

SuperStorage Server 6028R-E1CR12N



SAS3 HW RAID controller Storage Expandable

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. 2x PCI-E 3.0 x16, 3x PCI-E 3.0 x8 (slot 3 & 4 occupied by controller and JBOD expansion port)
4. Quad 10GBase-T LAN w/ Intel® X540
5. 12x 3.5" Hot-swap SAS3/SATA3 drive bays
6. SAS3 via LSI 3108 AOC (HW RAID)
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 3x 8cm hot-swap redundant PWM cooling fans
9. 920W Redundant Power Supplies **Platinum Level (94%)**

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

Specifications

Product SKUs

- SSG-6028R-E1CR12N** ■ SuperServer 6028R-E1CR12N (**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, 512GB ECC RDIMM

Chassis

- Form Factor** ■ 2U Rackmount

- Model** ■ **CSE-826BE1C-R920LPB**

Dimensions

- Width** ■ 17.2" (437mm)

- Height** ■ 3.5" (89mm)

- Depth** ■ 25.6" (648mm)

- Weight** ■ Gross Weight: lbs (kg)
■ Net Weight: lbs (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

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|------------------------|---|
| Memory Type | <ul style="list-style-type: none"> 2133/1866/1600MHz ECC DDR4 SDRAM 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

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|----------------------------|---|
| Chipset | <ul style="list-style-type: none"> Intel® C612 chipset |
| SAS | <ul style="list-style-type: none"> SAS3 (12Gbps) via LSI 3108 AOC; HW RAID |
| 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 Controllers | <ul style="list-style-type: none"> Quad 10GBase-T LAN with Intel® X540 Ethernet Controller Virtual Machine Device Queues reduce I/O overhead Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8201N PHY (dedicated IPMI) |
| Graphics | <ul style="list-style-type: none"> ASPEED AST2400 BMC |

Input / Output

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|-----------------------------|---|
| LAN | <ul style="list-style-type: none"> 4x RJ45 10GBase-T LAN 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) |
| VGA | <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 |

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| PCI-Express | <ul style="list-style-type: none"> 3x PCI-E 3.0 x8 slots Slot 3 & 4 occupied by controller and JBOD Expansion Port |
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Drive Bays

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|-----------------|---|
| Hot-swap | <ul style="list-style-type: none"> 12x 3.5" Hot-swap SAS3/SATA3 drive bays |
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Backplane

SAS3/SATA3 single expander per backplane



System Cooling

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| Fans | <ul style="list-style-type: none"> 3x 8cm hot-swap redundant PWM cooling fans |
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Power Supply with Power Distributor

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

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|------------------|--|
| AC Input | <ul style="list-style-type: none"> 100-240 V, 50-60 Hz, 11-4.5 Amp |
| 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

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|----------------------|---|
| 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 2.2 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI |

Operating Environment / Compliance

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|----------------------------|---|
| 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-X10DRI-T4+ | 1 | Super X10DRI-T4+ Motherboard |
| | CSE-826BE1C-R920LPB | 1 | 2U Chassis |
| Backplane | BPN-SAS3-826EL1 | 1 | SAS 12G single expander backplane, with LSISAS3x28 expander, support 12x 3.5 |
| 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-P0048P | 1 | 2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square ILM MB |
| Heatsink / Retention | SNK-P0048AP4 | 1 | 2U Active CPU Heat Sink for Intel R2/R3/B2/B3 and AMD C32 |
| Power Supply | PWS-920P-SQ | 2 | 920W 1U Redundant PWS W/ Quiet Mode |
| Drive Tray(s) | MCP-220-00075-0B | 12 | Black 3.5" 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 | - | 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 | 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) |