

UP SuperServer SYS-510T-ML



Form Factor

Mini-1U Rackmount
 Enclosure: 437 x 43 x 368mm (17.2" x 1.7" x 14.5")
 Package: 559 x 160 x 508mm (22" x 6.3" x 20")

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

2x 3.5" SATA drive bays;

Expansion Slots

Slot 1: PCI-E 4.0 x8 (in x16 FHHL)
 (Pentium CPUs provide PCI-e 3.0 only.)

On-Board Devices

SATA: SATA3 (6Gbps); RAID 0/1/5/10 support
 Chipset: Intel® C252
 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

Input / Output

SATA: 6 SATA (6Gbps) port(s)
 LAN: 2 RJ45 1GbE LAN ports
 1 RJ45 Dedicated IPMI LAN port
 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: 2 COM Port(s) (1 header; 1 rear)
 DOM: 2 SuperDOM (Disk on Module) port with built-in power

Key Applications

General Purpose
 Entry Appliance
 Front-end, Web Hosting

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 x8 (in x16 FHHL);
- Intel® Ethernet Controller i210 2x 1GbE RJ45;
- 1 Fixed 3.5" drive support (default); Up to 2 Fixed 3.5" drives or 3 Fixed 2.5" drives (opt.); Onboard 1x NVMe M.2;
- Single Platinum 350W Power Supply;

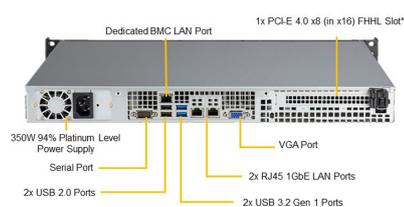
[More details here](#)



(Front View – System)



(Rear View – System)



* Pentium CPUs provide PCIe 3.0 only

Cooling System	2x (4cm x 4cm x 5.6cm) heavy duty fan(s)
Power Supply	1U 350W Multi-output, Platinum level, 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; SSM; Redfish API; IPMI2.0
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 6 + 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: 14.5" (368 mm) Gross Weight: 14 lbs (6.35 kg) Net Weight: 11 lbs (4.99 kg) Packaging: 6.3" (H) x 22" (W) x 20" (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 X12STL-F
Chassis	CSE-512F-350B1

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12STL-F	1	Super X12STL-F Motherboard
	CSE-512F-350B1	1	Mini-1U Chassis
Rear Window	MCP-240-00091-0N	2	1U universal riser card bracket for standard chassis, HF, RoHS/REACH, PBF
Manual	MNL-2420-QRG	1	510T-ML 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-P0049P	1	1U Passive Enhanced Performance CPU Heat Sink for Intel Socket H Series Processors
*Power Supply	PWS-350-1H	1	1U Single AC-DC 350W Platinum Level, multiple output power supply (180mm)
*Cable 1	CBL-0156L	1	ROUND 16PIN TO 16PIN FP CABLE, 40CM, PB FREE
*Cable 2	CBL-0260L	1	US POWER CORD 18 AWG, PBF
*Cable 3	CBL-0261L	1	40CM 7PIN SATA CABLE S-RA, PBF
*Cable 4	CBL-0262L	1	4PIN TO 1xSATA(RA)+1x4PIN(RA)+1xFPD PWS EXT. CBL
*FAN 1	FAN-0087L4	2	40x56,4 Pin PWM Fan
*Parts	MCP-260-00024-0N	1	1U I/O shield for X8 server MB (3rd LAN + 4xLAN)
*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
*Front Panel	MCP-280-51201-0N	1	Front control board (FP512) for SC512 (surface-mounted LED)
*Parts	MCP-290-00005-01	2	Black chassis handle for SC512F-520
*Peripheral Drive1	MCP-290-00006-01	1	Black DVD dummy cover for SC512, RoHS
*Fan Holder	MCP-320-00003-01	1	Fan holder of two 40x40x56mm fans for SC512F-280

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
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
Cable for internal HDD	CBL-0211L eStore	1	4PIN-TO-3X SATA POWER CABLE
	CBL-0483L eStore	-	29cm 30AWG SATA straight to straight cable
DVD-ROM / DVD-RW	DVM-TEAC-DVD-SBT5	1	TEAC slim DVD-ROM SATA drive
	DVM-TEAC-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
DVD-ROM Accessory	MCP-220-51202-0N	1	Slim SATA DVD mounting kit
Internal 2.5" HDD Tray	MCP-220-00051-0N eStore	-	Single 2.5" fixed HDD bracket
	MCP-220-00044-0N eStore	-	Dual 2.5" fixed HDD bracket
Rail Kit	MCP-290-00055-0N eStore	1	Quick-release rail set (25.6" ~ 33.05")
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)
TPM	AOM-TPM-9670V-O	1	TPM 2.0, vertical form factor
	AOM-TPM-9671V-O	1	TPM 1.2, vertical form factor