile rack; 1x 5.25" drive bay
7. 920W Redundant Power Supplies Platinum Level (94%)
8. Tower or Rackmount

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

## Specifications

### Product SKUs

- SYS-7048R-C1R ■ SuperServer 7048R-C1R (Black)

### Motherboard

Super X10DRH-C

### Processor/Cache

- CPU ■ Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP \*\*)  
 ■ Dual Socket R3 (LGA 2011)

- Cores / Cache ■ Up to 18 Cores / Up to 45MB Cache

- System Bus ■ QPI up to 9.6 GT/s

Note \*\* Please contact your Supermicro sales representative for additional details.

### System Memory

- Memory Capacity ■ 16x 288-pin DDR4 DIMM sockets  
 ■ Up to 1TB ECC LRDIMM, 512GB ECC RDIMM

- Memory Type ■ 2133/1866/1600MHz ECC DDR4 SDRAM  
 72-bit

- DIMM Sizes ■ RDIMM: 32GB, 16GB, 8GB, 4GB  
 ■ LRDIMM: 64GB, 32GB

### Chassis

- Form Factor ■ 4U Rackmountable / Tower  
 ■ Optional Rackmount Kit

- Model ■ CSE-745TQ-R920B

### Dimensions and Weight

- Height ■ 17.2" (437mm)

- Width ■ 7.0" (178mm)

- Depth ■ 25.5" (648mm)

- Package ■ 24" (H) x 14" (W) x 26.5" (D)

- Weight ■ Net Weight: 56.5 lbs (25.6 kg)  
 ■ Gross Weight: 74 lbs (33.57 kg)

- Available Colors ■ Black

### Front Panel

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



- LEDs ■ Power LED  
 ■ Hard drive activity LED  
 ■ 2x Network activity LEDs  
 ■ System Overheat LED  
 ■ Power Fail LED

- Ports ■ 2x USB Ports

### Drive Bays

- 8x 3.5" Hot-swap SATA3 drive trays

Memory Voltage	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> </ul>
<b>On-Board Devices</b>	
Chipset	<ul style="list-style-type: none"> <li>Intel® C612 Express chipset</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul>
SAS	<ul style="list-style-type: none"> <li>LSI 3108 SAS3 (12Gbps) controller; HW RAID 0, 1, 5, 6, 10, 50, 60</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>ASPEED AST2400 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>
Video	<ul style="list-style-type: none"> <li>ASPEED AST2400 BMC</li> </ul>
<b>Input / Output</b>	
SATA	<ul style="list-style-type: none"> <li>8x SATA3 (6Gbps) ports</li> </ul>
SAS	<ul style="list-style-type: none"> <li>8x SAS3 (12Gbps) ports</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>2x USB 3.0 ports (2 rear)</li> <li>4x USB 2.0 ports (2 rear, 2 front)</li> <li>1x USB Type A</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 COM/Serial</li> </ul>
DOM	<ul style="list-style-type: none"> <li>2x SuperDOM (Disk on Module) ports</li> </ul>
<b>Expansion Slots</b>	
PCI-Express	<ul style="list-style-type: none"> <li>1x PCI-E 3.0 x16 (Full-height, Full-length)</li> <li>6x PCI-E 3.0 x8 (Full-height, Full-length)</li> </ul>
<b>System BIOS</b>	
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>DMI 2.2</li> <li>ACPI 1.0 / 2.0</li> <li>USB Keyboard support</li> <li>SMBIOS 2.3</li> <li>UEFI</li> </ul>

Hot-swap	<ul style="list-style-type: none"> <li>8x 2.5" Hot-swap SAS3 drives in mobile rack</li> </ul>
Peripheral Bay	<ul style="list-style-type: none"> <li>1x 5.25" drive bay (optional devices)</li> </ul>
<b>SAS / SATA Backplane</b>	
	<ul style="list-style-type: none"> <li>SAS via backplane (BPN-SAS3-I28A) in Mobile rack</li> <li>SATA via chassis HDD Backplane CSE-SAS-743TQ-O-P</li> </ul>
<b>System Cooling</b>	
Fans	<ul style="list-style-type: none"> <li>3x 8cm Hot-swap redundant PWM Cooling Fans</li> <li>2x 8cm Hot-swap Rear Exhaust PWM Fans &amp; air shroud</li> </ul>
<b>Power Supply with Power Distributor</b>	
	920W high-efficiency (94%+) AC-DC Redundant power supplies with PMBus and I2C
AC Input	<ul style="list-style-type: none"> <li>100-240 V, 50-60 Hz, 11-4.5 Amp</li> </ul>
DC Output	<ul style="list-style-type: none"> <li>4 Amp @ +5V standby</li> <li>75 Amp @ +12V</li> </ul>
Certification	  Platinum Certified [ <a href="#">Test Report</a> ]
<b>PC Health Monitoring</b>	
CPU	<ul style="list-style-type: none"> <li>Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages.</li> <li>6-Phase-switching voltage regulator</li> </ul>
FAN	<ul style="list-style-type: none"> <li>Total of five fan headers supporting up to 5 fans</li> <li>5x fans with tachometer status monitoring</li> <li>Status monitor for speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul>
Temperature	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>CPU thermal trip support</li> <li>Thermal Control for 5x fan connectors</li> <li>Thermal Monitor 2 (TM2) support</li> <li>PECI</li> </ul>
LED	<ul style="list-style-type: none"> <li>System info. LED: UID indicator, fan fail/System Overheat</li> <li>Suspend static indicator LED</li> <li>UID/Remote LED</li> </ul>
Other Features	<ul style="list-style-type: none"> <li>Chassis intrusion detection</li> <li>Chassis intrusion header</li> </ul>
<b>Operating Environment / Compliance</b>	
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 - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRH-C	1	Super X10DRH-C Motherboard
	CSE-745TQ-R920B	1	4U Chassis
Backplane	BPN-SAS3-I28A	1	,RoHS/REACH,PBF SAS3 BPN - 8x2.5" SSD/HDD hotswap drive bays for CSE-M28SAC chassis,overheat indicator,SGPIO support SES2 mngt,2 mini-SAS HD connector(SFF-8643),1 fan connector with fan fail detection
Backplane	CSE-SAS-743TQ-O-P	1	CSE-SAS-743TQ-O-P
Cable 1	CBL-CDAT-0661	1	8 pin to 8 pin round SGPIO cable, 40cm, 28AWG, pinout 1-1,RoHS/REACH
Cable 2	CBL-0476L	1	IPASS to 4 SATA, 55,45,35,30, w/55 SB, 30AWG
Cable 3	CBL-0484L	4	55cm 30AWG SATA S-S cable
Cable 4	CBL-SAST-0532	2	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF
Cable 5	CBL-0099	1	Power extension cable; one HDD to two HDD and two FDD. 35/25/12cm. 22AWG
Heatsink / Retention	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-920P-1R	2	1U REDUNDANT 920W PMBus 94% EFFICIENCY
Mobile Rack	CSE-M28SACB-OEM	1	Black SAS3/SATA3 Mobile Rack for 8x 2.5" HDD w/o fan module,HF,RoHS/REACH,PBF

### Optional Parts List

	Part Number	Qty	Description
Mounting Rails	CSE-PT26	-	Outer slides extendable length: 26"
HDD Tray Converter	MCP-220-00080-0B	-	Adaptor HDD carrier to install 2.5" HDD in 3.5" HDD tray
Onsite Service Program	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)