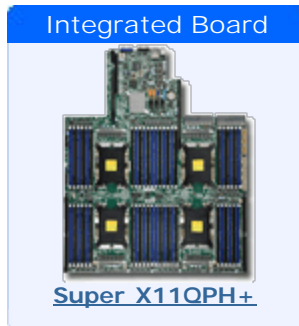


SuperServer 2049U-TR4 (Complete System Only)



Due to the complexity of integration, this product is sold as completely assembled systems only (with minimum 4 CPU, 4 DIMM and 1 HDD installed). Please contact your Supermicro sales rep for special requirements.

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

Key Features

- 48 DDR4 DIMM Slots, up to 6TB
- Up to 11 PCI-E 3.0 slots
- 4 Hot-Swap NVMe Bays support via optional NVMe AOC
- Flexible Connectivity Options

1. Quad socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s
2. Up to 6TB 3DS LRDIMM, up to DDR4-2666MHz; 48 DIMM slots
3. 5 PCI-E 3.0 x8 slots, 6 PCI-E 3.0 x16 slots
4. 4 GbE LAN ports via AOC-2UR66-i4G 1 dedicated IPMI LAN port
5. 24 Hot-swap 2.5" SAS3/SATA3 drive bays supported via optional Add-on RAID controller card; 4 Hybrid ports with NVMe support via extra AOC
6. 4x 8cm heavy duty fans
7. 1600W Redundant Power Supplies Titanium Level (96%)

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

Specifications

Product SKUs

SYS-2049U-TR4 ■ SuperServer 2049U-TR4 (Black)

Motherboard

Super X11QPH+

Processor/Cache

CPU

- Quad Socket P (LGA 3647)
- Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s
- Support CPU TDP 70-165W with IVR, 205W supported with optional kit

Cores ■ Up to 28 Cores with Intel® HT Technology

System Memory

Memory Capacity

- 48 DIMM slots
- Up to 6TB ECC 3DS LRDIMM, 6TB ECC RDIMM, DDR4 2666MHz

Chassis

Form Factor ■ 2U Rackmount

Model ■ CSE-218UTS-R1K62P

Dimensions and Weight

Width ■ 17.2" (437mm)

Height ■ 3.5" (89mm)

Depth ■ 30.7" (780mm)

Weight

- Net Weight: 43 lbs (19.4 kg)
- Gross Weight: 69 lbs (31.2 kg)



Available Colors ■ Black

Front Panel

Buttons

- Power On/Off button
- System Reset button
- Power status LED
- HDD activity LED

Memory Type	<ul style="list-style-type: none"> 2666MHz ECC DDR4 SDRAM
On-Board Devices	
Chipset	<ul style="list-style-type: none"> Intel® C621 chipset
SATA	<ul style="list-style-type: none"> SATA3 via Intel C621; RAID 0, 1, 5, 10
Network Connectivity	<ul style="list-style-type: none"> 4 Gigabit Ethernet ports via AOC-2UR66-i4G; Other options
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	<ul style="list-style-type: none"> ASPEED AST2500 BMC
Input / Output	
SATA	<ul style="list-style-type: none"> 12 SATA3 (6Gbps) ports
SAS	<ul style="list-style-type: none"> 24 SAS3 ports support via optional Add-on Cards
NVMe	<ul style="list-style-type: none"> 4 Hybrid ports with NVMe support via AOC
LAN	<ul style="list-style-type: none"> 4 RJ45 GbE LAN ports 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2 USB 3.0 ports (rear)
Video	<ul style="list-style-type: none"> 1 VGA Connector
Serial Port / Header	<ul style="list-style-type: none"> 1 COM port (rear)
DOM	<ul style="list-style-type: none"> 2 SuperDOM (Disk on Module) ports
System BIOS	
BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI BIOS
Management	
Software	<ul style="list-style-type: none"> SuperDoctor® 5 Watch Dog NMI SUM IPMI 2.0
Power Configurations	<ul style="list-style-type: none"> ACPI Power Management Power-on mode for AC power recovery
PC Health Monitoring	
CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment Thermal Control for fan connectors

