

# SuperServer 8048B-TR4FT (Complete System Only)



**Integrated Board**



**Super X10QBi**

**Views:** | [Angled View](#) | [Top View](#) |  
| [Front View](#) | [Rear View](#) |

**Complete System Only:** To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 4 CPUs, 32 DIMMs, 1 HDD installed).

96/64/32 DIMMs are the recommended memory population configurations for the best performance.

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Manuals](#)  
▶ [OS Certification Matrix](#) ▶ [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. Quad socket R1 (LGA 2011) supports Intel® Xeon® processor E7-8800 v4/v3, E7-4800 v4/v3 family (up to 24-Core)
2. Up to 12TB DDR4 (128GB 3DS LRDIMM); 96x DIMM slots (8x memory module boards: X10QBi-MEM2)
3. Up to 11x PCI-E 3.0 slots (4 x16, 7 x8)
4. I/O ports via Add-on Card:  
2x 10Gb LAN, 1x Dedicated LAN for IPMI Remote Management, 1x VGA
5. Up to 24x 3.5" Hot-swap drive bays
6. 4x 92mm Hot-swap cooling fans, 3x 80mm Hot-swap rear exhaust fans, 2x 80mm rear exhaust fans (option)
7. 1620W Redundant (N+1) Power Supplies, **Platinum Level (94%)**

## Product Review

# Specifications

## Product SKUs

- SYS-8048B-TR4FT**
  - SuperServer 8048B-TR4FT (Black)

## Motherboard

### Super X10QBi

## Processor/Cache

- CPU**
  - Intel® Xeon® processor E7-8800 v4/v3, E7-4800 v4/v3 family (up to 24 Cores and 165W TDP)
  - Quad Socket R1 (LGA 2011)
- Cache**
  - Up to 60 MB
- System Bus**
  - QPI up to 9.6 GT/s

## System Memory

- Memory Capacity**
  - 96x 288-pin DDR4 DIMM slots
  - Supports up to 12TB DDR4 ECC 3DS LRDIMM in 96 DIMM slots
- Memory Type**
  - 1866/1600/1333/1066/800MHz ECC DDR4 SDRAM 72-bit, 288-pin gold-plated DIMMs
- DIMM Sizes**
  - 128GB, 64GB, 32GB, 16GB, 8GB, 4GB
- Memory Voltage**
  - 1.2 V
- Error Detection**
  - Corrects single-bit errors
  - Detects double-bit errors (using ECC memory)

## On-Board Devices

- Chipset**
  - Intel® C602J chipset
- AHCI SATA**
  - SATA3 (6Gbps) with RAID 0, 1
  - SATA2 (3Gbps) with RAID 0, 1, 5, 10
- Network Controllers (via AOM)**
  - Intel® X540 Dual 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)
- IPMI (via AOM)**
  - Support for Intelligent Platform Management Interface v.2.0
  - IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
  - ASPEED 2400
- Graphics**
  - ASPEED 2400

## Input / Output

- AHCI SATA**
  - 2x SATA3 (6Gbps) ports
  - 4x SATA2 (3Gbps) ports
- LAN**
  - 2x RJ45 10GBase-T ports on AOM
  - 1x dedicated LAN port for IPMI on AOM
- USB**
  - 2x USB 2.0 ports
- Serial Port / Header**
  - 2x Fast UART 16550 ports: 1 rear and 1 header

## Chassis

- Form Factor**
  - 4U Rackmountable
  - Rackmount Kit: Comes with the system
- Model**
  - CSE-848XA-R3240B

## Dimensions and Weight

- Height**
  - 7.0" (178mm)
- Width**
  - 17.2" (437mm)
- Depth**
  - 32.1" (815mm)
- Package**
  - 15" (H) x 27" (W) x 43.7" (D)
- Weight**
  - Net Weight: 74.5 lbs (33.79 kg)
  - Gross Weight: 115 lbs (52.16 kg)
- Available Colors**
  - Black

## Drive Bays

- Hot-swap**
  - 24x 3.5" drive bays
  - BPN-SAS-846A direct attached backplane, system supports up to 24 HDDs by using selected RAID/HBA card and default HDD connection is onboard C602J chipset 2 SATA3 + 4 SATA2

## Expansion Slots

- PCI-Express**
  - 11x PCI-E 3.0 slots w/ 48 memory slots (4x PCI-E 3.0 x16 and 7x PCI-E 3.0 x8)
  - 8x PCI-E 3.0 slots w/ 96 memory slots (4x PCI-E 3.0 x16 and 4x PCI-E 3.0 x8)

