

SuperServer 7048R-C1RT4+



Integrated Board



Super X10DRC-T4+

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 1.5TB reg. ECC DDR4 2133MHz; 24x DIMM sockets
3. 2x PCI-E 3.0 x16, 3x PCI-E 3.0 x8, and 1x PCI-E 2.0 x4 (in x8) slot
4. Quad LAN w/ Intel® X540 10GBase-T
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. 1000W Redundant Power Supplies **Titanium Level (96%)**
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-C1RT4+** ■ SuperServer 7048R-C1RT4+ (Black)

Motherboard

Super X10DRC-T4+

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** ■ 24x 288-pin DDR4 DIMM slots
 ■ Up to 1.5TB ECC LRDIMM, 768GB ECC RDIMM
- Memory Type** ■ 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
- DIMM Sizes** ■ RDIMM: 32GB, 16GB, 8GB, 4GB

Chassis

- Form Factor** ■ 4U Rackmountable / Tower
 ■ Optional Rackmount Kit
- Model** ■ CSE-745TQ-R1K03B

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: 57 lbs (25.9 kg)
 ■ Gross Weight: 74.5 lbs (33.8 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

DIMM Sizes	<ul style="list-style-type: none"> ▪ LRDIMM: 64GB, 32GB
Memory Voltage	<ul style="list-style-type: none"> ▪ 1.2 V
Error Detection	<ul style="list-style-type: none"> ▪ Corrects single-bit errors
On-Board Devices	
Chipset	<ul style="list-style-type: none"> ▪ Intel® C612 Express chipset
SATA	<ul style="list-style-type: none"> ▪ SATA3 (6Gbps); RAID 0, 1, 5, 10
SAS	<ul style="list-style-type: none"> ▪ LSI 3108 SAS3 (12Gbps) controller; HW RAID 0, 1, 5, 6, 10, 50, 60
IPMI	<ul style="list-style-type: none"> ▪ Support for Intelligent Platform Management Interface v.2.0 ▪ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ▪ ASPEED AST2400 BMC
Network Controllers	<ul style="list-style-type: none"> ▪ Intel® X540 Quad Port 10GBase-T ▪ Virtual Machine Device Queues reduce I/O overhead ▪ Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output ▪ 1x Realtek RTL8201N PHY (dedicated IPMI)
Video	<ul style="list-style-type: none"> ▪ ASPEED AST2400 BMC
Input / Output	
SATA	<ul style="list-style-type: none"> ▪ 10x SATA3 (6Gbps) ports
SAS	<ul style="list-style-type: none"> ▪ 8x SAS3 (12Gbps) ports ▪ SuperCap option support
LAN	<ul style="list-style-type: none"> ▪ 4x RJ45 10GBase-T LAN ports ▪ 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> ▪ 2x USB 3.0 ports (rear) ▪ 4x USB 2.0 ports (2 rear, 2 front) ▪ 1x USB Type A
Video	<ul style="list-style-type: none"> ▪ 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> ▪ 1x COM/Serial
DOM	<ul style="list-style-type: none"> ▪ 2x SuperDOM (Disk on Module) ports
Expansion Slots	
PCI-Express	<ul style="list-style-type: none"> ▪ 2x PCI-E 3.0 x16 (Full-height, Full-length) ▪ 3x PCI-E 3.0 x8 (Full-height, Full-length) ▪ 1x PCI-E 2.0 x4 (in x8)
System BIOS	
BIOS Type	<ul style="list-style-type: none"> ▪ 128Mb SPI Flash EEPROM with UEFI BIOS
BIOS Features	<ul style="list-style-type: none"> ▪ Plug and Play (PnP) ▪ APM 1.2 ▪ DMI 2.2 ▪ ACPI 1.0 / 2.0 ▪ USB Keyboard support ▪ SMBIOS 2.3 ▪ UEFI

Hot-swap	<ul style="list-style-type: none"> ▪ 8x 3.5" Hot-swap SATA3 drive trays ▪ 8x 2.5" Hot-swap SAS3 drives in mobile rack
Peripheral Bay	<ul style="list-style-type: none"> ▪ 1x 5.25" drive bay (optional devices)
SAS / SATA Backplane	
	<ul style="list-style-type: none"> ▪ SAS via backplane (BPN-SAS3-I28A) in Mobile rack ▪ SATA via chassis HDD Backplane CSE-SAS-743TQ-O-P
System Cooling	
Fans	<ul style="list-style-type: none"> ▪ 3x 8cm Hot-swap redundant PWM Cooling Fans ▪ 2x 8cm Hot-swap Rear Exhaust PWM Fans & air shroud
Power Supply with Power Distributor	
	1000W Titanium Level (96%) High-efficiency AC-DC Redundant power supplies with PMBus and I2C
AC Input	<ul style="list-style-type: none"> ▪ 100-240 V, 50-60 Hz, 11-4.5 Amp
DC Output	<ul style="list-style-type: none"> ▪ 4 Amp @ +5V standby ▪ 75 Amp @ +12V
Certification	  Titanium Certified [Test Report]
PC Health Monitoring	
CPU	<ul style="list-style-type: none"> ▪ Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. ▪ 6-Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> ▪ Total of five fan headers supporting up to 5 fans ▪ 5x fans with tachometer status monitoring ▪ Status monitor for speed control ▪ Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> ▪ Monitoring for CPU and chassis environment ▪ CPU thermal trip support ▪ Thermal Control for 5x fan connectors ▪ Thermal Monitor 2 (TM2) support ▪ PECI
LED	<ul style="list-style-type: none"> ▪ System info. LED: UID indicator, fan fail/System Overheat ▪ Suspend static indicator LED ▪ UID/Remote LED
Other Features	<ul style="list-style-type: none"> ▪ Chassis intrusion detection ▪ Chassis intrusion header
Operating Environment / Compliance	
RoHS	<ul style="list-style-type: none"> ▪ RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> ▪ 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 - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRC-T4+	1	Super X10DRC-T4+ Motherboard
	CSE-745TQ-R1K03B	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-SAST-0532	2	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF
Cable 2	CBL-0099	1	Power extension cable; one HDD to two HDD and two FDD. 35/25/12cm. 22AWG
Cable 3	CBL-0483L	8	29cm 30AWG SATA S-S cable
Cable 4	CBL-CDAT-0661	2	8 pin to 8 pin round SGPIO cable, 40cm, 28AWG, pinout 1-1,RoHS/REACH
Heatsink / Retention	SNK-P0048P	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square ILM MB
Power Supply	PWS-1K03A-1R	2	1U 1000W Redundant Power Supply Titanium W/PMbus 76x365x40mm,RoHS/REACH
Mobile Rack	CSE-M28SACB-OEM	1	Black SAS3/SATA3 Mobile Rack for 8x 2.5" HDD w/o fan module,HF,RoHS/REACH,PBF
Air Shroud	MCP-310-74501-0B	1	SC745 Air Shroud For System with 10G

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	QS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	OSNBD3/2/1	-	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)