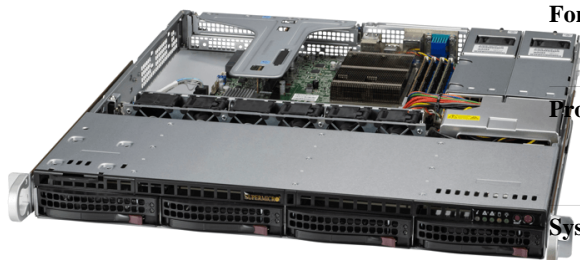


# UP SuperServer SYS-510T-MR



<b>Form Factor</b>	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")
<b>Processor</b>	Support Intel® Xeon® E-2300 series Processors and 10th Gen. Pentium® Processors Single Socket LGA 1200 (Socket H5) supported TDP up to 95W;
<b>System Memory</b>	4 DIMM slots ECC UDIMM, DDR4-3200MHz
<b>Drive Bays</b>	4x 3.5" SATA drive bays;
<b>Expansion Slots</b>	Slot 1: PCIe 4.0 x16 or x8 (FHHL) Slot 2: PCIe 4.0 x0 or x8 (LP) [Auto Switch with Slot 1] Slot 3: Dedicated Internal HBA Slot <b>(Pentium CPUs provide PCI-e 3.0 only.)</b>
<b>On-Board Devices</b>	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support (Port 0-5) Chipset: Intel® C256 Network Connectivity: 2x 1GbE BaseT with Intel® i210 IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
<b>Input / Output</b>	SATA: 8 SATA (6Gbps) port(s) LAN: 2 RJ45 1GbE LAN ports 1 RJ45 Dedicated IPMI LAN port 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

### Key Applications

- Virtualization
- Small Business
- Encoding Decoding

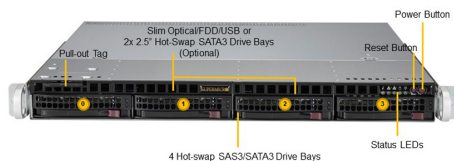
### Key Features

- Single Socket H5 (LGA-1200) supports Intel® Xeon® E-2300 series, Intel® Pentium® processors;
- 4 DIMMs; Up to 128GB of DDR4 ECC UDIMM memory with speeds of up to 3200MHz;
- 1 PCI-E 4.0 x16 or 2 PCI-E 4.0 x8 (FHHL); 1 Dedicated Internal HBA slot;
- Intel® Ethernet Controller i210 2x 1GbE RJ45;
- 4x Hot-swap 3.5" SATA3 drive bays, SAS3 w/ additional SAS controller card; Onboard 1x NVMe M.2;
- Redundant Platinum 400W Power Supply;

[More details here](#)

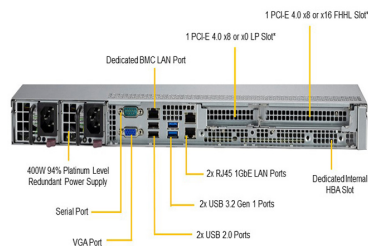


(Front View - System)



Drive Bay	Description
0 - 3	4x 3.5" Hot-swap SAS3/SATA3 Drive Bays

(Rear View - System)



\* Pentium CPUs provide PoE 3.0 only

<b>Cooling System</b>	4x (4cm x 4cm x 2.8cm) heavy duty fan(s) 4x (4cm x 4cm x 2.8cm) heavy duty fan(s)
<b>Power Supply</b>	AC and DC 240V Input, 400W, Platinum Level, Redundancy power supply meet PMBus Revision 1.2 requirement, RoHS/REACH Dimension (W x H x L): 54.5 x 40.25 x 220 mm Output Type: Gold Finger Connector
<b>System BIOS</b>	BIOS Type: AMI 32MB SPI Flash EEPROM
<b>Management</b>	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
<b>PC Health Monitoring</b>	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 6 + 2 + 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
<b>Dimensions and Weight</b>	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
<b>Operating Environment</b>	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)
<b>Motherboard</b>	<a href="#">Super X12STH-SYS</a>
<b>Chassis</b>	CSE-813MF2TS-R407RCBP

