

## SuperServer 7088B-TR4FT (Complete System Only)



### Integrated Board



### 8 X100Bi-CPU

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

**Complete System Only:** To maintain quality and integrity, this product is sold only as a completely-assembled system (8 CPU with 192/96 DIMMs are the recommended configurations for the best performance.) Please contact your Supermicro sales rep for special 4 CPU with 96/48 DIMMs requirements with fees.

192/128/64 DIMMs are the recommended memory population configurations for the best performance.

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Manuals](#)  
▶ [OS Certification Matrix](#) ▶ [Drive Options](#) ▶ [Tested SIOM](#)

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

### Key Features

1. Eight Socket R1 (LGA 2011) support Intel® Xeon® processor E7-8800 v4/v3 family (up to 24-Core)
2. Up to 24TB in 192 DDR4 DIMM slots
3. Up to 15 PCI-E 3.0 slots (8 x16, 7 x8 in x16)
4. 4 10Gb LAN (SIOM), 1 dedicated LAN for IPMI Remote Management, 1 VGA, 2 USB 2.0, 1 COM via KVM
5. Up to 12 Hot-swap 2.5" SAS3 HDDs (w/ RAID cards), 20x 2.5" or 6x 3.5" internal HDDs (w/ RAID cards)
6. 8x 9cm Hot-swap counter-rotating rear fans
7. 5x 1600W Redundant (N+1) Power Supplies, **Titanium Level (96%)**

**90TB DWFT For Microsoft® SQL Server® 2016**



# Specifications

## Product SKUs

- SYS-7088B-TR4FT**
  - SuperServer 7088B-TR4FT (Black)

## Motherboard

### Super X100Bi-CPU

## Processor/Cache

- CPU**
  - Intel® Xeon® processor E7-8800 v4/v3 family (up to 24 Cores and 165W TDP)
  - Socket R1 (LGA 2011)

- Cache**
  - Up to 60 MB

- System Bus**
  - QPI up to 9.6 GT/s

## System Memory

- Memory Capacity**
  - 192x 288-pin DDR4 DIMM slots
  - Supports up to 24TB DDR4 ECC 3DS LRDIMM in 192 DIMM slots

- Memory Type**
  - 2400\*/2133\*/1866\*/1600/1333MHz ECC DDR4 SDRAM 72-bit, 288-pin gold-plated DIMMs
  - \* Run up to 1600MHz depend on setting.

- 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

- Storage**
  - Intel C602J including 2 SATA3 (6Gbps, for SATA DOM) + 4 SATA2 (3Gbps, 2 for M.2, 2 for HDD) with RAID 0, 1, 5, 10

- Network Controllers (via AOM)**
  - 4-port 10GBase-T Ethernet SIOM (Intel® X550 controller)

- 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 AST2400 BMC

## Input / Output

- Storage**
  - 2 SATA2 (HDD) ports
  - 2 SATA2 (M.2) ports
  - 2 SATA3 (SATADOM) ports

- LAN**
  - 4 10GBase-T ports via SIOM
  - 1 dedicated LAN port for IPMI

- USB**
  - 2 USB 2.0 ports via KVM port

- Serial Port / Header**
  - 1 Fast UART 16550 ports: 1 front via KVM port

## Chassis

- Form Factor**
  - 7U Rackmountable
  - Rackmount Kit: Comes with the system

- Model**
  - CSE-718TQC-R4800B

## Dimensions and Weight

- Height**
  - 12.2" (310mm)

- Width**
  - 17.63" (448mm)

- Depth**
  - 28.87" (733mm)

- Weight**
  - Gross Weight: 208 lbs (93.35 kg)

- Available Colors**
  - Black

## Drive Bays

- Hot-swap**
  - 12 Hot-swap 2.5" SAS3 drive bays (w/ RAID cards)
  - 20x 2.5" or 6x 3.5" internal drive bays (w/ RAID cards)

## Expansion Slots

- PCI-Express**
  - 15 PCI-E 3.0 FH slots total
  - 8 PCIe 3.0 x16 + 7 PCIe 3.0 x8 (in x16) slots
  - Up to 16 U.2 NVMe option available

