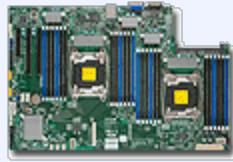


SuperStorage Server 2028R-E1CR48L (Complete System On



Integrated Board



Super X10DSC+

Due to the complexity of integration, this product is sold as completely assembled systems only (with minimum 24 HDDs and 1 NIC or SIOM card).

Coming Soon

Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4†/ v3 family; QPI up to 9.6GT/s
2. Up to 3TB† ECC 3DS LRDIMM , up to DDR4- 2400†MHz ; 24x DIMM slots
3. 2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8
4. SIOM for flexible networking options
5. 48x 2.5" Hot-swap SAS3/SATA3 drive bays
6. LSI 3008 SAS3 IT mode controller
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 5x 8cm hot-swap redundant PWM fans
9. 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

SSG-2028R-E1CR48L	■ SuperServer 2028R-E1CR48L (Black)
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Motherboard

Super X10DSC+

Processor/Cache

CPU	<ul style="list-style-type: none"> ■ Intel® Xeon® processor E5-2600 v4†/ v3 family (up to 145W TDP) * ■ Dual Socket R3 (LGA 2011)
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Cores / Cache	■ Up to 22 Cores† / Up to 55MB† Cache
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System Bus	■ QPI up to 9.6 GT/s
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Note	† BIOS version 2.0 or above is required
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Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.
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Chassis

Form Factor	■ 2U Rackmount
Model	■ CSE-226STS-R1K62P1

Dimensions

Width	■ 17.2" (437mm)
Height	■ 3.5" (89mm)
Depth	<ul style="list-style-type: none"> ■ 30.2" (767mm) ■ With Cable Management Arm Installed: 35.2" (895mm)
Available Colors	■ Black

Front Panel

Buttons	<ul style="list-style-type: none"> ■ Power On/Off button ■ System Reset button
LEDs	<ul style="list-style-type: none"> ■ Power status LED ■ Hard drive activity LED ■ 2x Network activity LEDs ■ System Overheat LED ■ Power fail LED

System Memory

Memory Capacity	<ul style="list-style-type: none">24x 288-pin DDR4 DIMM slotsUp to 3TB[†] ECC 3DS LRDIMM, 768 ECC RDIMM
Memory Type	<ul style="list-style-type: none">2400[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none">RDIMM: 32GB, 16GB, 8GB, 4GBLRDIMM: 64GB, 32GB3DS LRDIMM: 128GB
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); RAID 0, 1, 5, 10
SAS3	<ul style="list-style-type: none">LSI 3008 SAS3 IT mode
IPMI	<ul style="list-style-type: none">Support for Intelligent Platform Management Interface v.2.0IPMI 2.0 with virtual media over LAN and KVM-over-LAN supportASPEED AST2400 BMC
Network Controllers	<ul style="list-style-type: none">SIOM support for flexible networking options
Video	<ul style="list-style-type: none">ASPEED AST2400 BMC

Input / Output

LAN	<ul style="list-style-type: none">LAN ports via SIOM Add-On-Card: (See SIOM Compatibility Matrix)
USB	<ul style="list-style-type: none">3x USB 3.0 ports (2 rear + 1 Type A)
Video	<ul style="list-style-type: none">1x VGA port
Serial Port / Header	<ul style="list-style-type: none">1x Fast UART 16550 port / 1 Header

Expansion Slots

PCI-Express	<ul style="list-style-type: none">2x PCI-E 3.0 x16 slots1x PCI-E 3.0 x8 slotsSlot 1 Occupied by LSI 3008 AOC
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Drive Bays

Hot-swap	<ul style="list-style-type: none">48x 2.5" Hot-swap SAS3/SATA3 drive bays2x 2.5" rear Hot-swap drive bays
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Backplane

Two 24 port SAS3 12G expander backplanes, each supporting up to 24x 2.5" SAS3 drives

System Cooling

Fans	<ul style="list-style-type: none">5x 8cm hot-swap redundant PWM cooling fans
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Power Supply

1600W Redundant Titanium Level AC Power Supplies with PMbus	
Input	<ul style="list-style-type: none">100-127 V, 50-60 Hz200-240 V, 50-60 Hz
+12V	<ul style="list-style-type: none">Max: 83.3A & Min: 0A (100Vac-127Vac)Max: 133A & Min: 0A (200Vac-240Vac)
12V SB	<ul style="list-style-type: none">Max: 2.1AMin: 0A

Certification	  Titanium Level Certified [Test Report]
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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 1.2PCI 2.2ACPI 1.0 / 2.0USB Keyboard supportSMBIOS 2.3UEFI

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-X10DSC+	1	Super X10DSC+ Motherboard
	CSE-226STS-R1K62P1	1	2U Chassis
Backplane	BPN-SAS3-226SEL1-N4	2	2U 24-Port Expander Backplane Support 20x2.5" SAS3/SATA3 HDD/SSD and 4x2.5" SAS3/SATA3/NVMe Storage Devices
Cable 1	CBL-SAST-0844	2	SLIMLINE SAS to MiniSAS HD,INT,85CM,30D-41F-14D,no sidebend,32AWG
Cable 2	CBL-SAST-0836	2	MINI SAS HD,INT,SAS3 SSD,48CM,no sidebend,32AWG
Heatsink / Retention	SNK-P0047PS	2	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Parts	MCP-220-82609-0N	1	Rear 2.5 x 2 Hot swap HDD kit for 216B/826B/417B/846X/847B
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
Drive Tray(s)	MCP-220-00047-0B	48	Black 3rd Gen hot-swap 2.5" HDD tray
Add On Card	AOC-S3008L-L8E-O-P	1	12Gbps SAS3/HBA/ 2 internal HD connectors/STD Gen3 PCI/122 HD support

Optional Parts List

	Part Number	Qty	Description
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)
SIOM Network Card(s)	AOC-MGP-I2	-	SIOM 2-port GbE, Intel i350-AM2
	AOC-MGP-I4	-	SIOM 4-port GbE, Intel i350-AM4
	AOC-MTGN-I2S	-	SIOM 2-port 10G SFP+, Intel 82599ES
	AOC-MTG-I4S	-	SIOM 4-port 10G SFP+, Intel XL710