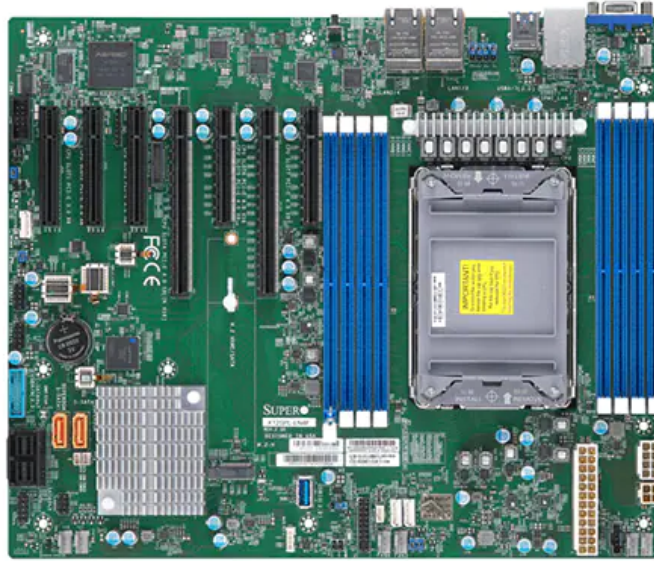


# X12SPL-LN4F

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## Quad LAN

### 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:** 2280/22110

**M.2 Key:** M-Key

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

Quad LAN with Intel® i210 Gigabit Ethernet Controller

### Specifications

**Product SKUs****MBD-X12SPL-LN4F**

X12SPL-LN4F

**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**

Quad LAN with Intel® i210 Gigabit Ethernet Controller

**Input / Output****SATA**

10 SATA3 (6Gbps) port(s)

**LAN**

4 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 **DOM** (Disk on Module) power connector support**TPM**

1 TPM Header

**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

**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

### Standard Parts (Bulk Package)

**CPU carrier**

Part Number SKT-1205L-P4IC-FXC

Qty 1

Description CPU carrier for 3rd Gen Intel Xeon Scalable Processors

#### I/O Cables

Part Number CBL-0044L • [eStore](#)  
Qty 2  
Description 57.5CM SATA FLAT S-S PBF

#### I/O Shield

Part Number MCP-260-00130-0N  
Qty 1  
Description STD I/O Shield for X12SPL-LN4F with EMI Gasket

### Standard Parts (Retail Package)

#### CPU carrier

Part Number SKT-1205L-P4IC-FXC  
Qty 1  
Description CPU carrier for 3rd Gen Intel Xeon Scalable Processors

#### I/O Cables

Part Number CBL-0044L • [eStore](#)  
Qty 2  
Description 57.5 cm SATA FLAT S-S PBF

#### I/O Shield

Part Number MCP-260-00130-0N  
Qty 1  
Description STD I/O Shield for X12SPL-LN4F with EMI Gasket

#### QRG

Part Number MNL-2270-QRG  
Qty 1  
Description Motherboard Quick Reference Guide

### Optional Parts

#### 1U I/O Shield

Part Number	MCP-260-00132-0B	MCP-260-00131-0N
Qty	1	1
Description	1U I/O Shield for X12SPL-LN4F with EMI Gasket (for standard 1U chassis: SC510, SC504, SC505)	1U I/O Shield for X12SPL-LN4F with EMI Gasket (for standard 1U chassis: SC813M, SC815, SC512, SC514, SC515, SC113)

#### TPM security module

Part Number	AOM-TPM-9671V	AOM-TPM-9670V	AOM-TPM-9671H	AOM-TPM-9670H
Qty	1	1	1	1
Description	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	SPI capable TPM 2.0 with Infineon 9670 controller with horizontal form factor

### Chassis (Optimized for X12SPL-LN4F)

#### SKU

Embedded  
Compact  
1U

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

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1. ● = Most optimized Chassis for SuperServer Configuration
2. Blue color = Compatible
3. Green color = Global SKU&Compatible
4. Red dot & green color = Optimized + Global SKU