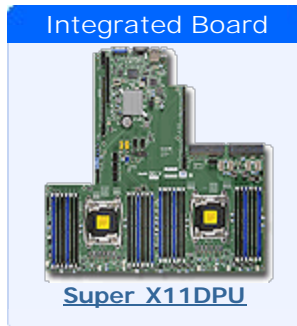


# SuperServer 6029U-TR25M (Complete System Only)



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

- Virtualization
- Hyperconverge Storage
- Cloud Computing
- High End Enterprise Server
- 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. 2 25GbE SFP28 Ethernet ports
5. 12 Hot-swap 3.5" drive bays: 12 SATA (opt. 8 SAS3 + 4 NVMe/SAS3)
6. 4 Heavy duty 8cm fans
7. 1000W High efficiency (96%) Redundant PSU; Titanium Level

## Specifications

### Product SKUs

SYS-6029U-TR25M ■ SuperServer 6029U-TR25M (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-829U2AC4-R1K02-T

### Dimensions and Weight

Width ■ 17.2" (437mm)

Height ■ 3.5" (89mm)

Depth ■ 28.46" (723mm)

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) with RAID 0, 1, 5, 10
Network Connectivity	▪ 2 25GbE SFP28 ports via AOC-2UR68-M2TS-O (Mellanox ConnectX-4 Lx EN)
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	▪ 12 SATA3 (6Gbps) ports
SAS	▪ 8 SAS3 + 4 SAS3/NVMe support optional
LAN	▪ 2 25GbE SFP28 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 header
DOM	▪ 2 SuperDOM (Disk on Module) ports

System BIOS	
BIOS Type	▪ AMI 32Mb SPI Flash ROM

Management	
Software	▪ Intel® Node Manager ▪ <a href="#">IPMI 2.0</a> ▪ KVM with dedicated LAN ▪ NMI ▪ <a href="#">SSM</a> , <a href="#">SPM</a> , <a href="#">SUM</a> ▪ <a href="#">SuperDoctor® 5</a>
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	
PCI-Express	▪ 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)
(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and <a href="#">AOC Support</a> for details.)	

Drive Bays	
Hot-swap	▪ 12 Hot-swap 3.5" drive bays ▪ 12 SATA3 ports by default; Optional 8 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 [ <a href="#">Test Report</a> ]

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	<a href="#">MBD-X11DPU</a>	1	Super X11DPU Motherboard
	<a href="#">CSE-829U2AC4-R1K02-T</a>	1	2U Chassis
Add-on Card / Module	<a href="#">AOC-2UR68-M2TS-O</a>	1	[NR]AOC-2UR68-M2TS-P
Backplane	<a href="#">BPN-SAS3-826A-N4</a>	1	12-port 2U SAS3 12Gbps hybrid backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD and 4x SAS3/SATA3/NVMe Storage Devices

Cable 1	CBL-PWEX-0652	1	8 pin female to 2x RA(Right Angle) big 4 pin female power, 60/65CM, 18AWG,RoHS/REACH
Cable 2	CBL-PWEX-0673	1	8 pin female to 2x big 4 pin female power, 65/70CM, 18AWG,RoHS/REACH
Cable 3	CBL-SAST-0655	1	MINI SAS HD(ST)-MINI SAS(RA-RS EXIT),6G,INT,47CM,SB,30AWG
Cable 4	CBL-SAST-0656	1	MINI SAS HD(ST)-MINI SAS(RA-RS EXIT),6G,INT,39CM,SB,30AWG
Cable 5	CBL-SAST-0657	1	MINI SAS HD(ST)-MINI SAS(RA-RS EXIT),6G,INT,55CM,SB,30AWG
Parts	MCP-240-82914-0N	1	Ultra I/O bracket for SC829U, 219U (B2TS)
Air Shroud	MCP-310-82921-0N	1	Plastic air shroud for SC829U, 219U (X11 24DIMM, left side)
Air Shroud	MCP-310-82922-0N	1	Plastic air shroud for SC829U, 219U (X11 24DIMM, right side)
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
3.5" to 2.5" NVMe Drive Tray	MCP-220-00138-0B	4	Black gen-5.5 tool-less NVMe 3.5" to 2.5" drive tray, Orange tab
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	-	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
Hot-swap 3.5" to 2.5" Hard Disk Drive Tray	MCP-220-00043-0N	-	Black hot-swap 3.5" to 2.5" HDD tray
Global Services & Support	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	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)

[Hide Parts List](#)