



# UP Storage SuperServer SSG-522B-ACR12H

2U UP front-loading storage server with 12 direct-attached hot-swap 3.5" SAS/SATA/NVMe bays (SAS hardware RAID) and PCIe 5.0

## Key Applications

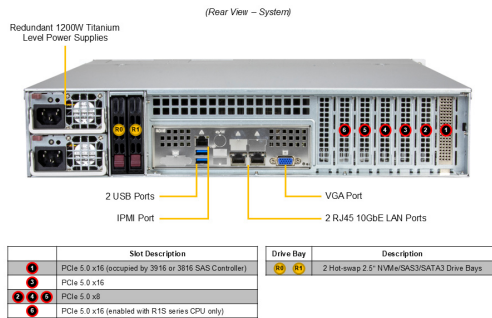
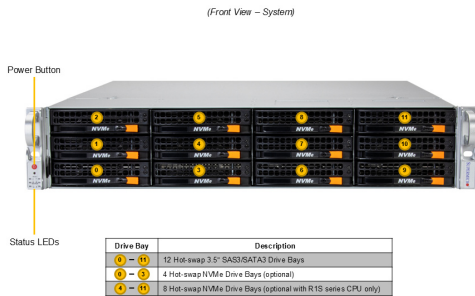
General Purpose Computing, Data Center Enterprise Applications, iSCSI SAN, Database Processing & Storage, Corporate Database, Appliance Optimized Storage Building Blocks,

## Key Features

- HW RAID by Broadcom® SAS3916 on both front and rear drive bays;
- Single Intel® Xeon® 6700/6500 series processor up to 350W TDP;
- Up to 2TB DDR5-6400MT/s ECC Registered in 8 DIMM slots (1DPC);
- 2 onboard 10GbE ports via Intel® X550 and 1 GbE port for BMC via Aspeed AST2600;
- Six total PCIe slots: 3 PCIe 5.0 x8 + 3 PCIe 5.0 x16 slots \*  
\* Slot 1 is occupied by system's default controller;
- 2U all hybrid hot-swap NVMe/SAS3/SATA3 front(3.5" x 12) and rear(2.5" x 2) drive bays \*  
\* up to total 12 NVMe ports in the system;
- 1200W Redundant Titanium Level (96%) Hot-plug power supplies;



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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 E2 (LGA-4710)<br>Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores<br>P-cores: Up to 86C/172T; Up to 336MB Cache<br>E-cores: Up to 144C/144T; Up to 108MB Cache                                                                                                  |
| System Memory            | Slot Count: 8 DIMM slots/8 Channels<br>Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM                                                                                                                                                                                                                               |
| Drive Bays Configuration | Default: Total 14 bays <ul style="list-style-type: none"> <li>• 12 front hot-swap 3.5" NVMe*/SAS/SATA drive bays</li> <li>• 2 rear hot-swap 2.5" NVMe*/SAS/SATA drive bays</li> </ul> (*NVMe support may require additional storage controller and/or cables)<br>M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 22110(default)) |
| Expansion Slots          | Default <ul style="list-style-type: none"> <li>• 3 PCIe 5.0 x16 (in x16) LP slots</li> <li>• 3 PCIe 5.0 x8 (in x8) LP slots</li> </ul>                                                                                                                                                                                    |
| On-Board Devices         | SATA: 4 x SlimSAS<br>SAS: SAS (12Gbps) via Broadcom® 3916; RAID 0/1/5/6/10/50/60 support<br>NVMe: NVMe; RAID 0/1 support(Intel® VROC RAID key required)<br>Chipset: System on Chip<br>Network Connectivity: 2 RJ45 10GbE with Intel® X550                                                                                 |
| Input / Output           | LAN: 2 RJ45 10 GbE LAN ports (Intel® X550)<br>1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1)<br>USB: 2 USB 3.2 Gen1 ports(Header)<br>2 USB 3.2 Gen1 ports(Rear)<br>Video: 1 VGA port(Rear)<br>Serial: 1 COM port(header)<br>TPM: 1 TPM header                                                            |



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| System Cooling        | Fans: Up to 3 Heavy Duty PWM 80x80x38mm Fan(s)<br>Air Shroud: 1 Air Shroud                                                                                                                                                                                                                                        |
| Power Supply          | 2x 1200W Redundant (1 + 1) Titanium Level (96%) Hot-plug power supplies                                                                                                                                                                                                                                           |
| System BIOS           | BIOS Type: AMI 64MB UEFI<br>BIOS Features: ACPI 6.5<br>SMBIOS 3.7 or later<br>UEFI 2.9                                                                                                                                                                                                                            |
| Management            | SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!                                                                                                                                          |
| PC Health Monitoring  | CPU: 8 Phase-switching voltage regulator<br>Monitors for CPU Cores, Chipset Voltages, Memory<br>FAN: Fans with tachometer monitoring<br>Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control<br>Temperature: CPU thermal trip support, Monitoring for CPU and chassis environment, PECI |
| 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 | RoHS Compliant<br>Operating Temperature: 10°C to 35°C (50°F to 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 X14SBI-TF</a>                                                                                                                                                                                                                                                                                   |
| Chassis               | CSE-826BTS-R1K23LPBP2                                                                                                                                                                                                                                                                                             |