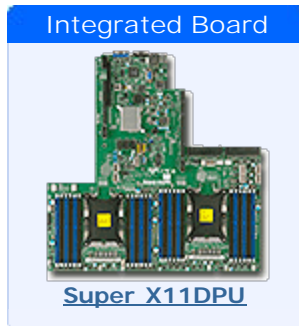


SuperServer 2029U-TR4 (Complete System Only)



Due to the complexity of integration, this product is sold as completely assembled systems only (with minimum 2 CPU and 4 DIMM). Please contact your Supermicro sales rep for special requirements.

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

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

Key Features

- Flexible Networking Options

1. Dual socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
2. Up to 3TB ECC 3DS LRDIMM or RDIMM, up to DDR4-2666MHz; 24 DIMM slots
3. 1 PCI-E 3.0 x16 slot (FH, 10.5" L), 5 PCI-E 3.0 x8 slots (FH, 10.5" L), 1 PCI-E 3.0 x8 slot (LP), 1 PCI-E 3.0 x8 slot (internal LP)
4. 4 1GbE LAN ports via Intel i350
5. 24 Hot-swap 2.5" Drive Bays; 14 SATA3 (optional 20 SAS3 + 4 NVMe/SAS3)
6. 4 Heavy duty 8cm PWM fans
7. 1000W Redundant Power Supplies Titanium Level (96%)

Specifications

Product SKUs

SYS-2029U-TR4 ■ SuperServer 2029U-TR4 (Black)

Motherboard

[Super X11DPU](#)

Processor/Cache

CPU

- Dual Socket P (LGA 3647)
- Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
- Support CPU TDP 70-205W

Cores

- Up to 28 Cores with Intel® HT Technology

System Memory

Memory Capacity

- 24 DIMM slots
- Up to 3TB ECC 3DS LRDIMM, 3TB ECC RDIMM, DDR4 up to 2666MHz

Memory Type

- 2666/2400/2133MHz ECC DDR4 SDRAM

Chassis

Form Factor

- 2U Rackmount

Model

- CSE-219U2AC4-R1K02-T

Dimensions and Weight

Width

- 17.2" (437mm)

Height

- 3.5" (89mm)

Depth

- 27.76" (705.3mm)

Weight

- Net Weight: 36 lbs (16.4 kg)
- Gross Weight: 72 lbs (32.7 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

On-Board Devices	
Chipset	▪ Intel® C621 chipset
SATA	▪ SATA3 (6Gbps); RAID 0, 1, 5, 10
Network Connectivity	▪ 4x 1GbE LAN ports via Intel® i350 (AOC-2UR68-i4G)
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	▪ 14 SATA3 (6Gbps) ports
LAN	▪ 4 RJ45 1GbE LAN ports ▪ 1 RJ45 Dedicated IPMI LAN port
USB	▪ 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A)
Video	▪ 1 VGA Connector
Serial Header	▪ 1 Serial header
DOM	▪ 2 SuperDOM (Disk on Module) ports

System BIOS	
BIOS Type	▪ AMI 32Mb SPI Flash ROM

Management	
Software	▪ Intel® Node Manager ▪ Redfish API ▪ IPMI 2.0 ▪ KVM with dedicated LAN ▪ NMI ▪ SSM , SPM , SUM ▪ SuperDoctor® 5
Power Configurations	▪ ACPI Power Management

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

Expansion Slots	
	▪ 1 PCI-E 3.0 x16 (FH, 10.5" L) ▪ 5 PCI-E 3.0 x8 (FH, 10.5" L) ▪ 1 PCI-E 3.0 x8 (LP) ▪ 1 PCI-E 3.0 x8 (internal LP)
PCI-Express	(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and AOC Support for details.)