## Backplane

2x 6-port 12G backplane supports 6x 2.5" SAS3/SATA3 HDD/SSD

## System Cooling

- Fans**
  - 8x 9cm Hot-Swap Counter-rotating Rear Fans

## Power Supply

1600W Redundant Power Supplies with PMBus

- Total Output Power**
  - 1600W/1000W

- Dimension (W x H x L)**
  - 73.5 x 40 x 203 mm

- Input**
  - 100-127Vac / 13 - 9A / 50-60Hz
  - 200-240Vac / 10 - 8A / 50-60Hz

- +12V**
  - Max: 83.3A / Min: 0A (100-127Vac)
  - Max: 133A / Min: 0A (200-240Vac)

- 12Vsb**
  - Max: 2.1A / Min: 0A

- Output Type**
  - 25 Pairs Gold Finger Connector

## Certification



**Titanium Level**  
[ [Test Report](#) ]

## PC Health Monitoring

## System BIOS

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|----------------------|--|
| <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> |

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|------------|---|
| <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> |
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| <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> |
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| <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> |
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| <b>Other Features</b> | <ul style="list-style-type: none"> <li>Chassis intrusion detection</li> </ul> |
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## Operating Environment / Compliance

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| <b>RoHS</b> | <ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul> |
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| <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> |
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## Список деталей

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Chassis</b>	CSE-718TQC-R4800B	1	CSE-718TQC-R4800B 7U Chassis
<b>Motherboard</b>	X100Bi-CPU-CPU	8	Super X100Bi-CPU-CPU Motherboard
<b>Add-on Card / Module</b>	AOM-X100BI-PCH-P	1	PCH and BMC add on module for X100BI series MB
<b>Add-on Card / Module</b>	AOM-X100BI-PCIE-P	5	PCI-E add on module for X10 7U 8-way server
<b>Add-on Card / Module</b>	AOM-X100BI-HDD-P	2	Storage add-on module for X100BI series MB
<b>Add-on Card / Module</b>	AOC-MTG-I4TM-P	1	[NR]AOC-MTG-I4TM-P
<b>Backplane</b>	BPN-SAS3-718TQ	2	6-port SC718TQC SAS3 12Gbps TQ backplane, support up to 6x 2.5-inch SAS3/SATA3 HDD/SSD
<b>Backplane</b>	BPN-X100BI	1	Midplane for X10 8-way server
<b>Cable 1</b>	CBL-0218L	1	USB/KVM/SUVI,36 PIN TO 9 PIN/15 PIN/2 USB CH,11.5CM,30/28AWG
<b>Cable 2</b>	CBL-0484L	2	SATA,INT,ROUND,ST-ST,55CM,30AWG
<b>Cable 3</b>	CBL-PWEX-0651	1	8 pin female to 2x RA(Right Angle) big 4 pin female power, 40/50CM, 18AWG,RoHS/REACH
<b>Riser Card</b>	RSC-R1UF-E16R	2	RSC-R1UF-E16R
<b>Riser Card</b>	RSC-BLG-E16R	8	RSC-BLG-E16R
<b>Heatsink / Retention</b>	SNK-P0047PS	8	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
<b>Power Supply</b>	PWS-1K62A-1R	5	AC-DC 1600W, Titanium Level, Redundancy, 1U, DC Output: +12V and +12Vs, 203 x 73.5 x 40 mm, AC Input: 90 - 264 VAC/47-63Hz, PMBus 1.2 with DSP controller,HF,RoHS/REACH

### Optional Parts List

	Part Number	Qty	Description
<b>Battery Backup Kit Cache Vault (s) for 1x 3108</b>	BTR-TFM8G-LSICVM02	1	Broadcom Supercap w/ 8GB CV + 24" cable (whole kit)
	MCP-240-00127-0N	1	Broadcom SuperCap Bracket, Include Screw, Same Size as 2.5" HDD
	MCP-220-00137-0N	1	HDD bkt for 2x 2.5"HDD (use std 2.5" HDD hole)
<b>Storage Options</b>	<a href="#">See Details</a>	-	<a href="#">SAS3 and NVMe Options</a>
<b>GPU Power Cable</b>	CBL-PWEX-0665	-	PCIe 8 pin female(black) to CPU 8 pin female(white), K80/M60/M40 GPU power cable, 30cm, 18AWG,RoHS/REACH
<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)