

## X11DPFR-SN (For SuperServer Only)

---



### Key Features

1. 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors, Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 165W TDP, 2 UPI up to 10.4 GT/s
2. Intel® C621
3. Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz  
Or 2TB DCPMM, DDR4-2666MHz, in 12 DIMM slots;  
Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);
4. 1 PCI-E 3.0 x16 Left Riser Slot,  
1 PCI-E 3.0 x16 Right Riser Slot,  
1 PCI-E 3.0 x16 connector for SMC add-on cards  
1 PCI-E 3.0 x16 SIOM LAN Networking Slot  
**M.2 Interface:** PCI-E 3.0 x4  
**M.2 Form Factor:** 2260, 2280, 22110  
**M.2 Key:** M-Key,  
4 NVMe Internal Port(s)
5. Intel® C621 controller for SATA3 (6 Gbps) ports; RAID 0,1,5,10
6. 1 VGA port
7. Single LAN with  
Networking options provided via SIOM module

# Specifications

## Product SKUs

**MBD-X11DPFR-SN** ■ X11DPFR-SN

## Physical Stats

**Form Factor** ■ Proprietary FatTwin

**Dimension** ■ 8.53" x 19.66" (21.67cm x 49.94cm)

## Processor

**CPU** ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors

■ Dual Socket LGA-3647 (Socket P) supported, CPU TDP supports Up to 165W TDP, Dual UPI up to 10.4 GT/s

**Core** ■ Up to 28 cores

**Note** ■ BIOS version 3.0a or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP

■ BIOS version 3.0a or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP

■ BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

## System Memory

**Memory Capacity** ■ 12 DIMM slots

■ Up to 2TB Intel® Optane™ Persistent Memory 200 Series, DDR4-2666MHz

■ Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz

■ Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)

**Memory Type** ■ 2933/2666/2400/2133MHz ECC DDR4 LRDIMM (3DS), RDIMM (3DS)

**DIMM Sizes** ■ LRDIMM: 64GB

■ RDIMM: 64GB

**Memory Voltage** ■ 1.2V

**Error Detection** ■ Corrects single-bit errors

■ Detects double-bit errors (using ECC memory)

## On-Board Devices

**Chipset** ■ Intel® C621

**SATA** ■ Intel® C621 controller for SATA3 (6 Gbps) ports; RAID 0,1,5,10

<b>IPMI</b>	<ul style="list-style-type: none"> <li>ASPEED AST2500</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>ASPEED AST2500 BMC</li> </ul>
<b>Network Controllers</b>	<ul style="list-style-type: none"> <li>Single LAN, Networking options provided via SIOM module</li> </ul>
<b>Input / Output</b>	
<b>SATA</b>	<ul style="list-style-type: none"> <li>8 SATA3 (6Gbps) port(s)</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>1 RJ45 Dedicated IPMI LAN port</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>2 USB 3.0 port(s) (2 rear)</li> </ul>
<b>Video Output</b>	<ul style="list-style-type: none"> <li>1 VGA port(s)</li> </ul>
<b>DOM</b>	<ul style="list-style-type: none"> <li>2 SuperDOM (Disk on Module) ports</li> </ul>
<b>TPM</b>	<ul style="list-style-type: none"> <li>1 TPM Header</li> </ul>

## Expansion Slots

<b>PCI-E</b>	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x16 Left Riser Slot,</li> <li>1 PCI-E 3.0 x16 Right Riser Slot,</li> <li>1 PCI-E 3.0 x16 connector for SMC add-on cards</li> <li>1 PCI-E 3.0 x16 SIOM LAN Networking Slot</li> </ul>
<b>M.2</b>	<ul style="list-style-type: none"> <li>M.2 Interface: PCI-E 3.0 x4</li> <li>Form Factor: 22110, 2280, 2260</li> <li>Key: M-Key</li> </ul>

## System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>AMI UEFI</li> </ul>
------------------	--

## Management

<b>Software</b>	<ul style="list-style-type: none"> <li>SuperDoctor® 5, <u>SUM</u>, KVM with dedicated LAN, <u>SPM</u>, Intel® Node Manager, <u>SSM</u>, Watchdog, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support</li> </ul>
<b>Power Configurations</b>	<ul style="list-style-type: none"> <li>ACPI Power Management</li> </ul>

## PC Health Monitoring

<b>Voltage</b>	<ul style="list-style-type: none"> <li>Monitors CPU voltages, Chipset Voltage, 1.05 (PCH), +5V standby, +5V, +3.3V, +12V, +1.8V, Memory Voltages</li> </ul>
<b>LED</b>	<ul style="list-style-type: none"> <li>UID/Remote UID</li> <li>BMC/IPMI Heartbeat LED</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Thermal Control for 3 Fan Connectors</li> <li>Monitoring for CPU and chassis environment</li> <li>CPU thermal trip support</li> </ul>
<b>FAN</b>	<ul style="list-style-type: none"> <li>3x 4-pin fan headers (up to 3 fans)</li> <li>PWM fan speed control</li> </ul>
<b>Other Features</b>	<ul style="list-style-type: none"> <li>WOL, UID, RoHS, Node Manager Support, CPU thermal trip support for processor protection, Chassis intrusion detection, SDDC</li> </ul>

## Operating Environment

<b>Operating Temperature Range</b>	<ul style="list-style-type: none"> <li>10°C - 35°C (50°F - 95°F)</li> </ul>
<b>Non-Operating Temperature Range</b>	<ul style="list-style-type: none"> <li>-40°C - 70°C (-40°F - 158°F)</li> </ul>
<b>Operating Relative Humidity Range</b>	<ul style="list-style-type: none"> <li>8% - 90% (non-condensing)</li> </ul>
<b>Non Operating Relative Humidity Range</b>	<ul style="list-style-type: none"> <li>5% - 95% (non-condensing)</li> </ul>



## Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11DPFR-SN	1	X11DPFR-SN Motherboard

Optional Parts List			
Name	Part Number	Qty	Description
TPM security module (optional, not included)	<a href="#"><u>AOM-TPM-9671H</u></a>	1	SPI capable TPM 1.2 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 2.0 with Infineon 9670 controller with horizontal form factor
	<a href="#"><u>AOM-TPM-9671V</u></a>	1	
	<a href="#"><u>AOM-TPM-9670V</u></a>	1	
	<a href="#"><u>AOM-TPM-9670H</u></a>	1	

### Server (Optimized for X11DPFR-SN)

Server Name
<a href="#"><u>SYS-F619P2-RC0</u></a>
<a href="#"><u>SYS-F619P2-RC1</u></a>
<a href="#"><u>SYS-F619P2-RTN</u></a>
<a href="#"><u>SYS-F629P3-RC0B</u></a>
<a href="#"><u>SYS-F629P3-RC1B</u></a>
<a href="#"><u>SYS-F629P3-RTBN</u></a>

