

UP SuperServer SYS-510P-M



Key Applications

Small Business
Web/Hosting Application
Email/Firewall/Print Server

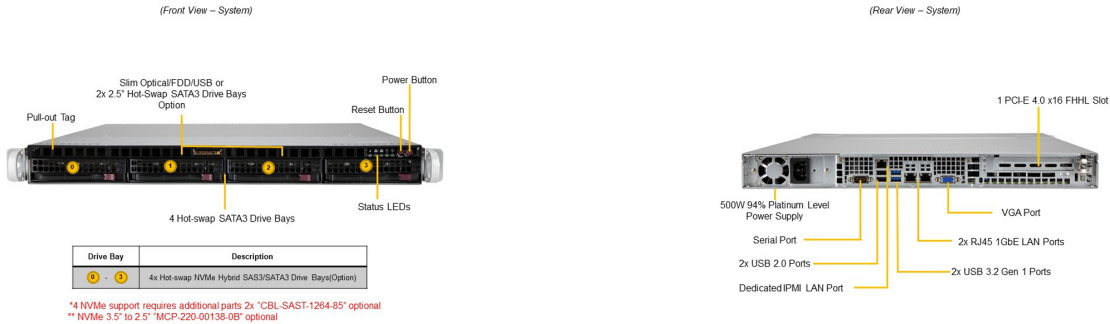
Key Features

- Single Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors. Up to 220W TDP.;
- 8 DIMMs; Supports 3DS DDR4-3200: RDIMM/LRDIMM/Intel® DCPMM;
- 1 PCI-E 4.0 x16 (FHHL) slot;
- Intel® Ethernet Controller i350 2x 1GbE RJ45;
- 4x hot-swap 3.5" Hybrid SATA3/NVMe drive bays, SAS3 with additional SAS controller card; Onboard 2x NVMe/SATA M.2;
- Single Platinum 500W Power Supply;

[More details here](#)



Form Factor	1U Rackmount Enclosure: 437 x 43 x 507mm (17.2" x 1.7" x 19.98") Package: 609.6 x 215.9 x 749.3mm (24" x 8.5" x 29.5")
Processor	Support Intel® 3rd Gen Xeon® Scalable Processors Single Socket LGA 4189 (Socket P+) supported TDP up to 220W;
System Memory	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz
Drive Bays	4x 3.5" NVMe/SATA drive bays; 4x 3.5" NVMe hybrid;
Expansion Slots	Slot 1: PCI-E 4.0 x16 FHHL
On-Board Devices	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support NVMe: NVMe; RAID 0/1/5/10 support (*VROC HW key is required) Chipset: Intel® C621A Network Connectivity: 2x 1GbE BaseT with Intel® i350 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	SATA: 10 SATA (6Gbps) port(s) LAN: 1 RJ45 Dedicated IPMI LAN port 2 RJ45 1GbE LAN ports USB: 6 USB 2.0 port(s) (2 rear; 4 headers) 5 USB 3.2 Gen 1 port(s) (2 rear; 2 headers; 1 Type A) Video: 1 VGA port(s) Serial Port: 2 COM Port(s) (1 header; 1 rear) DOM: 2 SuperDOM (Disk on Module) port with built-in power



Cooling System	4x (4cm x 4cm x 2.8cm) heavy duty fan(s) 4x (4cm x 4cm x 2.8cm) heavy duty fan(s)
Power Supply	1U 500W Multi-output, Platinum level with PMbus 24pin, W100xL180xH40mm,RoHS/REACH Dimension (W x H x L): 100 x 40 x 180 mm
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 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: 1.7" (43 mm) Width: 17.2" (437 mm) Depth: 19.98" (507 mm) Gross Weight: 30.4 lbs (13.8 kg) Net Weight: 17.6 lbs (8 kg) Packaging: 8.5" (H) x 24" (W) x 29.5" (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 X12SPO-F
Chassis	CSE-813MF2TS-505CBP

