SuperServer 2049P-TN8R (Complete System Only)

Integrated Board

Super X11QPL

Views: | **Angled View** | **Top View** |
| **Front View** | **Rear View** |

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** ▸**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

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 controllers.

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 ■ Watch Dog ■ NMI ■ SUM ■ 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	**Titanium Level** **[Test Report]**

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: 5% to 95% (non-condensing)

Список деталей

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11QPL	1	Super X11QPL Motherboard
	CSE-218LTS-R2K21P	1	2U Chassis
Backplane	BPN-NVME3-218L-S2	1	2U Backplane Supports 8 x 2.5" NVMe and 2 x 2.5" SAS3/SATA3 Storage Media,HF,RoHS
Cable 1	CBL-0097L-03	1	MINI SAS-4 SATA,INT,51CM,51CM SB,30AWG
Cable 2	CBL-PWEX-1076	1	PWEX,2X4F/P4.2 TO 2X2F/P4.2 x2,BLK*4,YEL*4,30CM,18AWG
Cable 3	CBL-SAST-1044	1	SLIMLINE SAS (LE) to SLIMLINE SAS, INT, 57CM,32AWG,85
Cable 4	CBL-SAST-1045	1	SLIMLINE SAS (LE) to SLIMLINE SAS, INT, 62CM,32AWG,85
Cable 5	CBL-SAST-1046	1	SLIMLINE SAS (LE) to SLIMLINE SAS, INT, 39CM,32AWG,85
Cable 6	CBL-SAST-1048	1	SLIMLINE SAS x8 to SLIMLINE SAS x8, INT, 10CM,32AWG,85
Heatsink / Retention	SNK-P0068PS	4	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-2K21A-2R1	2	2U 2200W power supply with PMBus and 200-240Vdc input,RoHS
FAN	FAN-0198L4	2	80x80x38 mm, 14.9K RPM for SC218L Low Cost 4-way Server