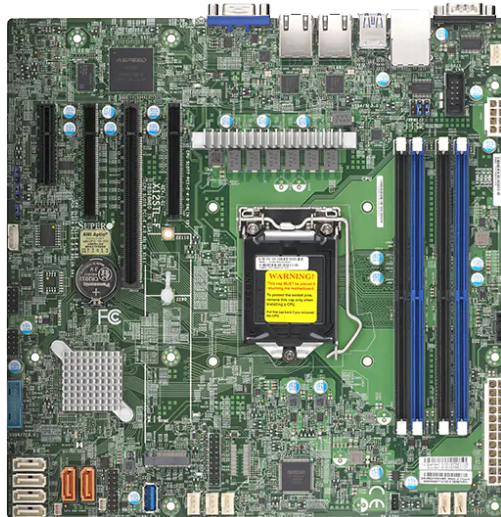# X12STL-F

Key Features

Intel® Xeon® E-2300 Processor, 10th Generation Intel® Pentium® Processor, Single Socket LGA-1200 (Socket H5) supported, CPU supports Up to 95W TDP

Intel® C252

Up to 128GB Unbuffered ECC UDIMM, DDR4-3200MHz, in 4 DIMM slots

1 PCIe 4.0 x8,

1 PCIe 4.0 x8 (in x16 slot),

1 PCIe 4.0 x4 (in x8 slot)1 PCIe 3.0 x2 (in x4 slot)

M.2 Interface: 1 PCIe 3.0 x4

M.2 Form Factor: 2280/22110

M.2 Key: M-Key

Dual LAN with 1GbE with Intel® I210

Intel® C252 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10

1 VGA D-Sub Connector port

2 SuperDOM with built-in power

5x USB 3.2 Gen1 (2 rear, 1 Type-A, 2 via header), 4x USB 2.0 (2 rear, 2 via headers)

Optimized Servers

SYS-510T-ML

SYS-530T-I

Specifications

Product SKUs
MBD-X12STL-F

Physical Stats
Form Factor
microATX
Dimension
9.6" x 9.6" (24.38cm x 24.38cm)

Processor
CPU
10th Generation Intel® Pentium® Processor, Intel® Xeon® E-2300 Processor
Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 95W TDP
Core
Up to 8 cores

System Memory
Memory Capacity
4 DIMM slots
Up to 128GB Unbuffered ECC UDIMM, DDR4-3200MHz
Memory Type
3200/2933/2666 MT/s SDRAM
DIMM Sizes
4GB, 8GB, 16GB, 32GB
Memory Voltage
1.2V
Error Detection
Corrects single-bit errors

On-Board Devices
Chipset
Intel® C252
SATA
Intel® C252 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10
IPMI
ASPEED AST2600 BMC
Graphics
1 ASPEED AST2600 BMC port(s)
Network Controllers
Dual LAN with 1GbE with Intel® I210

Input / Output
SATA
6 SATA3 (6Gbps) port(s)
LAN
2 1GbE LAN ports
USB
4 USB 2.0 port(s) (2 rear; 2 via header)
5 USB 3.2 Gen1 port(s) (2 via header; 2 rear; 1 type A)
Video Output
1 VGA D-Sub Connector port(s)
Serial Port
2 COM Port(s) (1 header; 1 rear)
DOM
2 SuperDOM (Disk on Module) power connector
TPM
1 TPM Header

Expansion Slots
PCIe
1 PCIe 4.0 x8 (in x16 slot),
1 PCIe 4.0 x8,
1 PCIe 4.0 x4 (in x8 slot),
1 PCIe 3.0 x2 (in x4 slot)
M.2
M.2 Interface: 1 PCIe 3.0 x4
Form Factor: 2280/22110
Key: M-Key

System BIOS
BIOS Type
256MB UEFI
BIOS Features
ACPI 6.0
SMBIOS 3.3
Plug and Play (PnP)
RTC (Real Time Clock) Wakeup
UEFI 2.7
USB Keyboard support
PCI 3.0

Management
Software
Redfish API, Supermicro Server Manager (SSM), Supermicro Update Manager (SUM), SuperDoctor® 5, Super Diagnostics Offline , KVM with dedicated LAN , IPMI 2.0
System Management Software
IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support
Power Configurations
Power-on mode for AC power recovery, ACPI Power Management

Security
Hardware
Trusted Platform Module (TPM) 2.0

PC Health Monitoring
Voltage
VBAT, System level control, Supports system management utility, Monitors CPU voltages, Chipset Voltage, Chassis intrusion header, 6 - fan status, 3.3V standby, +5V standby, +5V, +3.3V, +12V, +1.8V, Memory Voltages
LED
UID/Remote UID
BMC/IPMI Heartbeat LED
Temperature
Monitoring for CPU and chassis environment
CPU thermal trip support
Thermal Monitor 2 (TM2) support
PECI
FAN
6x 4-pin fan headers (up to 6 fans)
Thermal control tachometer fan connectors
Fan speed control
6 fans with tachometer status monitoring
Overheat LED indication

Other Features
WOL, UID, M.2 NGFF connector, Dual Cooling Zones, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, Chassis intrusion detection, ACPI power management

Operating Environment
Operating Temperature Range
0°C - 50°C (32°F - 122°F)
Non-Operating Temperature Range
-20°C - 60°C (-4°F - 140°F)
Operating Relative Humidity Range
10% - 85% (non-condensing)
Non Operating Relative Humidity Range
10% - 95% (non-condensing)

Parts List

Standard Parts (Bulk Package)

I/O Cables

Part Number	CBL-0044L • *eStore*
Qty	2
Description	-

I/O Shield

Part Number	MCP-260-00042-0N • *eStore*
Qty	1
Description	-

Standard Parts (Retail Package)

I/O Cables

Part Number	CBL-0044L • *eStore*
Qty	2
Description	-

I/O Shield

Part Number	MCP-260-00042-0N • *eStore*
Qty	1
Description	-

QRG

Part Number	MNL-2353-QRG
Qty	1
Description	-