

UP SuperServer SYS-510T-WTR



Form Factor	1U Rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 596.9 x 215.9 x 855.98mm (23.5" x 8.5" x 33.7")
Processor	Support Intel® Xeon® E-2300 series Processors and 10th Gen. Pentium® Processors Single Socket LGA 1200 (Socket H5) supported TDP up to 95W;
System Memory	4 DIMM slots ECC UDIMM, DDR4-3200MHz
Drive Bays	4x 3.5" SATA drive bays;
Expansion Slots	Slot 1: PCIe 4.0 x16 or x8 (FHFL) Slot 2: PCIe 4.0 x0 or x8 (FHFL) [Auto Switch with Slot 1] Slot 3: PCIe 3.0 x4 (in x8 LP) (Pentium CPUs provide PCI-e 3.0 only.)
On-Board Devices	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support (Port 0-5) Chipset: Intel® C256 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	SATA: 8 SATA (6Gbps) port(s) LAN: 2 RJ45 10GbE LAN ports 1 RJ45 Dedicated IPMI LAN port USB: 6 USB 2.0 port(s) (2 rear; 4 headers) 4 USB 3.2 Gen 1 port(s) (2 rear; 2 headers) 1 USB 3.2 Gen 2 port(s) (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

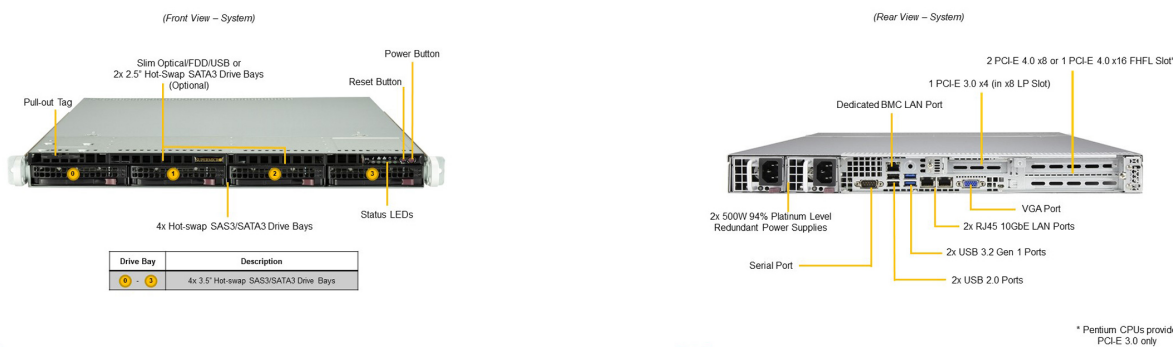
- Virtualization
- Cloud Computing
- Enterprise Server
- Data Center Optimized

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 (FHFL); 1 PCI-E 3.0 x4 (in x8 LP);
- Intel® Ethernet Controller X550 2x 10GbE RJ45;
- 4x hot-swap 3.5" SATA3 drive bays, SAS3 with additional controller card; Onboard 2x NVMe M.2 (with Xeon CPU) or 1x NVMe M.2 (with Pentium CPU);
- Redundant Platinum 500W Power Supply;

[More details here](#)





Cooling System	4x (4cm x 4cm x 5.6cm) heavy duty fan(s) 4x (4cm x 4cm x 5.6cm) heavy duty fan(s)
Power Supply	AC-DC/DC-DC 500W, Platinum efficiency, AC inlet: C14,RoHS Dimension (W x H x L): 54.5 x 40.25 x 320 mm Output Type: Gold Finger Connector
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 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
Dimensions and Weight	Height: 1.7" (43 mm) Width: 17.2" (437 mm) Depth: 25.6" (650 mm) Gross Weight: 48 lbs (21.77 kg) Net Weight: 24 lbs (10.89 kg) Packaging: 8.5" (H) x 23.5" (W) x 33.7" (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 X12STW-TF
Chassis	CSE-815TS-R504WBP7

