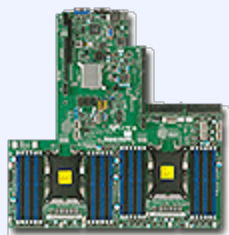


SuperServer 2029UZ-TR4+ (Complete System Only)



Integrated Board



X11DPU-Z+

Due to the complexity of integration, this product is sold as a completely assembled system 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](#) ▶ [Tested Network Card \(AOC\)](#)

Key Features

- Virtualization
- Hyperconverge Storage
- Cloud Computing
- High End Enterprise Server

1. Dual socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, 3 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 (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)
4. 4 Gigabit Ethernet ports
5. 24 Hot-swap 2.5" drive bays; Optional SAS3 and NVMe support, Optional 2 hot-swap 2.5" rear drive bays for SSDs; Optional M.2 NVMe and SATA3 ports
6. 4 Heavy duty 8cm 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-2029UZ-TR4+ ■ SuperServer 2029UZ-TR4+ (Black)

Motherboard

Super X11DPU-Z+

Processor/Cache

CPU ■ Dual Socket P (LGA 3647)
■ Intel® Xeon® Scalable Processors, 3 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

Chassis

Form Factor ■ 2U Rackmount

Model ■ CSE-219U2AC4-R1K62-T

Dimensions and Weight

Height ■ 3.5" (89mm)

Width ■ 17.2" (437mm)

Depth ■ 27.76" (705mm)

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



Available Color ■ Black

Front Panel

Buttons ■ Power On/Off button
■ System UID button

LEDs ■ Power LED
■ Hard drive activity LED
■ Network activity LEDs

Type	2666/2400/2133MHz ECC DDR4 SDRAM
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	▪ 10 SATA3 (6Gbps) ports
LAN	▪ 4 GbE 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	▪ 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

▪ UID LED	
Expansion Slots	
PCI-Express	▪ 1 PCI-E 3.0 x16 slot (FH, 10.5"L) ▪ 5 PCI-E 3.0 x8 slot (FH, 10.5"L) ▪ 1 PCI-E 3.0 x8 slot (LP) ▪ 1 PCI-E 3.0 x8 slot (internal LP)
Drive Bays / Storage	
Hot-swap	▪ 24 Hot-swap 2.5" drive bays Optional 20 SAS3 + 4 SAS3/NVMe ▪ 2 Rear Hot-swap 2.5" drive bays
M.2	▪ 1 M.2 NVMe and 1 M.2 SATA3 via optional riser card RSC-UMR-8 and cable CBL-SAST-0538 (2240/2260/2280/22110) ▪ 2 M.2 NVMe via optional add-on card AOC-SLG3-2M2 (2260/2280/22110)
System Cooling	
Fans	▪ 4 Heavy duty 8cm 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-Z+	1	Super X11DPU-Z+ Motherboard
	CSE-219U2AC4-R1K62-T	1	CSE-219U2AC4-R1K62-T
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-0306L	1	CBL,FRONT CNTL,16 TO 16 PIN,RA,RND TUBE,65CM,28AWG
Cable 2	CBL-PWEX-0673	3	8 pin female to 2x big 4 pin female power, 65/70CM, 18AWG,RoHS/REACH
Cable 3	CBL-SAST-0591	1	MINI SAS HD-4 SATA,6G,INT,RF,Cross Over,75CM,75CM SB,30AWG
Cable 4	CBL-SAST-0655	1	MINI SAS HD(ST)-MINI SAS(RA-RS EXIT),6G,INT,47CM,SB,30AWG
Cable 5	CBL-SAST-0657	1	MINI SAS HD(ST)-MINI SAS(RA-RS EXIT),6G,INT,55CM,SB,30AWG
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	1U RHS WIO Riser card with one PCI-E x8 slot
Riser Card	RSC-R2UW-4E8	1	2U LHS WIO Riser card with four PCI-E x4 slots
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
Add-on card for internal M.2 NVMe	AOC-SLG3-2M2	1	Low Profile PCIe x8 add-on card supports 2 M.2 NVMe Modules
2U Ultra optional rear drive kit	MCP-240-82922-0N-OEM	1	Rear 2x2.5" HDDs riser bracket kit for SC829U/219U, tool-less
2 Rear 2.5" Hot-swap SATA Drive Bays	MCP-240-82922-0N-OEM	-	Rear 2x 2.5" HDDs riser bracket kit for SC829U/219U, tool-less
Storage Control Card and Cable for 4x Hybrid NVMe/SAS Drive Bays	AOC-S3008L-L8e & 2 CBL-SAST-0593 (1~3)	-	Std LP, 8 internal ports, 12Gb/s per port- Gen3, 122HDD, HBA
	AOC-S3008L-L8i & 2 CBL-SAST-0593 (1~3)		Std LP, 8 internal ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E
	AOC-S3108L-H8iR & 2 CBL-SAST-0593 (1~3)		Std LP, 8 internal ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8iR-16DD & 2 CBL-SAST-0593 (1~3)		LSI 3108 based SAS3 RAID, 12Gb, 8 internal ports, 16 drives with expander - RAID 0,1,10,5,6,50,60, Gen3 x8 Standard Low Profile
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 Trays	MCP-220-00167-0B	1 ~ 4	Tool-less black hot-swap 2.5" NVMe drive tray (Orange tab, w/ key lock, clip design)
	MCP-220-00127-0B		Black hot-swap 2.5" NVMe drive tray (Orange tab, w/ key lock)
Cable for internal M.2 SATA	CBL-SAST-0538	1	29cm 30AWG SATA S-RA cable
Network Card(s)	AOC-SGP-i2/4	-	Standard LP, 2/4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STGN-i1S/i2S	-	Standard LP, 1/2x 10GbE SFP+, PCI-E x8, Intel 82599EN
	AOC-STGF-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel XL710-BM2
	AOC-STG-i4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel XL710
	AOC-STG-b4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STG-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540
	AOC-STGS-i1/2T	-	Standard LP, 1/2x 10GbE RJ45, PCI-E x8, Intel X550
	AOC-STG-i4T	-	Standard LP, 4x 10GbE RJ45, PCI-E x8, Intel XL710
	AOC-STG-i2	-	Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB
	AOC-S25G-m2S	-	Standard LP, 2x 25GbE SFP28, Mellanox ConnectX-4 LX EN
	AOC-S40G-i2Q	-	Standard LP 2-port 40GbE controller, Intel Fortville XL710
	More	-	AOC Compatibility Matrix
	2U Cable Management Arm	MCP-290-00128-0N & MCP-290-00127-0N	1
CachVault(s)	BTR-CV3108-U1	-	CacheVault for Broadcom 3108 with Supercap mounting for 2U Ultra
TPM security module	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller, Vertical form factor

TPM security module	AOM-TPM-9671V	1	SPI capable TPM 1.2 with Infineon 9670 controller, Vertical form factor
Intel VROC RAID Key	AOC-VROCINTMOD	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
	AOC-VROCSTNMOD	1	Intel VROC Standard, RAID 0, 1, 10
	AOC-VROCPREMOD	1	Intel VROC Premium, RAID 0, 1, 5, 10
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)
