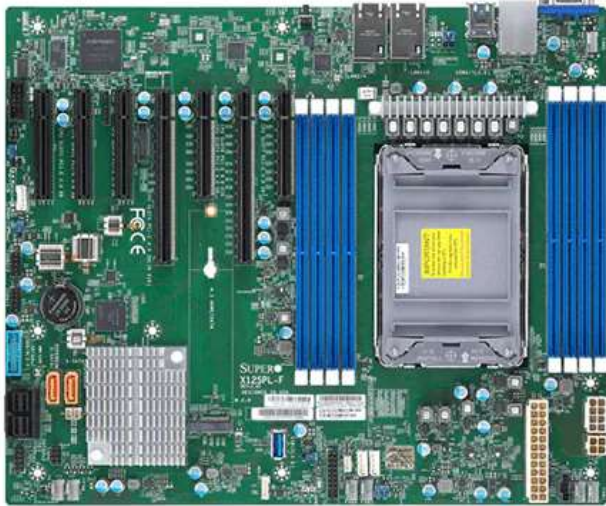


X12SPL-F



Key Features



3rd Gen Intel® Xeon® Scalable processors, Single Socket LGA-4189 (Socket P+) supported, CPU TDP supports Up to 270W TDP

Intel® C621A

Up to 2TB 3DS ECC RDIMM, DDR4-3200MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-3200MHz
Up to 2TB Intel® Optane™ Persistent Memory, in 8 DIMM slots

2 PCI-E 4.0 x8,
1 PCI-E 4.0 x16,
1 PCI-E 4.0 x8 (in x16 slot)
3 PCI-E 3.0 x8

M.2 Interface: 1 SATA/PCI-E 3.0 x4

M.2 Form Factor: 2280/2210

M.2 Key: M-Key

Intel® C621A controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10

Dual LAN with Intel® i210 Gigabit Ethernet Controller

Product SKUs

MBD-X12SPL-F	■ X12SPL-F
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Physical Stats

Form Factor	■ ATX
Dimension	■ 12.1" x 10" (30.73cm x 25.4cm)

Processor

CPU	■ 3rd Gen Intel® Xeon® Scalable processors ■ Single Socket LGA-4189 (Socket P+) supported, CPU TDP supports Up to 270W TDP
Core	■ Up to 40 cores

System Memory

Memory Capacity	■ 8 DIMM slots ■ Up to 2TB Intel® Optane™ Persistent Memory 200 Series ■ Up to 2TB 3DS ECC LRDIMM, DDR4-3200MHz; Up to 2TB 3DS ECC RDIMM, DDR4-3200MHz
Memory Type	■ 3200/2933/2666MHz ECC , DDR4 LRDIMM (3DS), RDIMM (3DS)
DIMM Sizes	■ 8GB, 16GB, 32GB, 64GB, 128GB, 256GB
Memory Voltage	■ 1.2V
Error Detection	■ Corrects single-bit errors

On-Board Devices

Chipset	■ Intel® C621A
SATA	■ Intel® C621A controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
IPMI	■ ASPEED AST2600 BMC
Graphics	■ ASPEED AST2600 BMC
Network Controllers	■ Dual LAN with Intel® i210 Gigabit Ethernet Controller

Expansion Slots

PCI-E	■ 1 PCI-E 4.0 x16, ■ 1 PCI-E 4.0 x8 (in x16 slot), ■ 2 PCI-E 4.0 x8, ■ 3 PCI-E 3.0 x8
M.2	■ M.2 Interface: 1 SATA/PCI-E 3.0 x4 ■ Form Factor: 2280/22110 ■ Key: M-Key

System BIOS

BIOS Type	■ AMI UEFI
BIOS Features	■ ACPI 6.2 ■ SMBIOS 3.0 or later ■ UEFI 2.7

Management

Software	■ SuperDoctor® 5, SUM , KVM with dedicated LAN, SPM , Intel® Node Manager, SSM , IPMI2.0 , Watchdog
Power Configurations	■ Power-on mode for AC power recovery, ACPI Power Management, CPU thermal trip support for processor protection

