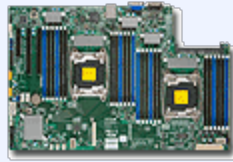


SuperStorage Server 6028R-E1CR24L (Complete System)



SAS3 IT mode controller, Storage Expandable

Integrated Board



[Super X10DSC+](#)

Due to the complexity of integration, this product is sold as completely assembled systems only (with minimum 12 HDDs and 1 NIC or SIOM card).

[Drivers & Utilities](#) [BIOS](#) [IPMI](#) [Tested Memory](#) [Manuals](#) [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.

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. 24x 3.5" Hot-swap SAS3/SATA3 drive bays; optional 2x 2.5" Hot-swap rear SATA 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%)**

Specifications

Product SKUs

SSG-6028R-E1CR24L ■ SuperServer 6028R-E1CR24L (**Black**)

Motherboard

Super X10DSC+

Processor/Cache

CPU ■ Intel® Xeon® processor E5-2600 v4[†]/ v3 family (up to 145W TDP) *
■ Dual Socket R3 (LGA 2011)

Cores / Cache ■ Up to **22 Cores[†]** / Up to **55MB[†]** Cache

System Bus ■ QPI up to 9.6 GT/s

Note [†] BIOS version 2.0 or above is required

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

Chassis

Form Factor ■ 2U Rackmount

Model ■ **CSE-826SE1C4-R1K62**

Dimensions

Width ■ 17.2" (437mm)

Height ■ 3.5" (89mm)

Depth ■ 34" (863.6mm)
■ With Cable Management Arm Installed: 41" (1041.4mm)

Available Colors ■ Black

Front Panel

Buttons ■ Power On/Off button
■ System Reset button

LEDs ■ Power status LED
■ Hard drive activity LED
■ 2 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, 512GB 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: 64GB, 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
Graphics	<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">3 USB 3.0 ports (2 rear + 1 Type A)
Video	<ul style="list-style-type: none">1 VGA port
Serial Port / Header	<ul style="list-style-type: none">1 Fast UART 16550 port / 1 Header

Expansion Slots

PCI-Express	<ul style="list-style-type: none">2 PCI-E 3.0 x16 slots1 PCI-E 3.0 x8 slots
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Drive Bays

Hot-swap	<ul style="list-style-type: none">24x 3.5" Hot-swap SAS3/SATA3 drive baysOptional 2x 2.5" rear Hot-swap SATA drive bays
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Backplane

Two 12 port SAS3 12G expander backplanes, each supporting up to 12x 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 Power Supplies with PMBus

Total Output Power	<ul style="list-style-type: none">1000W/1600W
Dimension (W x H x L)	<ul style="list-style-type: none">73.5 x 40 x 203 mm
Input	<ul style="list-style-type: none">100-127Vac / 13 - 9A / 50-60Hz200-240Vac / 10 - 8A / 50-60Hz
+12V	<ul style="list-style-type: none">Max: 83.3A / Min: 0A (100-127Vac)Max: 133A / Min: 0A (200-240Vac)
12Vsb	<ul style="list-style-type: none">Max: 2.1A / Min: 0A
Output Type	<ul style="list-style-type: none">25 Pairs Gold Finger Connector

Certification	  UL/cUL/CB/BSMI/CE/CCC Titanium Level [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-826SE1C4-R1K62	1	2U Chassis
Add-on Card / Module	AOM-S3008M-L8-P	1	Mezz card with LSI 3008 controller
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-SAST-0835	2	SLIMLINE SAS to MiniSAS HD, INT, 100CM, 32AWG
Cable 2	CBL-SAST-0836	2	MINI SAS HD,INT,SAS3 SSD,48CM,no sidebend,32AWG
Cable 3	CBL-PWEX-0702	1	8 pin female to RA(Right Angle) big 4 pin female power, 32cm, 18AWG, pinout 5-1, 3-2, 4-3, 7-4,RoHS/REACH
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
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
Drive Tray(s)	MCP-220-00133-0B	24	Black gen 8 hot-swap 3.5" HDD tray

Optional Parts List

	Part Number	Qty	Description
Converter Tray	MCP-220-00136-0B	-	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	1	8-pin female to 2 Right Angle big 4-pin female power, 47/62cm
	MCP-240-22603-0N	1	2U Rear Window support (2 + 2) 2.5 HDD
	MCP-240-22604-0N	1	2U Rear plate support (2 + 2) 2.5 HDD
	MCP-220-82609-0N	1	Rear 2.5 x 2 Hot swap HDD kit
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	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-MTG-I2T	-	SIOM 2-port 10GBase-T, Intel X550
	AOC-MTG-I4T	-	SIOM 4-port 10GBase-T, Intel X550
	AOC-MTGN-I2S	-	SIOM 2-port 10G SFP+, Intel 82599ES
	AOC-MTG-I4S	-	SIOM 4-port 10G SFP+, Intel XL710