SuperStorage 6029P-E1CR24H (Complete System Only)





Integrated Board



Super X11DSC+

Views: | <u>Angled View</u> | <u>Top View</u> | | <u>Front View</u> | <u>Rear View</u> |

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 2 CPUs, 2 DIMMs, 6 HDDs and 1 NIC or SIOM card).

Drivers & Utilities → BIOS → IPMI → Tested Memory → NVMe
Options → Manuals → OS Certification Matrix → QuickReferences Guide → Drive Options

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

Key Features

- Corporate Database
- Database Processing & Storage
- Enterprise Server
- HPC, Data Center
- iSCSI SAN
- Dual Socket P (LGA 3647) support 2nd Gen Intel® Xeon® Scalable processors (Cascade Lake/Skylake)[‡]
- 2. 24 DIMMs; up to 6TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM^{††}
- 3. 2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8, 1 SIOM card support (flexible networking)

 Note: must bundle with Network card
- 4. 24 Hot-swap 3.5" SAS3/SATA3 drive bays; 2 hot-swap 2.5" SATA3 drive bays (rear) Expander based backplane
- 5. Broadcom 3108 SAS3, HW RAID
- 6. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
- 7. 5x 8cm high-performance PWM fans
- 8. 1600W Redundant Power Supplies Titanium Level (96%)

Specifications

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SSG-6029P- E1CR24H	SuperStorage 6029P-E1CR24H (Black)	Form Factor	2U Rackmount
		Model	■ CSE-826STS-R1K62P1
Motherboard		Dimensions	
Super X11DSC+		Width	■ 17.2" (437mm)
		Height	■ 3.5" (89mm)
Processor/Cache		Depth	■ 34" (863mm)
CPU	 Dual Socket P (LGA 3647) 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® 	Available Colors	■ Black
	Scalable Processors [‡] , 3 UPI up to 10.4GT/s	Front Panel	
	■ Support CPU TDP 70-165W	Buttons	Power On/Off buttonSystem Reset button
Cores	Up to 28 Cores	LEDs	■ Power status LED
Note	[‡] BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)		 Hard drive activity LED Network activity LEDs System Information LED Power fail LED
System Memory		Expansion Slots	
Memory Capacity	 24 DIMM slots Up to 6TB 3DS ECC DDR4- 2933MHz[†] RDIMM/LRDIMM Supports Intel® Optane™ DCPMM^{††} 	PCI-Express	 2 PCI-E 3.0 x16 slots 1 PCI-E 3.0 x8 slot 1 <u>SIOM</u> card support (must bundle with network card)
Memory Type	■ 2933 [†] /2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM	Drive Bays	
Note	† 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro †† Cascade Lake only. Contact your Supermicro sales rep for more info.	Hot-swap	 24 Hot-swap 3.5" SAS3/SATA3 drive bays 2 Hot-swap 2.5" SATA3 drive bays (rear)
		Backplane	
On-Board Devices		Expander based ba	ackolane
Chipset	■ Intel® C621 chipset		
SAS	 SAS3 (12Gbps) via Broadcom 3108; HW RAID RAID 0, 1, 5, 6, 10, 50, 60 	System Cooling Fans	■ 5x 8cm high-performance PWM
SATA	■ SATA3 (6Gbps); RAID 0, 1, 5, 10	i uns	fans
IPMI	 Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support 	Power Supply 1600W Redundant	Power Supplies with PMBus
Video	■ ASPEED AST2500 BMC	Total Output Power	■ 1600W/1000W
Input / Output		Dimension (W x H x L)	■ 73.5 x 40 x 203 mm
Serial ATA	■ 8 SATA3 (6Gbps) ports	Input	■ 100-127Vac / 13 - 9A / 50-60Hz
LAN	■ 1 RJ45 Dedicated IPMI LAN port		■ 200-240Vac / 10 - 8A / 50-60Hz
		+12V	Max: 83.3A / Min: 0A (100-127Va)

	■ 1 Type A
Video	1 VGA D-Sub connector port
Serial Port / Header	■ 1 Fast UART 16550 port / 1 Header
System BIOS	
BIOS Type	■ AMI UEFI
Management	
Software	Intel® Node ManagerIPMI 2.0NMI

Header	■ 1 Fast UART 16550 port / 1 Header	
System BIOS		
BIOS Type	■ AMI UEFI	
Management		
Software	 Intel® Node Manager IPMI 2.0 NMI SSM, SPM, SUM SuperDoctor® 5 Watchdog 	
PC Health Monit	toring	
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 	
	connectors	