LEDs	<ul style="list-style-type: none"> Network activity LEDs System information (overheat/UID) LED
Expansion Slots	
PCI-Express	<ul style="list-style-type: none"> 5 PCI-E 3.0 x8 slots 6 PCI-E 3.0 x16 slots <p>(4 CPUs need to be installed for full access to PCI-E slots and onboard controllers. See AOC Support for details.)</p>
Drive Bays	
Hot-swap	<ul style="list-style-type: none"> 24 Hot-swap 2.5" SAS3/SATA3 drive bays Optional 24 SAS3 ports via AOC Optional 20 SAS3 ports via AOC + 4 NVMe ports via AOC
System Cooling	
Fans	<ul style="list-style-type: none"> 4x 8cm heavy duty PWM fans
Power Supply	
1600W Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> 1000W/1600W
Dimension (W x H x L)	<ul style="list-style-type: none"> 73.5 x 40 x 203 mm
Input	<ul style="list-style-type: none"> 100-127Vac / 13 - 9A / 50-60Hz 200-240Vac / 10 - 8A / 50-60Hz
+12V	<ul style="list-style-type: none"> Max: 83.3A / Min: 0A (100-127Vac) Max: 133A / Min: 0A (200-240Vac)
12Vsb	<ul style="list-style-type: none"> Max: 2.1A / Min: 0A
Output Type	<ul style="list-style-type: none"> 25 Pairs Gold Finger Connector
Certification	  <ul style="list-style-type: none"> UL/cUL/CB/BSMI/CE/CCC Titanium Level [Test Report]
Operating Environment	
RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> 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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11QPH+	1	Super X11QPH+ Motherboard
	CSE-218UTS-R1K62P	1	2U Chassis

Optional Parts List

	Part Number	Qty	Description
205 watt CPU option kit	MCP-240-21904-0N-OEM	1	RSC bkt set (left, Mid/Right) for SC829/219U (LP), Tool-less 2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
	SNK-P0068PS	2	
2000w power supply kit	MCP-250-21802-0N	-	Power adapter bracket for 2K03P in SC218U, HF, RoHS/REACH 1U 2000W Redundant Power Supply Platinum 73.5mm width
	PWS-2K03P-1R	-	
CachVault(s)	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET- 05	-	CacheVault for Broadcom 3108; Supercap mounting bracket for PCI-E location
	BTR-TFM8G-LSICVM02 & MCP-240-00127-0N	-	CacheVault for Broadcom 3108; Supercap mounting bracket for 2.5" HDD location
Network Card(s)	AOC-S40G-i2Q	-	Standard LP 2-port 40GbE controller, based on Intel Fortville XL710
	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STG-b4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGN-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STGN-i1S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599EN
	AOC-STG-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)

Storage Options List

Cases	AOC	Cable	Connection
For 8 SAS3 HDD	AOC-S3008L-L8i x1 or AOC-S3108L-H8iR x1 or AOC-S3108L-H8iR-16DD x1	CBL-SAST-0532 x2	PCI-E slot 10
For 16 SAS3 HDD	AOC-S3008L-L8i x2 or AOC-S3108L-H8iR x2 or AOC-S3108L-H8iR-16DD x2	CBL-SAST-0532 x2	PCI-E slot 10
		CBL-SAST-0593 x2	PCI-E slot 11
For 24 SAS3 HDD	AOC-S3008L-L8i x3 or AOC-S3108L-H8iR x3 or AOC-S3108L-H8iR-16DD x3	CBL-SAST-0532 x2	PCI-E slot 10
		CBL-SAST-0593 x2	PCI-E slot 11
		CBL-SAST-0568 x2	PCI-E slot 9
For 24 SAS3 HDD including 4 NVMe	AOC-S3008L-L8i x3 + AOC-SLG3-4E4T x1 or AOC-S3108L-H8iR x3 + AOC-SLG3-4E4T x1 or AOC-S3108L-H8iR-16DD x3 + AOC-SLG3-4E4T x1	CBL-SAST-0532 x2	PCI-E slot 10
		CBL-SAST-0593 x2	PCI-E slot 11
		CBL-SAST-0568 x2	PCI-E slot 9
		CBL-SAST-0929 x4 (NVMe cable)	PCI-E Slot 8 (AOC-SLG3-4E4T)