

SuperServer 7089P-TR4T (Complete System Only)



Integrated Board



[./products/motherboard/Xeon/C620/X110Pi-](https://products/motherboard/Xeon/C620/X110Pi-CPU.cfm)

[CPU.cfm](#).

[X110Pi-CPU](#) ([./products/motherboard/Xeon/C620/X110Pi-CPU.cfm](https://products/motherboard/Xeon/C620/X110Pi-CPU.cfm)).

Views: | [Angled View](#) ([./a_images/products/views/7089P-TR4T_angle.jpg](#)) |
| [Front View](#) ([./a_images/products/views/7089P-TR4T_front.jpg](#)) | [Rear View](#) ([./a_images/products/views/7089P-TR4T_rear.jpg](#)) |

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (8 CPU with 96/48 DIMMs are the recommended configurations for the best performance.) Please contact your Supermicro sales rep for special 4 CPU with 48/24 DIMMs requirements with fees.

96/48 DIMMs are the recommended memory population configurations for the best performance.

[Drivers & Utilities](#) | [BIOS](#) | [IPMI](#) | [Tested Memory](#) | [Manuals](#)

[OS Certification Matrix](#)

[./support/resources/OS/OS_Certification_Intel.cfm?](https://support/resources/OS/OS_Certification_Intel.cfm?MProduct_Name=SYS%2D7089P%2DTR4T)

[MProduct_Name=SYS%2D7089P%2DTR4T](#)).

[Drive Options](#)

Key Features

- 8-Way MP, 224 Cores
- Virtualization, ERP, CRM
- In-Memory Database Application
- Research lab/National Lab
- Scale-up HPC

1. Octa Socket P (LGA 3647) support 2nd Gen Intel® Xeon® Scalable processors (Cascade Lake/Skylake)[‡]
2. 96 DIMMs; up to 24TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM^{††}
3. 23 or 39 (OEM) PCI-E 3.0 slots include: 8 FH x16 PCI-E cards or 8 GPUs or 16 U.2 NVMe + 8 FHFL x16 PCI-E cards or 16 U.2 NVMe + 8 FHFL x16 PCI-E cards or 16 U.2 NVMe + 2 LP x8 (in x16) PCI-E internal cards (storage module) + 5 FHHL x16 PCI-E cards (rear)(Up to 39 PCI-E 3.0 slots for OEM)
4. 4 10Gb LAN (SIOM), 1 dedicated LAN for IPMI Remote Management, 1 VGA, 2 USB 2.0, 1 COM via KVM
5. 16 Hot-swap 2.5" SAS3 drive bays (w/ RAID cards); 8x 2.5" or 6x 3.5" internal drive bays (w/ RAID cards)
6. 8x 9cm Hot-swap counter-rotating rear fans
7. 5x 1600W (N+2) Redundant Power Supplies, **Titanium Level (96%)**



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

Specifications

Product SKUs

SYS-7089P-TR4T
SuperServer 7089P-TR4T (Black)

Motherboard

Super X110Pi-CPU
(</products/motherboard/Xeon/C620/X110Pi-CPU.cfm>).

Processor/Cache

CPU
Octa Socket P (LGA 3647)
2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[†],
8S-3 UPI up to 10.4GT/s
Support CPU TDP 70-205W
Cores
Up to 28 Cores
Note
[†] BIOS version 3.0 or above is required to support 2nd Gen Intel® Xeon® Scalable processors

System Memory

Memory Capacity
96 DIMM slots
Up to 24TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
Supports Intel® Optane™ DCPMM^{††}
Memory Type
2933[†]/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
Note
[†] 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro
^{††} Cascade Lake only. Contact your Supermicro sales rep for more info.

On-Board Devices

Chipset
Intel® C621 chipset
Storage
Intel C621 including 2 SATA3 (SATA DOM), 2 M.2 (SATA3/PCIe), 8 HDD (SATA3), 1 TPM header
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
Graphics
ASPEED AST2500 BMC

Input / Output

Storage
2 SATA DOM (SATA3) ports
2 M.2 (SATA3/PCI3) ports
8 HDD (SATA3) ports
LAN
4 10GBase-T ports via SIOM
1 dedicated LAN port for IPMI
USB
2 USB 2.0 ports via KVM port

Chassis

Form Factor
7U Rackmountable
Rackmount Kit: Comes with the system
Model
CSE-718SAC-R4800

Dimensions and Weight

Height
12.2" (310mm)
Width
17.63" (448mm)
Depth
28.87" (733mm)
Package
38.5" (H) x 29.9" (W) x 47.2" (D)
Weight
Gross Weight: 208 lbs (94.35 kg)
Net Weight: 180 lbs (81.65 kg)
Available Colors
Black

Drive Bays

Hot-swap
16 Hot-swap 2.5" SAS3 drive bays (w/ RAID cards)
8x 2.5" or 6x 3.5" internal drive bays (w/ RAID cards)

Expansion Slots

PCI-Express
23 PCI-E 3.0 slots total including:
8 FH x16 PCI-E cards or 8 GPUs or 16 U.2 NVMe + 8 FHFL x16 PCI-E cards
NVMe + 2 LP x8 (in x16 slot) PCI-E internal cards (storage module) + 5 FH cards (rear)
Up to 39 PCI-E 3.0 slots for OEM

Backplane

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

System Cooling

Fans
8x 9cm 10.5K-10.8K RPM 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

Serial Port / Header

1 Fast UART 16550 ports: 1 front via KVM port

System BIOS

BIOS Type

16MB SPI Flash EEPROM with AMI® BIOS

BIOS Features

- Plug and Play (PnP)
- PCI 2.2
- ACPI up to 3.0
- USB Keyboard support

PC Health Monitoring

CPU

- Monitors for CPU Cores, Chipset Voltages, Memory.
- 4+1 Phase-switching voltage regulator

FAN

- Fans with tachometer monitoring
- Status monitor for speed control
- Pulse Width Modulated (PWM) fan connectors

Temperature

- Monitoring for CPU and chassis environment
- Thermal Control for fan connectors

Parts List

Certification

(<http://www.plugloadsolutions.com/80PlusPowerSupply>



[id=69&type=2](http://www.plugloadsolutions.com/80PlusPowerSupply)). Titanium Level

[[Test Report](#)

(</products/powersupply/80PLUS/80PLUS>

[1R.pdf](#)).

Operating Environment

RoHS

RoHS Compliant

Environmental Spec.

- Operating Temperature:
10°C ~ 35°C (50°F ~ 95°F)
- Non-operating Temperature:
-40°C to 60°C (-40°F to 140°F)
- Operating Relative Humidity:
8% to 90% (non-condensing)
- Non-operating Relative Humidity:

Global SKU (/en/products/SMC_global_skus)