

SuperServer 2049P-TN8R (Complete System Only)



Integrated Board



[./products/motherboard/Xeon/C620/X11QPL.cfm](https://products/motherboard/Xeon/C620/X11QPL.cfm)

Super X11QPL [./products/motherboard/Xeon/C620/X11QPL.cfm](https://products/motherboard/Xeon/C620/X11QPL.cfm)

Views: | [Angled View \(/a_images/products/views/2049P-TN8R_angle.jpg\)](#) |
[Top View \(/a_images/products/views/2049P-TN8R_top.jpg\)](#) |
[Front View \(/a_images/products/views/2049P-TN8R_front.jpg\)](#) | [Rear View \(/a_images/products/views/2049P-TN8R_rear.jpg\)](#) |

Key Applications

**4-Way High Core Count VM Optimized
Cloud and Virtualization
Data Center
Scale-Out Density, VOD Delivery**

Key Features

1. Quad Socket P (LGA 3647) support
2nd Gen. Intel® Xeon® Scalable
processors (Cascade Lake/Skylake)[‡]
2. 48 DIMMs; up to 12TB 3DS ECC
DDR4-2933MHz[†] RDIMM/LRDIMM,
Supports Intel® Optane™ DCPMM^{††}
3. 5 PCI-E 3.0 x8 slots,
2 PCI-E 3.0 x16 slots
4. 1 GbE LAN ports via Intel i210
1 dedicated IPMI LAN port
5. 2 Hot-swap 2.5" SATA3 drive bays
8 Hot-swap 2.5" U.2 NVMe SSD bays
6. 2 M.2 M key (22110/2280)
7. 4 heavy duty fans with optimal fan speed control
8. 2200W Redundant Power Supplies
Titanium Level (96%)

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 4 CPUs, 4 DIMMs and 1 HDD recommended). Please contact your Supermicro sales rep for special 2 CPUs with 2 DIMMs requirements with fees.

[Drivers & Utilities](#) [BIOS](#) [IPMI](#) [Tested Memory](#) [NVMe Options](#)

[Manuals](#)

[OS Certification Matrix](#)

[./support/resources/OS/OS_Certification_Intel.cfm?](https://support/resources/OS/OS_Certification_Intel.cfm?MProduct_Name=SYS%2D2049P%2DTN8R)

[MProduct_Name=SYS%2D2049P%2DTN8R](https://support/resources/OS/OS_Certification_Intel.cfm?MProduct_Name=SYS%2D2049P%2DTN8R)

[Drive Options](#)

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

Specifications

Product SKUs

SYS-2049P-TN8R
SuperServer 2049P-TN8R (**Black**)

Motherboard

Super X11QPL
(</products/motherboard/Xeon/C620/X11QPL.cfm>).

Processor

CPU
Quad Socket P (LGA 3647)
2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[†],
3 UPI up to 10.4GT/s
Support CPU TDP up to 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
48 DIMM slots
Up to 12TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
Supports Intel® Optane™ DCPMM^{††}
Memory Type
2933[†]/2666MHz 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
SATA
SATA3 via Intel C621; RAID 0, 1, 5, 10
Network Connectivity
1 Gigabit Ethernet port via Intel® i210
IPMI
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

SATA
2 SATA3 (6Gbps) ports
NVMe
8 U.2 NVMe
LAN
1 RJ45 GbE LAN port
1 RJ45 Dedicated IPMI LAN port
USB
2 USB 3.0 ports (front)
Video
1 VGA Connector
Serial Port / Header
1 COM port (rear)

System BIOS

BIOS Type
128Mb SPI Flash EEPROM with AMI BIOS

Management

Chassis

Form Factor
2U Rackmount
Model
CSE-218LTS-R2K21P

Dimensions and Weight

Width
17.2" (437mm)
Height
3.5" (89mm)
Depth
30.2" (767mm)
Weight
Net Weight: 47.5 lbs (21.55 kg)
Gross Weight: 73.5 lbs (33.34 kg)
Available Colors
Black

Front Panel

Buttons
Power On/Off button
System Reset button
LEDs
Power status LED
HDD activity LED
Network activity LEDs
System information (overheat/UID) LED

Expansion Slots

PCI-Express
5 PCI-E 3.0 x8 slots
2 PCI-E 3.0 x16 slots
(4 CPUs need to be installed for full access to PCI-E slots and onboard c

Drive Bays

Hot-swap
2 Hot-swap 2.5" SATA3 drive bays
8 Hot-swap 2.5" U.2 NVMe SSD bays
M.2
2 M.2 M key for NVMe/SATA3 (22110/2280)

System Cooling

Fans
4 heavy duty fans with optimal fan speed control

Power Supply

2200W Redundant Titanium Level Power Supplies with PMBus
Total Output Power
1200W/1800W/1980W/2090W/2200W
(UL/cUL only)
Dimension (W x H x L)
106.5 x 82.4 x 203.5 mm
Input
1200W: 100-127 Vac / 14-11 A / 50-60 Hz
1800W: 200-220 Vac / 10-9.5 A / 50-60 Hz
1980W: 220-230 Vac / 10-9.5 A / 50-60 Hz
2090W: 230-240 Vac / 10-9.8 A / 50-60 Hz
2200W: 220-240 Vac / 12-11 A / 50-60 Hz (UL/cUL only)
2090W: 180-220 Vac / 14-11 A / 50-60 Hz (UL/cUL only)
2090W: 230-240 Vdc / 10-9.8 A (CCC only)

Software

[SuperDoctor® 5 \(/products/nfo/SMS_SD5.cfm\)](#)

Watch Dog

NMI

[SUM \(/products/nfo/SMS_SUM.cfm\)](#)

IPMI 2.0

Power Configurations

ACPI Power Management

Power-on mode for AC power recovery

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

+12V

Max: 100A / Min: 0A (1200W)

Max: 150A / Min: 0A (1800W)

Max: 165A / Min: 0A (1980W)

Max: 174.17A / Min: 0A (2090W)

Max: 183.3A / Min: 0A (2200W)

Max: 174.17A / Min: 0A (2090W)

12Vsb

Max: 2A / Min: 0A

Output Type

Gold Finger (connector on M/P)

Certification

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



[id=69&type=2](#)). Titanium Level

[[Test Report](#)

[\(/products/powersupply/80PLUS/80PLUS](#)

[2R.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:

Parts List

Global SKU ([/zh_tw/products/SMC_global_skus](#))