

UP Storage SuperServer SSG-520P- ACTR12H



Key Applications

Enterprise Server
Database Processing & Storage
Appliance Optimized Storage

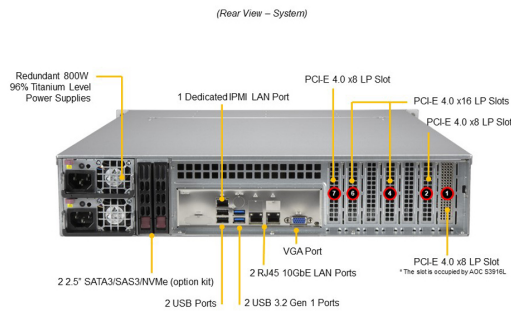
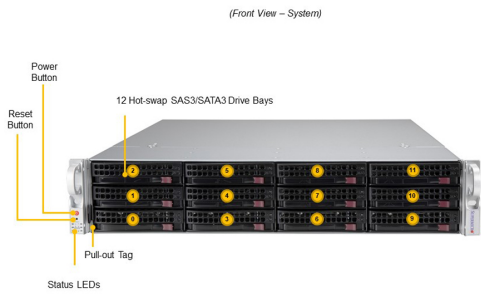
Key Features

- Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors. Up to 270W TDP.;
- 8 DIMMs; Supports 3DS DDR4-3200: RDIMM/LRDIMM/Intel® DCPMM;
- 2 PCI-E 4.0 x16 (LP) slots, 2 PCI-E 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;

[More details here](#)



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	Support Intel® 3rd Gen Xeon® Scalable Processors Single Socket LGA 4189 (Socket P+) supported TDP up to 270W;
System Memory	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz
Drive Bays	12x 3.5" hot-swap SATA/SAS drive bays;
Expansion Slots	Slot 2: PCI-E 4.0 x8 LP Slot 4: PCI-E 4.0 x16 LP Slot 6: PCI-E 4.0 x16 LP Slot 7: PCI-E 4.0 x8 LP
On-Board Devices	SATA: SATA3 (6Gbps) via C621A Chipset; RAID 0, 1, 5, 10 support SAS: SAS3 (12Gbps) via Broadcom 3916; RAID 0, 1, 5, 6, 10, 50, 60 support Chipset: Intel® C621A Network Connectivity: 2x 10GbE BaseT with Intel® X550 IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	LAN: 1 RJ45 Dedicated IPMI LAN port 2 RJ45 10GBase-T LAN ports USB: 4 USB 2.0 port(s) (2 rear; 2 headers) 5 USB 3.2 Gen 1 port(s) (2 rear; 2 headers; 1 Type A) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 header) DOM: 2 SuperDOM (Disk on Module) port with built-in power



