

# UP Storage SuperServer SSG-520P-ACTR12L

2U UP front-loading storage server with 12 direct-attached hot-swap 3.5" SAS/SATA bays and PCIe 4.0



## Key Applications

Enterprise Server, Database Processing & Storage, Appliance Optimized Storage,

## Key Features

- Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors. Up to 270W TDP.;
- 8 DIMMs; Supports 3DS DDR4-3200: RDIMM/LRDIMM/Intel® Intel® DCPMM;
- 2 PCIe 4.0 x16 (LP) slots, 2 PCIe 4.0 x8 (LP) slots;
- Intel® Ethernet Controller X550 2x 10GbE RJ45;
- 12x Direct-attached hot-swap 3.5" SAS3/SATA3 drive bays, Onboard 1x NVMe/SATA M.2; 2x Hot-swap 2.5" NVMe/SATA (rear, optional);
- Redundant Titanium 800W Power Supply;



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| Form Factor              | 2U Rackmount<br>Enclosure: 437 x 89 x 650mm (17.2" x 3.5" x 25.6")<br>Package: 673 x 292 x 864mm (26.5" x 11.5" x 34")                                                                                                                                                                                                                                                                                                                |
| Processor                | Single Socket P+ (LGA-4189)<br>3rd Gen Intel® Xeon® Scalable processors<br>Up to 40C/80T; Up to 60MB Cache                                                                                                                                                                                                                                                                                                                            |
| System Memory            | Slot Count: 8 DIMM slots<br>Max Memory (1DPC): Up to 2TB 3200MT/s ECC DDR4 RDIMM/LRDIMM<br>Supports Intel® Optane™ persistent memory 200 series                                                                                                                                                                                                                                                                                       |
| Drive Bays Configuration | Default: Total 12 bay(s) <ul style="list-style-type: none"> <li>• 12 front hot-swap 3.5" SAS/SATA drive bay(s)</li> </ul> (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details)<br>M.2: 1 M.2 PCIe 3.0 x4 NVMe/SATA slot(s) (M-key 2280/22110)                                                                                                             |
| Expansion Slots          | Default <ul style="list-style-type: none"> <li>• 2 PCIe 4.0 x8 LP slot(s)</li> <li>• 2 PCIe 4.0 x16 LP slot(s)</li> </ul>                                                                                                                                                                                                                                                                                                             |
| On-Board Devices         | SATA: SATA (6Gbps) ; RAID 0/1/5/10 support<br>SAS: SAS (12Gbps) via Broadcom® 3816; (IT mode)<br>NVMe: NVMe; RAID 0/1 support(Intel® VROC RAID key required)<br>Chipset: Intel® C621A<br>Network Connectivity: 2 RJ45 10GbE with Intel® X550<br>IPMI: Support for Intelligent Platform Management Interface v.2.0<br>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support                                                    |
| Input / Output           | LAN: 2 RJ45 1 GbE LAN port(s)<br>1 RJ45 1 GbE Dedicated IPMI LAN port(s) (IPMI shared on LAN port 1)<br>USB: 2 USB 2.0 port(s) (header)<br>2 USB 3.2 Gen1 Type-A port(s) (rear)<br>2 USB 2.0 Type-A port(s) (rear)<br>2 USB 3.2 Gen1 port(s) (Header)<br>1 USB 3.2 Gen1 Type-A port(s)<br>Video: 1 VGA port(s)<br>Serial: 1 COM port(s) (Header)<br>DOM: 2 SuperDOM (Disk on Module) port(s) with built-in power<br>TPM: 1 TPM header |

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|                       | <div> <div> <p>(Front View – System)</p> </div> <div> <p>(Rear View – System)</p> </div> </div>                                                                                                                                                                                                                                        |
| System Cooling        | Fans: 3 Heavy Duty PWM 80x80x38mm Fan(s)                                                                                                                                                                                                                                                                                               |
| Power Supply          | 2x 800W Redundant (1 + 1) Titanium Level power supplies                                                                                                                                                                                                                                                                                |
| System BIOS           | BIOS Type: AMI 32MB SPI Flash EEPROM                                                                                                                                                                                                                                                                                                   |
| Management            | Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0                                                                                                                                           |
| PC Health Monitoring  | CPU: Monitors for CPU Cores, Chipset Voltages, Memory<br>7+1 Phase-switching voltage regulator module (VRM)<br>FAN: Fans with tachometer monitoring<br>Status monitor for speed control<br>Pulse Width Modulated (PWM) fan connectors<br>Temperature: Monitoring for CPU and chassis environment<br>Thermal Control for fan connectors |
| Dimensions and Weight | Weight: Gross Weight: 58 lbs (26.3 kg)<br>Net Weight: 34 lbs (15.4 kg)<br>Available Color: Black                                                                                                                                                                                                                                       |
| Operating Environment | Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)<br>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)<br>Operating Relative Humidity: 8% to 90% (non-condensing)<br>Non-operating Relative Humidity: 5% to 95% (non-condensing)                                                                                                |
| Motherboard           | <a href="#">Super X12SPI-TF</a>                                                                                                                                                                                                                                                                                                        |
| Chassis               | CSE-826BTS-R802LPB                                                                                                                                                                                                                                                                                                                     |