

SuperServer 7048R-C1R4+



Integrated Board



Super X10DRC-LN4+

Available Colors:

Black



[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ Manuals](#)
[▶ OS Certification Matrix](#)
[▶ Quick-References Guide](#)
[▶ Drive Options](#)

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

Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 family; QPI up to 9.6GT/s
2. Up to **3TB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 24x DIMM slots
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® i350 GbE
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

Specifications

Product SKUs - Discontinued SKU (EOL). Please contact sales-rep for alternative options.

SYS-7048R-C1R4+ ■ SuperServer 7048R-C1R4+ (Black)

Motherboard

Super X10DRC-LN4+

Processor/Cache

CPU ■ Intel® Xeon® processor E5-2600 v4[†]/ v3 family (up to 145W TDP) *
■ Dual Socket R3 (LGA 2011)

Cores / Cache ■ Up to **22 Cores**[†] / Up to **55MB**[†] Cache

System Bus ■ QPI up to 9.6 GT/s

Note † BIOS version 2.0 or above is required

Note * Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.

System Memory

Memory Capacity ■ 24x 288-pin DDR4 DIMM slots
■ Up to 3TB[†] ECC 3DS LRDIMM, 768 ECC RDIMM

Memory Type ■ **2400**[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

DIMM Sizes ■ RDIMM: 32GB, 16GB, 8GB, 4GB
■ LRDIMM: 64GB, 32GB
■ 3DS LRDIMM: 128GB

Memory Voltage ■ 1.2 V

Error Detection ■ Corrects single-bit errors

On-Board Devices

Chipset ■ Intel® C612 chipset

SATA ■ SATA3 (6Gbps); RAID 0, 1, 5, 10

SAS ■ Broadcom 3108 SAS3 (12Gbps) controller;
HW RAID 0, 1, 5, 6, 10, 50, 60

IPMI ■ 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 ■ Intel® i350 Quad Port Gigabit Ethernet
■ Virtual Machine Device Queues reduce I/O overhead
■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
■ 1x Realtek RTL8201N PHY (dedicated IPMI)

Video ■ ASPEED AST2400 BMC

Input / Output

SATA ■ 10x SATA3 (6Gbps) ports

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: 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

Hot-swap ■ 8x 3.5" Hot-swap SATA3 drive trays
■ 8x 2.5" Hot-swap SAS3 drives in mobile rack

Peripheral Bay ■ 1x 5.25" drive bay (optional devices)

SAS / SATA Backplane

- SAS via backplane (BPN-SAS3-I28A) in Mobile rack
- SATA via chassis HDD Backplane CSE-SAS-743TQ-O-P

System Cooling

Fans ■ 3x 8cm Hot-swap redundant PWM Cooling Fans
■ 2x 8cm Hot-swap Rear Exhaust PWM Fans & air shroud

Power Supply with Power Distributor

920W high-efficiency (94%+) AC-DC Redundant power supplies with PMBus and I2C

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

DC Output ■ 4 Amp @ +5V standby
■ 75 Amp @ +12V

Certification



Platinum Certified
[**Test Report**]

PC Health Monitoring

SAS	<ul style="list-style-type: none"> 8x SAS3 (12Gbps) ports SuperCap option support
LAN	<ul style="list-style-type: none"> 4x RJ45 Gigabit Ethernet 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

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)

Список деталей

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRC-LN4+	1	Super X10DRC-LN4+ Motherboard
	CSE-745TQ-R920B	1	4U Chassis
Backplane	BPN-SAS3-I28A	1	8-port Mobile-Rack (CSE-M28SAC) SAS3 12Gbps hot swappable HDD backplane, support up to 8x 2.5-inch SAS3/SATA3 HDD/SSD
Backplane	CSE-SAS-743TQ	1	743 SAS BACKPLANE W/AMI MG9072
Cable 1	CBL-CDAT-0661	2	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,40CM,28AWG
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	SATA,INT,ROUND,ST-ST,29CM,30AWG
Cable 4	CBL-SAST-0532	2	MINI SAS HD,12G,INT,50CM,30AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1593-QRG	1	SYS-7048R-C1RT4+/SYS-7048R-C1R4+, QRG,HF,RoHS/REACH,PBF
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Heatsink / Retention	SNK-P0048P	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square 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
Storage Controller Card(s) & Cables(s)	AOC-S3008L-L8i & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
	AOC-S3108L-H8IR & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) 8x Gen3; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
Mounting Rails	CSE-PT26L-B	1	4U Chassis Rail Kits SC743,745 (w/ 2pcs Black Chassis Ears)
HDD Tray Converter	MCP-220-00080-0B	-	Adaptor HDD carrier to install 2.5" HDD in 3.5" HDD tray
Cable 1	CBL-0080L	-	big 4 pin to SATA POWER ADAPTER CABLE 6
Cable 2	CBL-0178L	-	SATA,INT,FLAT,48CM,26AWG
Peripheral Drive 1	DVM-LITE-DVDRW24-HBT1	-	BLACK LITE-ON 5.25" HH 24X DVD-RW SATA DRIVE PBF
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)

