

SuperStorage Server 2028R-E1CR24N



Rear Hot-Swap Drive Bay not Supported



Integrated Board



Super X10DRi-T4+

Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1.5TB ECC DDR4 2133MHz; 24x DIMM slots
3. 2 PCI-E 3.0 x16, 4 PCI-E 3.0 x8 (Slot 3 & 4 occupied by controller and JBOD expansion port)
4. Quad LAN w/ Intel® X540 10GBase-T
5. 24x 2.5" Hot-swap SAS3/SATA3 drive bays
6. Hardware RAID controller and JBOD Expansion; RAID 0, 1, 5, 6, 10, 50, 60
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 3x 8cm hot-swap redundant PWM fans
9. 920W Redundant Power Supplies **Platinum Level (94%)**

Available Colors:

Black



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-E1CR24N** ■ SuperServer 2028R-E1CR24N (Black)

Motherboard

Super X10DRi-T4+

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** ■ 24x 288-pin DDR4 DIMM slots
■ Up to 1.5TB ECC LRDIMM, 768GB ECC RDIMM

- Memory** ■ 2133/1866/1600MHz ECC DDR4 SDRAM

Chassis

- Form Factor** ■ 2U Rackmount

- Model** ■ CSE-216BE1C-R920LPB

Dimensions

- Width** ■ 17.2" (437mm)

- Height** ■ 3.5" (89mm)

- Depth** ■ 24.8" (630mm)

- Gross Weight** ■ 61 lbs (27.7 kg)

- Available Colors** ■ Black

Front Panel

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

- LEDs** ■ Power status LED
■ Hard drive activity LED
■ 2x Network activity LEDs
■ System Overheat LED
■ Power fail LED

Expansion Slots

- 2x PCI-E 3.0 x16 slots
■ 4x PCI-E 3.0 x8 slots

Type	72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 32GB, 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); RAID 0, 1, 5, 10
SAS3 AOC	<ul style="list-style-type: none"> LSI 3108 SAS3 AOC Hardware RAID 0, 1, 5, 6, 10, 50, 60
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 Controllers	<ul style="list-style-type: none"> Intel® X540 Quad Port 10GBase-T Virtual Machine Device Queues reduce I/O overhead Supports 10GBase-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Video	<ul style="list-style-type: none"> ASPEED AST2400 BMC

Input / Output

LAN	<ul style="list-style-type: none"> 4x RJ45 10GBase-T ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 3x USB 3.0 ports (2 rear + 1 Type A) 2x USB 2.0 ports (2 rear)
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

PCI-Express	<ul style="list-style-type: none"> Slot 3 & 4 Occupied by Controller and JBOD Expansion Port
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Drive Bays

Hot-swap	<ul style="list-style-type: none"> 24x 2.5" Hot-swap SAS3/SATA3 HDD bays
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Backplane

SAS3 12Gbps single expander backplane, w/ 24x SAS3 2.5" drive slots and 4x mini-SAS HD connectors for SAS3 uplink/downlink

System Cooling

Fans	<ul style="list-style-type: none"> 3x 8cm 7K RPM, 4-pin PWM fans
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Power Supply with Power Distributor

920W high-efficiency (94%+) AC-DC Redundant power supplies with PMBus and I2C

AC Input	<ul style="list-style-type: none"> 100-240 V, 50-60 Hz, 11-4.5 Amp
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DC Output	<ul style="list-style-type: none"> 4 Amp @ +5V standby 75 Amp @ +12V
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Certification	  Platinum Certified [Test Report]
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System BIOS

BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI BIOS
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BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) APM 1.2 PCI 2.2 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI
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Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
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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)
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Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRi-T4+	1	Super X10DRi-T4+ Motherboard
	CSE-216BE1C-R920LPB	1	2U Chassis
Backplane	BPN-SAS3-216EL1	1	SAS3 12Gb/s single expander backplane, with 24x SAS3 2.5" drive slots and 4x HD mini-SAS3 cable connectors for SAS3 uplink/downlink,RoHS/REACH,PBF
Cable 1	CBL-SAST-0532	4	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF
Heatsink / Retention	SNK-P0048AP4	1	2U Active CPU Heat Sink for Intel R2/R3/B2/B3 and AMD C32
Heatsink / Retention	SNK-P0048P	1	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square ILM MB
Power Supply	PWS-920P-SQ	2	920W 1U Redundant PWS W/ Quiet Mode
Drive Tray(s)	MCP-220-00047-0B	24	Black 3rd Gen hot-swap 2.5" HDD tray
Add On Card	AOC-S3108L-H8IR-O-P	1	SAS-3, GEN-3 RAID card. Supports 12Gb and RAID 0, 1, 5, 6, 10, 50, and 60. Includes 2GB memory
Add On Module	AOM-SAS3-8I8E-LP	1	8-port Mini SAS HD Int-to-Ext cable adapter w/ LP bracket

Optional Parts List

	Part Number	Qty	Description
3108 Cache Protection	BTR-TFM8G-LSICVM02	1	SuperCap Module
	BKT-BBU-BRACKET-05	1	Mounting PCIe Card
HDD bracket	MCP-220-82611-0N	1	Dual 2.5" fixed HDD tray
	CBL-0289L	1	HDD Power Cable
	CBL-0473L	2	HDD SATA Cable
Onsite Service Program	QS4HR3/2/1	-	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)