PC Health Monitoring

Voltage	■ VBAT, System temperature, Monitors CPU voltages, HT, Chassis intrusion header, 3.3V standby, +5V standby, +5V, +3.3V, +12V, +1.8V, 7-fan status
LED	■ UID/Remote UID ■ Suspend static indicator LED ■ CPU / System Overheat LED
Temperature	■ CPU thermal trip support ■ PECI
FAN	■ 7x 4-pin fan headers (up to 7 fans) ■ System level control ■ PWM fan speed control ■ Fan speed control ■ Overheat LED indication
Other Features	■ WOL, UID, RoHS, Chassis intrusion header, Chassis intrusion detection, ATX Power connector, ACPI power management, RoT

Input / Output

SATA	■ 10 SATA3 (6Gbps) port(s)
LAN	■ 2 RJ45 Gigabit Ethernet LAN ports
USB	■ 6 USB 2.0 port(s) (4 via header; 2 rear) ■ 5 USB 3.2 Gen1 port(s) (2 via header; 2 rear; 1 type A)
Video Output	■ 1 VGA port(s)
Serial Port	■ 1 COM Port(s) (1 header)
DOM	■ 2 SATA <u>DOM</u> (Disk on Module) power connector support
TPM	■ 1 TPM Header

Operating Environment

Operating Temperature Range	■ 0°C - 50°C (32°F - 122°F)
Non-Operating Temperature Range	■ -40°C - 70°C (-40°F - 158°F)
Operating Relative Humidity Range	■ 10% - 85% (non-condensing)
Non Operating Relative Humidity Range	■ 10% - 95% (non-condensing)

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X12SPL-F	1	X12SPL-F Motherboard
CPU carrier	SKT-1205L-P4IC-FXC	1	CPU carrier for 3rd Gen Intel Xeon Scalable Processors
I/O Cables	CBL-0044L • eStore	2	57.5CM SATA FLAT S-S PBF
I/O Shield	MCP-260-00130-0N	1	STD I/O Shield for X12SPL-F with EMI Gasket

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X12SPL-F	1	X12SPL-F Motherboard
CPU carrier	SKT-1205L-P4IC-FXC	1	CPU carrier for 3rd Gen Intel Xeon Scalable Processors
I/O Cables	CBL-0044L • eStore	2	57.5 cm SATA FLAT S-S PBF
I/O Shield	MCP-260-00130-0N	1	STD I/O Shield for X12SPL-F with EMI Gasket
QRG	MNL-2270-QRG	1	Motherboard Quick Reference Guide

Optional Parts List			
Name	Part Number	Qty	Description
1U I/O Shield	MCP-260-00132-0B	1	1U I/O Shield for X12SPL-F with EMI Gasket (for standard 1U chassis: SC510, SC504, SC505) 1U I/O Shield for X12SPL-F with EMI Gasket (for standard 1U chassis: SC813M, SC815, SC512, SC514, SC515, SC113)
	MCP-260-00131-0N	1	
TPM security module	AOM-TPM-9670H	1	SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor SPI capable TPM 1.2 with Infineon 9670 controller with horizontal form factor
	AOM-TPM-9671V	1	
	AOM-TPM-9670V	1	
	AOM-TPM-9671H	1	

Chassis (Optimized for X12SPL-F)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
		SC213LT-600LPB (Heatsink1 :SNK-P0078AP4) SCLA26E1C4-R609LP (Heatsink1 :SNK-P0078AP4) SCLA25TQC-R609LP (Heatsink1 :SNK-P0078AP4) SC825TQC-R802LPB (Heatsink1 :SNK-P0078AP4) SC825MBTQC-R802LPB (Heatsink1 :SNK-P0078AP4)	SC835TQC-R802B (Heatsink1 :SNK-P0078AP4)		SC842TQC-668B (Heatsink1 :SNK-P0080AP4)

 = Most optimized Chassis for SuperServer Configuration
Blue color = Compatible
Green color = Global SKU & Compatible
Red dot & green color = Optimized + Global SKU