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12STW-TF	1	Super X12STW-TF Motherboard
	CSE-815TS-R504WBP7	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-SAST-0699	1	MINI SAS HD-4 SATA,12G,INT,75/75/90/90CM,75CM SB,28/30AWG,Ro
Manual	MNL-2422-QRG	1	510T-WTR Quick Reference Guide
Riser Card	RSC-R1UW-E8R	1	1U RHS WIO Riser card with one PCI-E x8 slot
Riser Card	RSC-W-68G4	1	1U LHS WIO Riser card with one PCI-E4.0X16 and onePCI-E4
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0049P	1	1U Passive Enhanced Performance CPU Heat Sink for Intel Socket H Series Processors
*Power Supply	PWS-504P-1R2	2	1U Redundant 500W/600W, Platinum efficiency, AC inlet: C14,RoHS
*Power Distributor	PDB-PT112-S2424	1	WIO X11 Support,PDB-PT112-S2424 is based on PDB-PT112-2424
*Cable 2	CBL-0335L	1	FRONT CTL CABLE 20 PIN TO 20 PIN W/TUBE,70CM,PBF
*Fan Holder	CSE-PT0135	1	FAN HOLDER FOR SIX 40X56MM COUNTER ROTATING FANS
*Peripheral Drive1	CSE-PT93L-B	1	Black DVD dummy cover for SC813, 813M, 815, PBF-RoHS
*FAN 1	FAN-0086L4	4	40x56 4Pin PWM, Primary for SC815, Secondary for SC818, 825M
*FAN 2	FAN-0156L4	4	40x40x56 mm 13K-11K RPM Counter-rotating Fan,RoHS/REACH
*Front Panel	FPB-FP815U	1	815 UIO front control board (U)
*Parts	MCP-120-00030-0N	1	Blank LP L-bracket (1 raw of capsule hole)
*Parts	MCP-120-00053-0N	2	Blank FH L bracket w/o SCSI cutout for SC825,836,846,743
*Drive Tray(s)	MCP-220-00075-0B	4	Black gen 5.5 hot-swap 3.5" HDD tray
*Rear Window	MCP-240-00098-0N	1	WIO rear window for SC113,SC116, SC815 Redundant PWS
*Power Supply	MCP-250-81502-0N	1	SC815 Redundant Power Distributor Cover
*Rail Set	MCP-290-00054-0N	1set	Rail set, quick/quick, optional for 1U 17.2
*Air Shroud	MCP-310-19002-0N	1	SC815/113/116 Intel DP X9, X8 PC air shroud, 12x13MB
*Fan Holder	MCP-340-00035-0B	2	Dummy fan 40x56mm for 40x56 counter-rotating fan (cost-effective)

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 eStore	-	Hot-swap Gen-4 3.5" to 2.5" HDD tray, Black
CacheVault	BTR-CV3916-1U1 (For S3908)	1	CacheVault for Broadcom 3908 with SuperCap mounting in 1U 40x56 fan tray
	BTR-CV3108-1U1 (For S3108)	1	CacheVault for Broadcom 3108 with SuperCap mounting in 1U 40x56 fan tray
	BTR-CVPM05 + MCP-240-00203-0N (For S3908)	1	CacheVault for Broadcom 3908 with SuperCap mounting bracket for PCI-E location
	BTR-TFM8G-LSICVM02 + MCP-240-00203-0N (For S3108)	1	CacheVault for Broadcom 3108 with SuperCap mounting bracket for PCI-E location
Cooling Fan	FAN-0156L4 eStore	1	40x40x56 mm, 13K RPM/ 11K RPM, Counter-rotating 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 eStore + 1pc CBL-0099 eStore (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 eStore + 1pc CBL-0099 eStore (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 eStore	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
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
	<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
Storage Control Card and Cable(s) (HBA)	<u>AOC-S3008L-L8E</u>	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD; HBA
	<u>AOC-S3808L-L8i</u> + 1x CBL-SAST-1275A-100	1	Standard LP, 8 internal ports (12Gb/s) PCI-E 4.0 x8, 122HDD; HBA
TPM	AOM-TPM-9671V-O	1	TPM 1.2, vertical form factor
	AOM-TPM-9670V-O	1	TPM 2.0, vertical form factor