Parts List - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12SPO-F	1	Super X12SPO-F Motherboard
	CSE-813MF2TS-505CBP	1	1U Chassis
Backplane	BPN-SAS3-815TQ-N4	1	4-port 1U SAS3 12Gbps Hybrid backplane, support up to 4x 3.5-inch SAS3/SATA3/NVMe Storage Devices
Cable 1	CBL-0182L	1	PWR EXTENSION.HDD TO RIGHT ANGLE HDD,PBF
Cable 2	CBL-SAST-0811	1	MINI SAS HD-4 SATA (RA),12G,INT,50/50/60/70,70CM SB,30AWG
Manual	MNL-2267-QRG	1	510P-MMR Quick Reference Guide
Riser Card	RSC-S-6G4	1	1U LHS Standard riser card with one PCI-E 4.0 x16 slot,HF,Ro
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0077P	1	1U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
*Power Supply	PWS-505P-1H	1	1U 500W Multi-output, Platinum level w/ PMbus 24pin, W100xL180xH40mm,RoHS/REACH
*Cable 3	CBL-0071L	1	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF
*Peripheral Drive1	CSE-PT93L-B	1	Black DVD dummy cover for SC813, 813M, 815, PBF-RoHS
*FAN 1	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH
*Front Panel	FPB-FP813-D	1	Front control board dual color for SC815,SC813M (C)
*Drive Tray(s)	MCP-220-00075-0B	4	Black gen 5.5 hot-swap 3.5" HDD tray
*Parts	MCP-260-00078-0N	1	1U I/O shield for X10 and X9 Server MB with 5X5mm vent hole and EMI Gasket,RoHS/REACH,PBF
*Rail Set	MCP-290-00102-0N	1set	Outer rail, quick-release type, 25.6" to 33.05"
*Rail Set	MCP-290-00108-0N	1set	Inner rail, front, short, quick-release type
*Rail Set	MCP-290-00110-0N	1set	Inner rail, extension (quick) for 1U 17.2
*Fan Holder	MCP-320-00060-0N	1	Slim Fan tray for six 40x28 fans in SC813M (for X11DPL-i 12"x10.15")
*Parts	MCP-340-00001-01	2	Dummy fan 40x28mm

Notes:

- Parts with * are inside the chassis
- 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
3.5" to 2.5" Converter Tray(s)	MCP-220-00043-0N ☛Store	-	Hot-swap Gen-4 3.5" to 2.5" HDD tray, Black
3.5" to 2.5" NVMe Drive Tray(s)	MCP-220-00138-0B ☛Store	-	Tool-less Hot-swap Gen-5.5 NVMe 3.5" to 2.5" drive tray, Orange tab, Black
Add-on Card for additional M.2	AOC-SLG3-2H8M2	-	Standard LP, PCI-E 3.0 x8, supports 2x NVMe/SATA M-Key M.2 Modules; RAID 0,1
Cooling Fan(s)	FAN-0154L4 ☛Store	-	40x40x28 mm, 22.5K RPM, Middle Cooling Fan
DVD-ROM / DVD-RW	DVM-TEAC-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
	DVM-TEAC-DVD-SBT5	1	TEAC slim DVD-ROM SATA drive
DVD-ROM Accessory	MCP-220-81502-0N ☛Store + 1pc CBL-0099 ☛Store (max 1pc)	1	Slim SATA DVD mounting kit
Front Bezel	CSE-PTFB-813-02B	1	Black Front Bezel w/ Round Venting Holes
	CSE-PTFB-813LB	1	Black Front Bezel
Hot-swap 2.5" kit (DVD slot)	MCP-220-81506-0N ☛Store + 1pc CBL-0099 ☛Store (max 1pc)	1	Single 2.5" SAS3 (12Gb/s) hot swap in slim DVD form factor
Hot-swap 2.5" kit (FDD slot)	MCP-220-81504-0N ☛Store	1	Single 2.5" SAS3 (12Gb/s) hot swap in slim FDD form factor
Inlet Thermal Sensor	MCP-280-00034-0N	1	Universal Thermal sensor kit with 40cm I2C cable
Intel VROC RAID Key for NVMe	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
	AOC-VROCINTMOD	1	Intel SSD Only Upgrade module; RAID 0/1/10/5
NVMe Cable(s)	CBL-SAST-1264-85	-	Slimline x8 (STR) to 2x Oculink x4 (STR),64CM,85 OHM,Ro
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)
Storage Control Card and Cable(s)	AOC-S3908L-H8iR-16DD + 1x CBL-SAST-1275A-100	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 4.0 x8, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8iR-16DD	1	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD; RAID 0, 1, 10
Storage Control Card and Cable(s) (HBA)	AOC-S3808L-L8i T + 1x CBL-SAST-1275A-100	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 4.0 x8, 122HDD; HBA
	AOC-S3008L-L8E	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD; HBA
TPM	AOM-TPM-9671H-S-O	1	TPM 1.2, horizontal form factor, provisioned for server
	AOM-TPM-9670H-S-O	1	TPM 2.0, horizontal form factor, provisioned for server