

UP Storage SuperServer SSG-520P-ACTR12H

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



Form Factor	2U Rackmount Enclosure: 437 x 89 x 650mm (17.2" x 3.5" x 25.6") Package: 673 x 292 x 864mm (26.5" x 11.5" x 34")
Processor	Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 40C/80T; Up to 60MB Cache
System Memory	Slot Count: 8 DIMM slots Max Memory (1DPC): Up to 2TB 3200MT/s ECC DDR4 RDIMM/LRDIMM Supports Intel® Optane™ persistent memory 200 series
Drive Bays Configuration	Default: Total 12 bays • 12 front hot-swap 3.5" SAS/SATA drive bays Option A: Total 14 bays • 12 front hot-swap 3.5" SAS/SATA drive bays • 2 rear hot-swap 2.5" PCIe 4.0 NVMe*/SAS*/SATA* drive bays (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 1 M.2 PCIe 3.0 x4 NVMe/SATA slot (M-key 2280/22110)
Expansion Slots	Default • 2 PCIe 4.0 x8 LP slots • 2 PCIe 4.0 x16 LP slots
On-Board Devices	SAS: SAS (12Gbps) via Broadcom® 3916; RAID 0/1/5/6/10/50/60 support NVMe: NVMe; RAID 0/1 support(Intel® VROC RAID key required) Network Connectivity: 2 RJ45 10GbE with Intel® X550
Input / Output	LAN: 2 RJ45 10 GbE LAN ports (Intel® X550) 1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1) USB: 2 USB 2.0 ports (header) 2 USB 3.2 Gen1 Type-A ports (rear) 2 USB 2.0 Type-A ports (rear) 2 USB 3.2 Gen1 ports (Header) 1 USB 3.2 Gen1 Type-A port Video: 1 VGA port Serial: 1 COM port (Header)

DOM: 2 Super [DOM](#) (Disk on Module) ports with built-in power
TPM: 1 TPM header



System Cooling	Fans: Up to 3 Heavy Duty PWM 80x80x38mm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	2x 800W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperCloud Composer® (SCC); Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	CPU: 7+1 Phase-switching voltage regulator module (VRM) Monitors for CPU Cores, Chipset Voltages, Memory Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 58 lbs (26.3 kg) Net Weight: 34 lbs (15.4 kg) Available Color: Black
Operating Environment	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)
Motherboard	Super X12SPi-TF
Chassis	CSE-826BTS-R802LPB