Certification	Titanium Level [<u>Test Report</u>]			
Output Type	25 Pairs Gold Finger Connector			
12Vsb	■ Max: 2.1A / Min: 0A			
	■ Max: 133A / Min: 0A (200-240Vac)			

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-X11DSC+ CSE-826STS-R1K62P1	1	Super X11DSC+ Motherboard 2U Chassis
Add-on Card / Module	AOM-S3108M-H8L-P	1	sas3 roc mez for X10dsc
Backplane	BPN-SAS3-826SEL1- N4	2	12-port 2U Simply-Double SAS3 12Gbps single-expander backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD and 4x NVMe/SAS3/SATA3 storage devices
Cable 1	CBL-PWEX-0702	1	PWEX,2X4F/P4.2 TO 1X4F/P5.08/RA,32CM,18AWG,YEL,BLK*2,RED
Cable 2	CBL-SAST-0835	2	SLIMLINE SAS to MiniSAS HD, INT, 100CM, 32AWG
Cable 3	CBL-SAST-0836	2	MINI SAS HD,INT,SAS3 SSD,48CM,32AWG
Parts	MCP-220-82616-0N	1	12G 2.5x2 Drive Kit w/ Status LED(216B/826B/417B/846X/847B)
Heatsink / Retention	SNK-P0067PS	2	1U 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-0168L4	5	80x80x38 mm, 13.5K RPM, Middle Cooling Fan for SC226S Chassis (48-bay)

Optional Parts List

	Part Number	Qty	Description
Converter Tray	MCP-220-00140-0B	-	Hot-swap 3.5" to 2.5" converter tray
4 NVMe Drives Support	CBL-SAST-0929	4	OCuLink 0.91 to MiniSAS HD,INT,PCIe NVMe SSD, 57CM,34AWG
	MCP-220-00140-0B	4	Hot-swap 3.5" to 2.5" converter tray
2x 2.5" rear SATA drive bay to support (2+2) drive bays	CBL-PWEX-0650 MCP-240-22604-0N MCP-240-22605-0N MCP-220-82616-0N	1 1 1 1	8-pin female to 2 Right Angle big 4-pin female power, 47/62cm 2U Rear plate support (2 + 2) 2.5HDD for SC226S/826S 2U Rear Window support (2+2) 2.5HDD for SC226S/826S, X11DSC Rear 2.5 x 2 Hot swap HDD kit
SIOM Network Card(s)	AOC-MGP-I2 AOC-MGP-I4 AOC-MTG-I2T AOC-MTG-I4T AOC-MTGN-I2S AOC-MTG-I4S	- - - - -	SIOM 2-port GbE, Intel i350-AM2 SIOM 4-port GbE, Intel i350-AM4 SIOM 2-port 10GBase-T, Intel X550 SIOM 4-port 10GBase-T, Intel X550 SIOM 2-port 10G SFP+, Intel 82599ES SIOM 4-port 10G SFP+, Intel XL710
Network Card(s)	AOC-S25G-m2S AOC-STGN-i1S/i2S AOC-STG-i4S AOC-STG-i2T AOC-S100G-m2C More	- - - - -	Standard LP, 2x 25GbE SFP28, Mellanox ConnectX-4 LX EN Standard LP, 1/2x 10GbE SFP+, PCI-E x8, Intel 82599EN Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel XL710 Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540 Standard 100G Mellanox ConnectX-4 EN based AOC Compatibility Matrix
3108 Cache Protection	BTR-CV3108-FT1	-	Broadcom 3108 CacheVault kit (ROHS, Reach)
TPM security module (optional, not included)	AOM-TPM-9670V AOM-TPM-9671V	1	TPM module (Vertical) TPM 2.0 TPM module (Vertical) TPM 1.2.
Intel VROC RAID Key	AOC-VROCINTMOD AOC-VROCSTNMOD	1 1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only) Intel VROC Standard, RAID 0, 1, 10

	AOC-VROCPREMOD	1	Intel VROC Premium, RAID 0, 1, 5, 10
Short Rail	MCP-290-11808-0N	-	Supermicro 1U Rail Kit (Note: If short rail is used, system will not support cable management arm)
Global Services & Support	OS4HR3/2/1 OSNBD3/2/1	-	3/2/1-year onsite 24x7x4 service 3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • @Store	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)