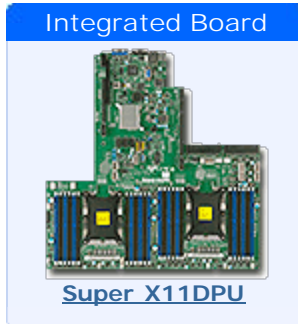


SuperServer 2029U-TN24R4T (Complete System Only)



Key Features

- Up to 24 NVMe drives supported
- 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. 2 PCI-E 3.0 x16 slots (FH, 10.5" L), 1 PCI-E 3.0 x8 slot (LP)
4. 4 10GBase-T LAN ports with Intel X550
5. 24 Hot-swap 2.5" drive bays; 24 NVMe (4 hybrid ports - SAS3 via opt. AOC), 2 rear Hot-swap 2.5" drive bays; 2 internal M.2 (1 SATA3, 1 NVMe)
6. 4 Heavy duty 8cm PWM fans
7. 1600W High efficiency (96%) Redundant PSU; Titanium Level

Due to the complexity of integration, this product is sold as completely assembled systems only (with minimum 2 CPU, 4 DIMM and 6 NVMe). 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.

Specifications

Product SKUs

SYS-2029U-TN24R4T ■ SuperServer 2029U-TN24R4T (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 3DS ECC LRDIMM, 3TB ECC RDIMM, DDR4 up to 2666MHz

Memory Type ■ 2666/2400/2133MHz ECC DDR4 RDIMM, LRDIMM

Chassis

Form Factor ■ 2U Rackmount

Model ■ CSE-219AC24-R1K62P-N24T

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
Storage	▪ SATA3 (6Gbps); RAID 0, 1, 5, 10 per node
Network Connectivity	▪ 4x 10GBase-T ports via Intel® X550 Ethernet Controller ▪ 1x Realtek RTL8211E PHY (dedicated IPMI)
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

NVMe	▪ 24 NVMe ports
LAN	▪ 4 10GBase-T LAN ports ▪ 1 RJ45 Dedicated IPMI LAN port
USB	▪ 3 USB 3.0 ports (2 rear, 1 Type A)
Video	▪ 2 VGA ports (1 rear, 1 onboard)
Serial Port / Header	▪ 1 Serial port
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

	▪ 2 PCI-E 3.0 x16 (FH, 10.5" L) ▪ 1 PCI-E 3.0 x8 (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: 24 NVMe (4 hybrid ports - SAS3 via opt. AOC) ▪ 2 rear Hot-swap 2.5" SATA drive bays
M.2	▪ 1 M.2 NVMe (2242/2260/2280*/22110*) ▪ 1 M.2 SATA (2242/2260/2280*/22110*) via optional SATA cable * Not supported if installing both NVMe & SATA M.2

System Cooling

Fans	▪ 4 Heavy duty 8cm PWM fans
------	-----------------------------

Power Supply

1600W Redundant Power Supplies with PMBus	
Total Output Power	▪ 1000W/1600W
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

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

Parts List - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DPU	1	Super X11DPU Motherboard
	CSE-219AC24-R1K62P-N24T	1	2U Chassis
Add-on Card / Module	AOC-2UR6N4-i4XT-P	1	2U Ultra Riser with 4-port 10GbE RJ45 (10GBase-T)
Backplane	BPN-NVME3-216EB	1	BPN-NVMe3-216A-S4 Backplane Base Board
Backplane	BPN-NVME3-216EL	2	PCIe Gen3x16 input to PLX9765 to support 12x NVMe port
Backplane	BPN-SAS3-826TQ-B2B	1	2-port 2U SAS3 12Gbps backplane, support up to 2x 2.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0097L-03	1	Ipass to 4 SATA, 51cm, W/51cm SB, S, 30AWG
Cable 2	CBL-PWEX-0653	3	8 pin female to 4 pin female power, 37cm, 18AWG,RoHS/REACH
Cable 3	CBL-PWEX-0702	1	8 pin female to RA(Right Angle) big 4 pin female power, 32cm, 18AWG, pinout 5-1, 3-2, 4-3, 7-4,RoHS/REACH
Cable 4	CBL-PWEX-1008	2	BPN PWR,2x4F/CPU to 2x4F/PCIe,P4.2, 12V,40CM,16AWG, 10A/pin, 0~80C
Cable 5	CBL-SAST-0819	4	OCuLink v 1.0,INT,PCIe NVMe SSD, 65CM,34AWG,RoHS/REACH
Cable 6	CBL-SAST-0820	4	OCuLink v. 1.0,INT,PCIe NVMe SSD, 85CM,34AWG,RoHS/REACH
Parts	MCP-110-00015-0N	8	Pan head screw, #6-32 x 6L
Riser Card	RSC-U2N4-6	1	2U Ultra Riser Card with 4 NVMe and PCI-Ex16,RoHS/REACH
Riser Card	RSC-UMR-8	1	1U Ultra RHS Riser Card with 1 PCIE/SATA Hybrid M.2 & 1 PCIE X8,,HF,RoHS
Heatsink / Retention	SNK-P0068PS	2	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-1K62A-1R	2	AC-DC 1600W, Titanium Level, Redundancy, 1U, DC Output: +12V and +12Vs, 203 x 73.5 x 40 mm, AC Input: 90 - 264 VAC/47-63Hz, PMBus 1.2 with DSP controller,HF,RoHS/REACH
FAN 1	FAN-0158L4	4	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH

Optional Parts List			
	Part Number	Qty	Description
Storage Control Card for 4x NVMe/SAS3 Drive Bays	AOC-S3008L-L8e & CBL-SAST-0593	1	Std LP, 8 internal ports, 12Gb/s per port- Gen3, 122HDD, HBA
	AOC-S3008L-L8i & CBL-SAST-0593		Std LP, 8 internal ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E
	AOC-S3108L-H8iR & CBL-SAST-0593		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	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)