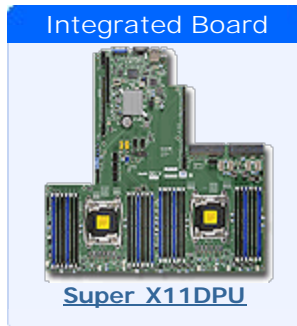


# SuperServer 6029U-E1CRTP (Complete System Only)



## 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 10G SFP+ Ethernet ports
5. 12 Hot-swap 3.5" drive bays: 12 SAS3 via opt. AOC (4 hybrid ports - opt. 4 NVMe)
6. 4 Heavy duty 8cm PWM fans
7. 1000W 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 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.

## Specifications

### Product SKUs

SYS-6029U-E1CRTP ■ SuperServer 6029U-E1CRTP (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-829U2E1C4-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	<ul style="list-style-type: none"> <li>Intel® C621 chipset</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA3 (6Gbps) with RAID 0, 1, 5, 10</li> </ul>
Network Connectivity	<ul style="list-style-type: none"> <li>2 10G SFP+ ports via AOC-2UR68-I2XS (Intel® 82599ES)</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>ASPEED AST2500 BMC</li> </ul>

## Input / Output

SAS	<ul style="list-style-type: none"> <li>12 SAS3 ports via expander and AOC</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2 10G SFP+ ports</li> <li>1 RJ45 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>3 USB 3.0 ports (2 rear, 1 Type A)</li> </ul>
Video	<ul style="list-style-type: none"> <li>2 VGA ports (1 rear, 1 onboard)</li> </ul>
Serial Port / Header	<ul style="list-style-type: none"> <li>1 Serial header</li> </ul>
DOM	<ul style="list-style-type: none"> <li>2 SuperDOM (Disk on Module) ports</li> </ul>

## System BIOS

BIOS Type	<ul style="list-style-type: none"> <li>AMI 32Mb SPI Flash ROM</li> </ul>
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## Management

Software	<ul style="list-style-type: none"> <li>Intel® Node Manager</li> <li>IPMI 2.0</li> <li>KVM with dedicated LAN</li> <li>NMI</li> <li>SSM, SPM, SUM</li> <li>SuperDoctor® 5</li> </ul>
Power Configurations	<ul style="list-style-type: none"> <li>ACPI Power Management</li> </ul>

## PC Health Monitoring

CPU	<ul style="list-style-type: none"> <li>Monitors for CPU Cores, Chipset Voltages, Memory.</li> <li>4+1 Phase-switching voltage regulator</li> </ul>
FAN	<ul style="list-style-type: none"> <li>Fans with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul>
Temperature	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>Thermal Control for fan connectors</li> </ul>

## Expansion Slots

	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x16 (FH, 10.5" L)</li> <li>5 PCI-E 3.0 x8 (FH, 10.5" L)</li> <li>1 PCI-E 3.0 x8 (LP)</li> <li>1 PCI-E 3.0 x8 (internal LP)</li> </ul>
PCI-Express	<p>(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.)</p>

## Drive Bays

Hot-swap	<ul style="list-style-type: none"> <li>12 Hot-swap 3.5" drive bays</li> <li>12 SAS3 via opt. AOC (4 hybrid ports - opt. 4 NVMe)</li> </ul> <p>Note: Storage Add-on card is required</p>
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## Backplane

2U SAS/SATA backplane
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## System Cooling

Fans	<ul style="list-style-type: none"> <li>4 Heavy duty 8cm PWM fans</li> </ul>
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## Power Supply

1000W Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> <li>800W/1000W</li> </ul>
Dimension (W x H x L)	<ul style="list-style-type: none"> <li>73.5 x 40 x 203 mm</li> </ul>
Input	<ul style="list-style-type: none"> <li>100-127Vac / 9.8 - 7A / 50-60Hz</li> <li>200-240Vac / 7 - 5A / 50-60Hz</li> </ul>
+12V	<ul style="list-style-type: none"> <li>Max: 66.7A / Min: 0A (100-127Vac)</li> <li>Max: 83A / Min: 0A (200-240Vac)</li> </ul>
12Vsb	<ul style="list-style-type: none"> <li>Max: 2.1A / Min: 0A</li> </ul>
Output Type	<ul style="list-style-type: none"> <li>25 Pairs Gold Finger Connector</li> </ul>

Certification	  <ul style="list-style-type: none"> <li>UL/cUL/CB/BSMI/CE/CCC Titanium Level</li> <li>[ <a href="#">Test Report</a> ]</li> </ul>
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## Operating Environment

RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</li> <li>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DPU	1	Super X11DPU Motherboard
	CSE-829U2E1C4-R1K02-T	1	2U Chassis

Add-on Card / Module	AOC-2UR68-I2XS	1	2U Ultra Riser based on Intel 82599ES controller with 2 10Gb SFP+ 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-SAS3-826EL1-N4	1	12-port 2U SAS3 12Gbps single-expander backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD and 4x NVMe/SAS3/SATA3 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-0593	2	MINI SAS HD,12G,INT,60CM,30AWG
Parts	MCP-240-82910-0N	1	Ultra I/O bracket for SC829U, 219U (i2XS),HF,RoHS/REACH
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 and Cable(s)	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
	AOC-S3108L-H8iR-16DD		Std LP, 8 internal ports, 12Gb/s per port- Gen3, 16HDD, 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)