Cooling System	3x (8cm x 8cm x 3.8cm) heavy duty fan(s)
Power Supply	AC 800W, Titanium Level, 100-240Vac/47-63Hz, and DC240 input Dimension (W x H x L): 76 x 40 x 336 mm Output Type: Gold Finger
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 7+1 Phase-switching voltage regulator module (VRM) FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Height: 3.5" (89 mm) Width: 17.2" (437 mm) Depth: 25.6" (650 mm) Gross Weight: 58 lbs (26.3 kg) Net Weight: 34 lbs (15.4 kg) Packaging: 11.5" (H) x 26.5" (W) x 34" (D) Available Color: Black
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12SPI-TF	1	Super X12SPI-TF Motherboard
	CSE-826BTS-R802LPB	1	2U Chassis
Add-on Card / Module	AOC-S3916L-H16IR-32DD-P	1	16 int 12Gb/s ports, x8 Gen4, ROC - LP, 32 HDD w/ exp,RoHS
Backplane	BPN-SAS3-LA26A-N12	1	2U 12-Slot LFF Backplane Supports 12 x SAS3/SATA3/NVMe4 Storage Devices with 1x(2x4) + 4x(1x4) power connectors, co-lay with BPN-SAS3-LA26A-N12,HF,RoHS
Cable 1	CBL-CDAT-0728	1	4 Pin to 4 Pin I2C Cable, 65cm, 26AWG, 4 Wires, Pinout 1-1
Cable 2	CBL-SAST-1249-100	1	Slimline x8 (STR) to 2x Slimline x4 (STR),50CM,100 OHM,
Cable 3	CBL-SAST-1281-100	1	Slimline x8 (STR) to 2x Slimline x4 (STR),80CM,100 OHM,
Parts	MCP-260-00042-1N	1	Standard I/O Shield for X12SPi with EMI Gasket
Manual	MNL-2361-QRG	1	520P-ACTR12L/H Quick Reference Guide
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0078P	1	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
*Power Supply	PWS-802A-1R	2	1U 800W 100-240Vac/47-63Hz, and DC240 input
*Power Distributor	PDB-PT826-8824	1	PDB with longer 24pin for SC826B
*Cable 4	CBL-CDAT-0607	1	[NR] FRONT CNTL,20 TO 20 PIN, P0.5, FFC,FLAT, 23.5CM, STD
*Cable 5	CBL-PWCD-0160-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH
*Cable 6	CBL-PWEX-1078	3	PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,20CM,22AWG,5A/PIN,RoHS
*FAN 1	FAN-0166L4	3	80x80x38 mm, 13.5K RPM, Optional Middle Cooling Fan for 2U Ultra Series Servers (Hot-swappable Version of FAN-0162L4)
*FAN 2	FAN-0206L4	3	80x80x38 mm, 13.5K RPM, Middle Cooling Fan for 2U and above Servers
*Front Panel	FPB-TB826-T	1	Chassis transfer board for SC826
*Drive Tray(s)	MCP-220-00075-0B	12	Black gen 5.5 hot-swap 3.5" HDD tray
*Rear Window	MCP-240-82608-0N	1	216B/826B LP rear window,RoHS/REACH,PBF
*Rail Set	MCP-290-00053-0N	1	Rail set, quick/quick, default for 2,3U 17.2";W
*Rail Set	MCP-290-00060-0N	1	Threaded rail adapter default for round hole rack
*Air Shroud	MCP-310-29001-0N	1	SC825/826/216/213 Intel DP X9,X8 air shroud 13.68x13/12x13

- Notes:
- 1. Parts with * are inside the chassis
 - 2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

Optional Parts List

	Part Number	Qty	Description
2x 2.5" NVMe Cage (Rear)	MCP-220-82619-0N + 1xCBL-SAST-1264-85	1	Rear hot-swap 2x2.5" NVMe drive kit
2x 2.5" SATA/SAS Cage (Rear)	MCP-220-82616-0N eStore	1	Rear hot-swap 2x2.5" SATA/SAS drive kit
3.5" to 2.5" Converter Tray(s)	MCP-220-00043-0N eStore	-	Hot-swap Gen-4 3.5" to 2.5" HDD tray, Black
CacheVault	BTR-CVPM05 & BKT-BBU-BRACKET-05 (For S3916)	1	CacheVault for Broadcom 3916 with SuperCap mounting bracket for PCI-E location
Intel VROC RAID Key for NVMe	AOC-VROCINTMOD	1	Intel SSD Only Upgrade module; RAID 0/1/10/5
	AOC-VROCPREMOD	1	Premium Upgrade module (Intel + 3rd party Vendor SSD); RAID 0/1/10/5
	AOC-VROCSTNMOD	1	Standard Upgrade module (Intel + 3rd party Vendor SSD); RAID 0/1/10
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)
TPM	AOM-TPM-9670V-O	1	TPM 2.0, vertical form factor, provisioned for server
	AOM-TPM-9671V-O	1	TPM 1.2, vertical form factor, provisioned for server