## Backplane

SAS/SATA HDD Backplane

## System Cooling

- Fans**
  - 4x 92mm RPM Hot-Swappable Cooling Fans
  - 3x 80mm RPM Hot-Swappable Rear Exhaust Fans
  - 2x 80mm Rear Exhaust Fans (optional)

## Power Supply

1620W high-efficiency redundant power supply w/ PMBus

- AC Input**
  - 1000W Output @ 100-120V, 12-10A, 50-60Hz
  - 1200W Output @ 120-140V, 12-10A, 50-60Hz
  - 1620W Output @ 180-240V, 10.5-8A, 50-60Hz
- DC Output**
  - 1000W: +12V/84A; +5Vsb/4A
  - 1200W: +12V/100A; +5Vsb/4A
  - 1620W: +12V/150A; +5Vsb/4A

<b>DOM</b>	<ul style="list-style-type: none"> <li>1x DOM (Disk on Module) power connector</li> </ul>
------------	---

### System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>16MB SPI Flash EEPROM with AMI® BIOS</li> </ul>
<b>BIOS Features</b>	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>PCI 2.2</li> <li>ACPI up to 3.0</li> <li>USB Keyboard support</li> </ul>

### Certification



**Platinum Certified**  
[ [Test Report](#) ]

### PC Health Monitoring

<b>CPU</b>	<ul style="list-style-type: none"> <li>Monitors for CPU Cores, +1.2V, 1.5V, +3.3V, +12V, (+3V, 1.0V, 1.2V, 1.8V, 1.1V) Standby, VBAT, Memory, Chipset Voltages.</li> <li>4-Phase-switching voltage regulator with auto-sense from 0.6V-1.35V</li> </ul>
<b>FAN</b>	<ul style="list-style-type: none"> <li>4-pin fan headers with tachometer status monitoring</li> <li>Low noise fan speed control mode</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Monitoring for CPU and system environment</li> <li>Thermal Control for 9x fan connectors</li> </ul>
<b>Other Features</b>	<ul style="list-style-type: none"> <li>Chassis intrusion detection</li> </ul>

### Operating Environment / Compliance

<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
<b>Environmental Spec.</b>	<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>

## Список деталей

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Chassis</b>	CSE-848XA-R3240B	1	CSE-848XA-R3240B 4U Chassis with 24x HDD trays
<b>Motherboard</b>	X10QBi	1	Super X10QBi Motherboard
<b>Memory Module</b>	X10QBi-MEM2	8	Supports 12x DIMMs / module (up to 64GB DDR4 ECC LRDIMM / slot)
<b>Add-on Module (Proprietary)</b>	AOM-X10QBi-A	1	Add-on Module support VGA, dual 10GBase-T ports, and Dedicated IPMI 2.0 LAN port
<b>Air Shroud</b>	MCP-310-41804-0B	1	Mylar CPU air shroud for SC418X (X10QBi),PBF
<b>Backplane</b>	BPN-SAS-846A	1	24-port 4U SAS 6Gbps direct-attached backplane, support up to 24x 3.5-inch SAS2/SATA3 HDD/SSD
<b>Cable 1</b>	CBL-0294L-01	2	MINI SAS-4 SATA,INT,RF,cross over,70CM,70CM SB,26AWG
<b>Label</b>	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
<b>Heatsink / Retention</b>	SNK-P0048PS	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
<b>Power Supply</b>	PWS-1K62P-1R	4	1620W REDUNDANT POWER MODULE

### Optional Parts List

	Part Number	Qty	Description
<b>Drive Option 1</b>	AOC-S2208L-H8IR (2208) x1 + CBL-0394L x2		For 8 SAS2 (Broadcom 2208) HDD
<b>Drive Option 2</b>	AOC-72405-ADP x1 + CBL-SAST-0507-01 x6		For 24 SAS2 (Adaptec 72405) HDD
<b>Drive Option 3</b>	AOC-S2308L-L8I (2 ports) x1 + CBL-0394L x2		For 8 SAS2 (Broadcom 2308) HDD
<b>Air Shroud</b>	MCP-310-41805-0B	1	Air shroud for 4 memory module configuration (to utilize all PCI-E slots)
<b>Rear Fan Kit</b>	MCP-320-00046-0N-KIT	-	Rear fan kit (8.2K RPM fan) when use GPU card (1 fan kit for 2 GPU)
<b>GPU Power Cable</b>	CBL-PWEX-0581	-	1 GPU Power Cable for 1 GPU (Recommend to pre-install GPU power cable in Supermicro)
<b>Global Services &amp; Support</b>	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
<b>Software</b>	<a href="#">SFT-OOB-LIC</a> • <a href="#">eStore</a>	1	OOB Management Package (per node license)
<b>Software</b>	<a href="#">SFT-DCMS-Single</a>	1	DataCenter Management Package (per node license)