

# SuperStorage 6029P-E1CR24L (Complete System Only)



Due to the complexity of integration, this product is sold as a completely assembled system only (with minimum 2 CPUs, 2 DIMMs, 12 HDDs and 1 NIC or SIOM card).

[▶ Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#) ▶ [Drive Options](#)

## Key Features

- Corporate Database
- Database Processing & Storage
- Enterprise Server
- HPC, Data Center
- iSCSI SAN

1. Dual socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s
2. Up to 3TB ECC 3DS LRDIMM, up to DDR4-2666MHz; 24 DIMM slots
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" drive bays (rear)
5. Broadcom 3008 SAS3, IT mode
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%)

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

## Specifications

### Product SKUs

- SSG-6029P-E1CR24L
- SuperServer 6029P-E1CR24L (Black)

### Motherboard

[Super X11DSC+](#)

### Processor/Cache

- CPU
- Dual Socket P (LGA 3647)
  - Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s
  - Support CPU TDP 70-165W
- Cores
- Up to 28 Cores with Intel® HT Technology

### System Memory

- Memory Capacity
- 24 DIMM slots
  - Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM, DDR4 up to 2666MHz

### Chassis

- Form Factor
- 2U Rackmount
- Model
- CSE-826STS-R1K62P1

### Dimensions

- Width
- 17.2" (437mm)
- Height
- 3.5" (89mm)
- Depth
- 34" (863mm)
- Gross Weight
- 
- Available Colors
- Black

### Front Panel

- Buttons
- Power On/Off button
  - System Reset button
- Power status LED
-

|             |  |
|-------------|--|
| Memory Type | <ul style="list-style-type: none"> <li>2666/2400/2133MHz ECC DDR4 SDRAM</li> </ul> |
|-------------|--|

### On-Board Devices

|         |  |
|---------|--|
| Chipset | <ul style="list-style-type: none"> <li>Intel® C621 chipset</li> </ul>  |
| SAS     | <ul style="list-style-type: none"> <li>SAS3 (12Gbps) via Broadcom 3008; IT Mode</li> </ul>   |
| SATA    | <ul style="list-style-type: none"> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul>  |
| IPMI    | <ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> </ul> |
| Video   | <ul style="list-style-type: none"> <li>ASPEED AST2500 BMC</li> </ul>   |

### Input / Output

|                      |  |
|----------------------|--|
| Serial ATA           | <ul style="list-style-type: none"> <li>8 SATA3 (6Gbps) ports</li> </ul>                    |
| LAN                  | <ul style="list-style-type: none"> <li>1 RJ45 Dedicated IPMI LAN port</li> </ul>           |
| USB                  | <ul style="list-style-type: none"> <li>2 USB 3.0 ports (rear)</li> <li>1 Type A</li> </ul> |
| Video                | <ul style="list-style-type: none"> <li>1 VGA D-Sub connector port</li> </ul>               |
| Serial Port / Header | <ul style="list-style-type: none"> <li>1 Fast UART 16550 port / 1 Header</li> </ul>        |

### System BIOS

|           |  |
|-----------|--|
| BIOS Type | <ul style="list-style-type: none"> <li>AMI UEFI</li> </ul> |
|-----------|--|

### Management

|          |   |
|----------|---|
| Software | <ul style="list-style-type: none"> <li>Intel® Node Manager</li> <li>IPMI 2.0</li> <li>NMI</li> <li>SSM, SPM, SUM</li> <li>SuperDoctor® 5</li> <li>Watchdog</li> </ul> |
|----------|---|

### PC Health Monitoring

|             |   |
|-------------|---|
| CPU         | <ul style="list-style-type: none"> <li>Monitors for CPU Cores, Chipset Voltages, Memory.</li> <li>4+1 Phase-switching voltage regulator</li> </ul>                              |
| FAN         | <ul style="list-style-type: none"> <li>Fans with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul> |
| Temperature | <ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>Thermal Control for fan connectors</li> </ul>  |

|      |   |
|------|---|
| LEDs | <ul style="list-style-type: none"> <li>Hard drive activity LED</li> <li>Network activity LEDs</li> <li>System Overheat LED</li> <li>Power fail LED</li> </ul> |
|------|---|

### Expansion Slots

|             |   |
|-------------|---|
| PCI-Express | <ul style="list-style-type: none"> <li>2 PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x8 slot</li> <li>1 <a href="#">SIOM</a> card support (must bundle with network card)</li> </ul> |
|-------------|---|

### Drive Bays

|          |   |
|----------|---|
| Hot-swap | <ul style="list-style-type: none"> <li>24 Hot-swap 3.5" SAS3/SATA3 drive bays</li> <li>2 Hot-swap 2.5" SATA3 drive bays (rear)</li> </ul> |
|----------|---|

### Backplane

|   |
|---|
| SAS3 12Gb/s direct attached storage backplane, w/ 24x SAS3 2.5" drive slots |
|---|

### System Cooling

|      |  |
|------|--|
| Fans | <ul style="list-style-type: none"> <li>5x 8cm high-performance PWM fans</li> </ul> |
|------|--|

### Power Supply

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

|               |   |
|---------------|---|
| Certification |   <ul style="list-style-type: none"> <li>UL/cUL/CB/BSMI/CE/CCC Titanium Level</li> <li>[ <a href="#">Test Report</a> ]</li> </ul> |
|---------------|---|

### Operating Environment

|                     |   |
|---------------------|---|
| RoHS                | <ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>  |
| Environmental Spec. | <ul style="list-style-type: none"> <li>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</li> <li>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul> |

## Parts List

### Parts List - (Items Included)

|                       | Part Number         | Qty | Description   |
|-----------------------|---------------------|-----|---|
| Motherboard / Chassis | MBD-X11DSC+         | 1   | Super X11DSC+ Motherboard   |
|                       | CSE-826STS-R1K62P1  | 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-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                          |
| 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                                 |
| 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                          |
| Global Services & Support                               | <a href="#">OS4HR3/2/1</a>   | -   | 3/2/1-year onsite 24x7x4 service                              |
|   | <a href="#">OSNBD3/2/1</a>   | -   | 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)                                    | <a href="#">AOC-MGP-I2</a>   | -   | SIOM 2-port GbE, Intel i350-AM2                               |
|   | <a href="#">AOC-MGP-I4</a>   | -   | SIOM 4-port GbE, Intel i350-AM4                               |
|   | <a href="#">AOC-MTG-I2T</a>  | -   | SIOM 2-port 10GBase-T, Intel X550                             |
|   | <a href="#">AOC-MTG-I4T</a>  | -   | SIOM 4-port 10GBase-T, Intel X550                             |
|   | <a href="#">AOC-MTGN-I2S</a> | -   | SIOM 2-port 10G SFP+, Intel 82599ES                           |
|   | <a href="#">AOC-MTG-I4S</a>  | -   | SIOM 4-port 10G SFP+, Intel XL710                             |