

SuperServer 6028UX-TR4 (Complete System Only)



Key Features

- Support [Hyper-Speed](#)

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB ECC, up to DDR4 2133MHz; 16x DIMM slots
3. 3x PCI-E 3.0 x16 slot (FH, 10.5" L), 3x PCI-E 3.0 x8 slots (1 in x16 FH 10.5" L, 1 LP, 1 Internal LP)
4. 4x Gigabit Ethernet ports
5. 12x Hot-swap 3.5" Drive Bays: SATA3 default, 12x SAS3 opt. 4x NVMe opt. via AOC
6. 4x heavy duty fans w/ optimal fan speed control
7. 1000W High efficiency (96%) Redundant PSU; Titanium Level

Note: Image above may show a varied configuration or optional parts. Please refer to parts list for standard parts included.

Specifications

Product SKUs

- SYS-6028UX-TR4 ■ SuperServer 6028UX-TR4 (Black)

Motherboard

[Super X10DRU-X](#)

Processor/Cache

- CPU ■ Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP) *
 ■ Dual Socket R3 (LGA 2011)

- Cores / Cache ■ Up to 18 Cores / Up to 45MB Cache

- System Bus ■ QPI up to 9.6 GT/s

Note * Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.

System Memory

- Memory Capacity ■ 16x 288-pin DDR4 DIMM slots
 ■ Up to 1TB ECC LRDIMM, 512GB ECC RDIMM

Memory **Handy** ■ F33/1866/1600MHz ECC DDR4 SDRAM Cache

Chassis

- Form Factor ■ 2U Rackmount

- Model ■ CSE-829UTS-R1K02P

Dimensions and Weight

- Width ■ 17.2" (437mm)

- Height ■ 3.5" (89mm)

- Depth ■ 25.5" (647mm)

- Gross Weight ■ 36 lbs (16.4kg)

- Available Colors ■ Black

Front Panel

- Buttons ■ Power On/Off button
 ■ System Reset button

- LEDs ■ Power status LED
 ■ HDD activity LED
 ■ 2x Network activity LEDs
 ■ System information (overheat/UID) LED

Expansion Slots

- 3x PCI-E 3.0 x16 slot (FH, 10.5" L)
- 3x PCI-E 3.0 x8 slots (1 in x16 FH 10.5" L, 1 LP, 1 Internal LP)

DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 64GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB
Memory Voltage	<ul style="list-style-type: none"> 1.2 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C612 chipset
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) with RAID 0, 1, 5, 10
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ASPEED AST2400 BMC
Network Connectivity	<ul style="list-style-type: none"> 4x Gigabit Ethernet ports via AOC-2UR68-i4G
Graphics	<ul style="list-style-type: none"> ASPEED AST2400 BMC

Input / Output

SATA	<ul style="list-style-type: none"> 10x SATA3 (6Gbps) ports
SAS	<ul style="list-style-type: none"> 12x SAS3 ports support via optional Add-on Card
NVMe	<ul style="list-style-type: none"> 4x NVMe ports support via optional Ultra Riser card (AOC-2UR8N4-i2XT)
LAN	<ul style="list-style-type: none"> 4x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 5x USB 3.0 ports (2 rear, 2 onboard header, 1 Type A)
Video	<ul style="list-style-type: none"> 1x VGA Connector
Serial Port / Header	<ul style="list-style-type: none"> 1x Serial header
DOM	<ul style="list-style-type: none"> 2x SuperDOM (Disk on Module) ports

Management

Software	<ul style="list-style-type: none"> SuperDoctor® 5 Watch Dog NMI, SPM, SUM IPMI 2.0 Intel Node Manager
Power Configurations	<ul style="list-style-type: none"> ACPI / APM Power Management Power-on mode for AC power recovery

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	<ul style="list-style-type: none"> 12x Hot-swap 3.5" Drive Bays: 10x SATA3 ports by default Optional SAS3 support: 12x SAS3 Optional NVMe support: 4x NVMe via AOC-2UR8N4-i2XT (2x 10GBase-T ports) <p>Note: optional storage card is required to support more than 10 drives.</p>
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Backplane

2U SAS/SATA backplane

System Cooling

Fans	<ul style="list-style-type: none"> 4x 8cm heavy duty PWM fans
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Power Supply with Digital Switching Control

1000W Redundant Titanium Level (96%) Single Output Power Supplies

AC Input	<ul style="list-style-type: none"> 100-127 V, 50-60 Hz 200-240 V, 50-60 Hz
+12V	<ul style="list-style-type: none"> Max: 62.5A & Min: 0A (100Vac-127Vac) Max: 83A (200Vac-240Vac) & Min: 0A
12V SB	<ul style="list-style-type: none"> Max: 2.1A Min: 0A

Certification	 <p>Titanium Level [Test Report]</p>
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System BIOS

BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) APM 1.2 PCI 2.3 ACPI 1.0 / 2.0 / 3.0 / 4.0 USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°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-X10DRU-X	1	Super X10DRU-X Motherboard
	CSE-829UTS-R1K02P	1	2U Chassis
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)
Air Shroud	MCP-310-82913-0N	1	
Backplane	BPN-SAS3-826A-N4	1	2U Backplane for 3.5
Cable 1	CBL-SAST-0631	1	cross-over mini SAS HD to 4 SATA w/SB, S. 55cm. 30AWG,RoHS/REACH
Cable 2	CBL-SAST-0657	1	Internal RA side exit (right) miniSAS to miniSAS HD 55cm w/ SB, 30AWG,RoHS/REACH
Cable 3	CBL-SAST-0655	1	Internal RA side exit (right) miniSAS to miniSAS HD 47cm w/ SB, 30AWG,RoHS/REACH
Cable 4	CBL-PWEX-0652	1	8 pin female to 2x RA(Right Angle) big 4 pin female power, 60/65CM, 18AWG,RoHS/REACH
Cable 5	CBL-PWEX-0673	1	8 pin female to 2x big 4 pin female power, 65/70CM, 18AWG,RoHS/REACH
Riser Card	RSC-R1UW-E8R	1	RSC-R1UW-E8R-O-P
Riser Card	RSC-W2-66	1	RSC-W2-66
Heatsink / Retention	SNK-P0058PU	2	2U Passive CPU Heat Sink for X10 2U 16-DIMM Ultra Series Servers,RoHS/REACH
Parts	MCP-240-82911-ASM-OEM	1	GPU kit for SC829U, 219U, Tool-less
Power Supply	PWS-1K02A-1R	2	1U 1000W Redundant Power Supply 73.5mm width Titanium Level,RoHS/REACH

Optional Parts List			
	Part Number	Qty	Description
Storage Control Card and Cable(s)	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	-
BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05		-	CacheVault for LSI 3108; Supercap mounting bracket for PCI-E location
BTR-TFM8G-LSICVM02 & MCP-240-00127-0N		-	CacheVault for LSI 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
Onsite Service Program	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	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)