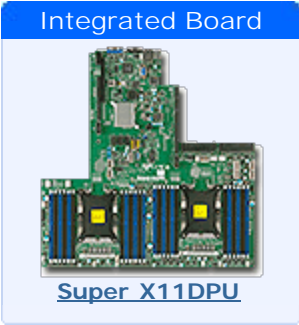


# SuperServer 2029U-E1CR4T (Complete System Only)



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](#)

### 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. 2 PCI-E 3.0 x16 slots (FH, 10.5" L), 4 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. 4x 10GBase-T LAN ports via Intel X710
5. 24 Hot-swap 2.5" drive bays: 24 SAS3 via opt. AOC (4 hybrid ports - opt. 4 NVMe)
6. VGA: Aspeed AST2500
7. 4 Heavy duty 8cm PWM fans
8. 1000W 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-2029U-E1CR4T	▪ SuperServer 2029U-E1CR4T (Black)
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#### Motherboard

[Super X11DPU](#)

#### Processor/Cache

CPU	<ul style="list-style-type: none"> <li>▪ Dual Socket P (LGA 3647)</li> <li>▪ Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s</li> <li>▪ Support CPU TDP 70-205W</li> </ul>
Cores	▪ Up to 28 Cores with Intel® HT Technology

#### System Memory

Memory Capacity	<ul style="list-style-type: none"> <li>▪ 24 DIMM slots</li> <li>▪ Up to 3TB 3DS ECC LRDIMM, 3TB ECC RDIMM, DDR4 up to 2666MHz</li> </ul>
Memory Type	▪ 2666/2400/2133MHz ECC DDR4 RDIMM, LRDIMM

#### Chassis

Form Factor	▪ 2U Rackmount
Model	▪ CSE-219U2E1C4-R1K02-T

#### Dimensions and Weight

Width	▪ 17.2" (437mm)
Height	▪ 3.5" (89mm)
Depth	▪ 27.76" (705.3mm)
Weight	<ul style="list-style-type: none"> <li>▪ Net Weight: 36 lbs (16.4 kg)</li> <li>▪ Gross Weight: 72 lbs (32.7 kg)</li> </ul>
Available Colors	▪ Black

#### Front Panel

Buttons	<ul style="list-style-type: none"> <li>▪ Power On/Off button</li> <li>▪ System Reset button</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>▪ Power status LED</li> <li>▪ HDD activity LED</li> <li>▪ Network activity LEDs</li> <li>▪ System information (overheat/UID) LED</li> </ul>

## On-Board Devices

Chipset	▪ Intel® C621 chipset
SAS	▪ SAS3 (12Gbps) via expander + Broadcom 3108/3008 AOC
Network Connectivity	▪ 4x 10GBase-T ports via Intel® X710 (AOC-2UR66-i4XTF)
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

SAS	▪ 24 SAS3 ports support via expander and storage Add-on Cards
LAN	▪ 4 RJ45 10GBase-T LAN ports ▪ 1 RJ45 Dedicated IPMI LAN port
USB	▪ 3 USB 3.0 ports (2 rear, 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
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## Management

Software	▪ Intel® Node Manager ▪ <a href="#">Redfish API</a> ▪ <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

Expansion Slots	▪ 2 PCI-E 3.0 x16 (FH, 10.5" L) ▪ 4 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 <a href="#">AOC Support</a> for details.)

## Drive Bays

Drive Bays	▪ 24 Hot-swap 2.5" drive bays: 24 SAS3 via opt. AOC (4 hybrid ports - opt. 4 NVMe)
Hot-swap	Note: Storage Add-on card is required

## System Cooling

Fans	▪ 4 Heavy duty 8cm PWM fans
Shroud	▪ 1 Air Shroud

## 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

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X11DPU	1	Super X11DPU Motherboard
	CSE-219U2E1C4-R1K02-T	1	2U Chassis
<b>Add-on Card / Module</b>	AOC-2UR66-I4XTF-P	1	2U Ultra Riser 4-port 10GBase-T, based on Intel XL710-BM1 (C
<b>Backplane</b>	BPN-SAS3-216EL1-N4	1	24-port 2U SAS3 12Gbps single-expander backplane, support up to 20x 2.5-inch SAS3/SATA3 HDD/SSD and 4x NVMe/SAS3/SATA3 storage devices
<b>Cable 1</b>	CBL-PWEX-0673	3	8 pin female to 2x big 4 pin female power, 65/70CM, 18AWG,RoHS/REACH
<b>Cable 2</b>	CBL-SAST-0593	2	Internal Mini-SAS HD to Mini-SAS HD 60cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF
<b>Riser Card</b>	RSC-R1UW-E8R	1	RSC-R1UW-E8R-O-P
<b>Riser Card</b>	RSC-R2UW-4E8	1	RSC-R2UW-4E8-O-P
<b>Heatsink / Retention</b>	SNK-P0068PS	2	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
<b>Power Supply</b>	PWS-1K02A-1R	2	1U 1000W Redundant Power Supply 73.5mm width Titanium Level,RoHS/REACH
<b>FAN 1</b>	FAN-0118L4	4	80 x 80 x 38 mm, 9.5K RPM, 4-pin PWM Fan, Hot

### Optional Parts List

	Part Number	Qty	Description
<b>Cable for 4 NVMe Hybrid Drive Bays</b>	2 CBL-SAST-0929 & 2 CBL-SAST-0972	1	OCuLink source to MiniSAS HD target V.91,INT,PCIe NVMe SSD, 57CM,34AWG
<b>2.5" NVMe Drive Tray</b>	MCP-220-00120-0B	4	Tool-less Black gen-3 2.5-inch NVMe drive tray (Orange tab. PUSH button with key lock)
<b>2 Internal M.2 slots (1 SATA, 1 NVMe)</b>	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
<b>2 Rear 2.5" Hot-swap SATA Drive Bays</b>	MCP-240-82922-0N-OEM	1	Rear 2x 2.5" HDDs riser bracket kit for SC829U/219U, tool-less
<b>Storage Control Card for SAS3 Drive Bays</b>	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
<b>Network Card(s)</b>	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
<b>CacheVault(s)</b>	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
<b>Global Services &amp; Support</b>	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
<b>Software</b>	SFT-OOB-LIC	1	OOB Management Package (per node license)
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)