

SuperServer 7048R-TR



Integrated Board



[Super X10DRi](#)

Available Colors:

Black



Key Features

- **Cloud and Virtualization needs**
- **Compute Intensive Application**
- **Database Processing and Storage**
- **High Availability Storage**
- **Mission-critical Applications**

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB ECC DDR4 2133MHz; 16x DIMM sockets
3. 3 PCI-E 3.0 x16, 3 PCI-E 3.0 x8 slots
4. Intel® i350 Dual port GbE LAN
5. Intel C612 controller for 8 SATA3 ports; RAID 0, 1, 5, 10
6. 8x 3.5" Hot-swap SATA3 HDD Bays
7. 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-7048R-TR** ■ SuperServer 7048R-TR (**Black**)

Motherboard

Super X10DRi

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

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 lbs (25.6 kg)
■ Gross Weight: 73.5 lbs (33.6 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

DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 32GB, 16GB, 8GB, 4GB 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"> SATA 3.0 (6Gbps) with RAID 0, 1, 5, 10
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® i350 Dual 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	<ul style="list-style-type: none"> ASPEED AST2400 BMC
Input / Output	
SATA	<ul style="list-style-type: none"> 8x SATA3 (6Gbps) ports 2x SATA3 powered ports that support SATA DOM
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> Rear USB: 2x USB 3.0 + 2x USB 2.0 Front USB: 2x USB 2.0 USB Header: 2x 3.0, 2x 2.0, 1x Type A
Video	<ul style="list-style-type: none"> 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> 1x COM/Serial
System BIOS	
BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) APM 1.2 PCI 2.3 ACPI 1.0 / 2.0 / 3.0 / 4.0 USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1
Management	
Software	<ul style="list-style-type: none"> SuperDoctor® 5 Watch Dog NMI, SPM, SUM IPMI 2.0 Intel Node Manager
Power Configurations	<ul style="list-style-type: none"> ACPI / APM Power Management Power-on mode for AC power recovery

Expansion Slots

- PCI-Express**
- 3x PCI-E 3.0 x16 (Full-height, Full-length)
 - 3x PCI-E 3.0 x8 (Full-height, Full-length)

Drive Bays

- Hot-swap**
- 8x 3.5" Hot-swap SAS/SATA Drive Trays
- Peripheral Bay(s) [90° Rotatable]**
- 2x 5.25" Peripheral Drive Bays
 - 1x 5.25" Bay that fits 3.5" bay devices

SAS / SATA Backplane

SAS / SATA Hard Drive Backplane w/AMI MG9072

System Cooling

- Fans**
- 3x 8cm hot-swap redundant PWM cooling fans
 - 2x 8cm hot-swap exhaust Fans and 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

- CPU**
- 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**
- Total of eight fan headers supporting up to 8 fans
 - 8x fans with tachometer status monitoring
 - Status monitor for speed control
 - Pulse Width Modulated (PWM) fan connectors
- Temperature**
- Monitoring for CPU and chassis environment
 - CPU thermal trip support
 - Thermal Control for 8x fan connectors
 - Thermal Monitor 2 (TM2) support
 - PECI
- LED**
- CPU / System Overheat LED
 - Suspend static indicator LED
 - UID/Remote LED
- Other Features**
- Chassis intrusion detection
 - Chassis intrusion header

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
Motherboard / Chassis	MBD-X10DRi	1	Super X10DRi Motherboard
	CSE-745TQ-R920B	1	4U Chassis
Backplane	CSE-SAS-743TQ-O-P	1	CSE-SAS-743TQ-O-P
Cable 1	CBL-0473L	8	21cm 30AWG SATA S-S cable
Cable 2	CBL-CDAT-0661	2	8 pin to 8 pin round SGPIO cable, 40cm, 28AWG, pinout 1-1,RoHS/REACH
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

Optional Parts List			
	Part Number	Qty	Description
Mounting Rails	CSE-PT26L-B	-	4U Chassis Rail Kits SC743,745 (w/ 2pcs Black Chassis Ears)
Cable	CBL-0118L-03	1	23CM, W / 25.5cm SB, S, 30AWG lpass to 4 SATA cable
Onsite Service Program	OS4HR3/2/1	-	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)

**This memory modules are not tested yet