**Parts List - (Items Included)**

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X12STH-SYS	1	Super X12STH-SYS Motherboard
	CSE-813MF2TS-R407RCBP	1	1U Chassis
<b>Backplane</b>	BPN-SAS3-815TQ	1	1U 4-Port 12Gbps Backplane Support 4x3.5
<b>Cable 1</b>	CBL-0296L	1	9" 4 PIN FAN PWS EXTENSION CORD, PBF
<b>Cable 2</b>	CBL-SAST-0811	1	MINI SAS HD-4 SATA (RA),12G,INT,50/50/60/70,70CM SB,30AWG
<b>Air Shroud</b>	MCP-310-81307-0B	1	Mylar Air Shroud for SC813MF2/SC113MF_RCB with X12STH
<b>Manual</b>	MNL-2419-QRG	1	510T-MMR Quick Reference Guide
<b>Riser Card</b>	Proprietary Riser Card	1	1U RHS Standard Riser card with one PCI-E 4.0 X16 and one PC
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
<b>Heatsink / Retention</b>	Proprietary Heatsink	1	Proprietary 1U Passive CPU HS, Rocket Lake (SKT-H5 LGA-1200)
<b>*Power Supply</b>	PWS-407P-1R	2	AC and DC 240V Input, 400W, Platinum Level, Redundancy power supply meet PMBus Revision 1.2 requirement,RoHS/REACH
<b>*Power Distributor</b>	PDB-PT813M-S2424	1	Power distributor with shorter 24pin for SC813M chassis
<b>*Cable 3</b>	CBL-0071L	1	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF
<b>*Cable 4</b>	CBL-PWCD-0160-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH
<b>*Peripheral Drive1</b>	CSE-PT93L-B	1	Black DVD dummy cover for SC813, 813M, 815, PBF-RoHS
<b>*FAN 1</b>	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH
<b>*Front Panel</b>	FPB-FP813-D	1	Front control board dual color for SC815,SC813M (C)
<b>*Drive Tray(s)</b>	MCP-220-00075-0B	4	Black gen 5.5 hot-swap 3.5" HDD tray
<b>*Rear Window</b>	MCP-240-00195-0N	1	Non-C Rear window Assy for SC813MF2/SC113MF_RCB redundant PWS
<b>*Power Supply</b>	MCP-250-00016-0V	1	Redundant Silver plastic PDB cover for SC813M,113M
<b>*Rail Set</b>	MCP-290-00102-0N	1set	Outer rail, quick-release type, 25.6" to 33.05"
<b>*Rail Set</b>	MCP-290-00108-0N	1set	Inner rail, front, short, quick-release type
<b>*Rail Set</b>	MCP-290-00110-0N	1set	Inner rail, extension (quick) for 1U 17.2
<b>*Fan Holder</b>	MCP-320-00060-0N	1	Slim Fan tray for six 40x28 fans in SC813M (for X11DPL-i 12"x10.15")
<b>*Parts</b>	MCP-340-00001-01	2	Dummy fan 40x28mm

**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
<b>3.5" to 2.5" Converter Tray(s)</b>	MCP-220-00043-0N <b>Store</b>	-	Hot-swap Gen-4 3.5" to 2.5" HDD tray, Black
<b>Add-on Card for additional M.2</b>	<u>AOC-SLG3-2H8M2</u>	-	Standard LP, PCI-E 3.0 x8, supports 2x NVMe/SATA M-Key M.2 Modules; RAID 0,1
<b>CacheVault</b>	BTR-CV3108-U1 + MCP-240-81305-0N (For S3108)	1	CacheVault for Broadcom 3108 with SuperCap mounting bracket for internal fixed location
	BTR-L3-00099-02 + MCP-240-81305-0N (For S3908)	1	CacheVault for Broadcom 3908 with SuperCap mounting bracket for internal fixed location
<b>Cooling Fan(s)</b>	FAN-0154L4 <b>Store</b>	-	40x40x28 mm, 22.5K RPM, Middle Cooling Fan
<b>DVD-ROM / DVD-RW</b>	DVM-TEAC-DVD-SBT5	1	TEAC slim DVD-ROM SATA drive
	DVM-TEAC-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
<b>DVD-ROM Accessory</b>	MCP-220-81502-0N <b>Store</b>	1	Slim SATA DVD mounting kit
<b>Front Bezel</b>	CSE-PTFB-813-02B	1	Black Front Bezel w/ Round Venting Holes
	CSE-PTFB-813LB	1	Black Front Bezel
<b>Hot-swap 2.5" kit (DVD slot)</b>	MCP-220-81506-0N <b>Store</b>	1	Single 2.5" SAS3 (12Gb/s) hot swap in slim DVD form factor
<b>Hot-swap 2.5" kit (FDD slot)</b>	MCP-220-81504-0N <b>Store</b>	1	Single 2.5" SAS3 (12Gb/s) hot swap in slim FDD form factor
<b>Inlet Thermal Sensor</b>	MCP-280-00034-0N	1	Universal Thermal sensor kit with 40cm I2C cable
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)
<b>Storage Control Card and Cable(s)</b>	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
	<u>AOC-S3108L-H8iR-16DD</u>	1	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	<u>AOC-S3008L-L8I</u>	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD; RAID 0, 1, 10
<b>Storage Control Card and Cable(s) (HBA)</b>	<u>AOC-S3008L-L8E</u>	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD; HBA
	<u>AOC-S3808L-L8IT</u> + 1x CBL-SAST-1275A-100	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 4.0 x8, 122HDD; HBA
<b>TPM</b>	AOM-TPM-9670H-O	1	TPM 2.0, horizontal form factor
	AOM-TPM-9671H-O	1	TPM 1.2, horizontal form factor