Drive Bays	
Hot-swap	▪ 24 Hot-swap 2.5" drive bays; 14 SATA3 (optional 20 SAS3 + 4 NVMe/SAS3)

Backplane	
	2U SAS/SATA backplane

System Cooling	
Fans	▪ 4 Heavy duty 8cm PWM fans

Power Supply	
	1000W Redundant Power Supplies with PMBus
Total Output Power	▪ 800W/1000W
Dimension (W x H x L)	▪ 73.5 x 40 x 203 mm
Input	▪ 100-127Vac / 9.8 - 7A / 50-60Hz ▪ 200-240Vac / 7 - 5A / 50-60Hz
+12V	▪ Max: 66.7A / Min: 0A (100-127Vac) ▪ Max: 83A / Min: 0A (200-240Vac)
12Vsb	▪ Max: 2.1A / Min: 0A
Output Type	▪ 25 Pairs Gold Finger Connector

Certification	
	  UL/cUL/CB/BSMI/CE/CCC 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)

Parts List

[See Parts List](#)

Parts List - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DPU	1	Super X11DPU Motherboard
	CSE-219U2AC4-R1K02-T	1	2U Chassis
Add-on Card / Module	AOC-2UR68-i4G-P	1	2U Ultra Riser based on Intel i350AM4 controller with 4 GbE RJ45 ports, 1 internal PCI-E x8 3.0 slot, 1 PCI-E x16 3.0, and 1 PCI-E x8 3.0 (in x16 slot)

Backplane	BPN-SAS3-216A-N4	1	24-port 2U SAS3 12Gbps hybrid backplane, support up to 20x 2.5-inch SAS3/SATA3 HDD/SSD and 4x SAS3/SATA3/NVMe Storage Devices
Cable 1	CBL-PWEX-0673	3	8 pin female to 2x big 4 pin female power, 65/70CM, 18AWG,RoHS/REACH
Cable 2	CBL-SAST-0591	1	cross-over mini SAS HD to 4 SATA w/SB, S. 75cm. 30AWG,HF,RoHS/REACH,PBF
Cable 3	CBL-SAST-0655	1	Internal RA side exit (right) miniSAS to miniSAS HD 47cm w/ SB, 30AWG,RoHS/REACH
Cable 4	CBL-SAST-0656	1	Internal RA side exit (right) miniSAS to miniSAS HD 39cm w/ SB, 30AWG,RoHS/REACH
Cable 5	CBL-SAST-0657	1	Internal RA side exit (right) miniSAS to miniSAS HD 55cm w/ SB, 30AWG,RoHS/REACH
Riser Card	RSC-R1UW-E8R	1	RSC-R1UW-E8R-O-P
Riser Card	RSC-R2UW-4E8	1	RSC-R2UW-4E8-O-P
Heatsink / Retention	SNK-P0068PS	2	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-1K02A-1R	2	1U 1000W Redundant Power Supply 73.5mm width Titanium Level,RoHS/REACH
FAN 1	FAN-0118L4	4	80 x 80 x 38 mm, 9.5K RPM, 4-pin PWM Fan, Hot

Optional Parts List

	Part Number	Qty	Description
Cable for 4 NVMe Hybrid Drive Bays	2 CBL-SAST-0929 & 2 CBL-SAST-0972	1	OCuLink source to MiniSAS HD target V.91,INT,PCIe NVMe SSD, 57CM,34AWG
2.5" NVMe Drive Tray	MCP-220-00120-0B	4	Tool-less Black gen-3 2.5-inch NVMe drive tray (Orange tab. PUSH button with key lock)
2 Internal M.2 slots (1 SATA, 1 NVMe)	RSC-UMR-8 & CBL-SAST-0538 & MCP-120-82924-0N	1	1U Ultra RHS Riser Card with 1 PCIe/SATA Hybrid M.2 & 1 PCIe X8
2 Rear 2.5" Hot-swap SATA Drive Bays	MCP-240-82922-0N-OEM	1	Rear 2x 2.5" HDDs riser bracket kit for SC829U/219U, tool-less
Storage Control Card for SAS3 Drive Bays	AOC-S3008L-L8e	1	Std LP, 8 internal ports, 12Gb/s per port- Gen3, 122HDD, HBA
	AOC-S3008L-L8i		Std LP, 8 internal ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E
	AOC-S3108L-H8iR		Std LP, 8 internal ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
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, 1x 10GbE SFP+, PCI-E x8, Intel 82599EN
	AOC-STG-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540
	AOC-STG-i2	-	Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB
CachVault(s)	BTR-CV3108-U1	-	CacheVault for Broadcom 3108 with Supercap mounting in 1U 40x56 fan tray
	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
Global Services & Support	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	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)