

## X11DPU-XLL (For SuperServer Only)

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### Hyper-Speed Technology

#### 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 205W TDP, 2 UPI up to 10.4 GT/s
2. Intel® C621
3. Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots
4. 1 PCI-E 3.0 x32 Left Riser Slot,  
1 PCI-E 3.0 x8 Center Right Riser Slot,  
1 PCI-E 3.0 x40 Far Right Riser Slot,  
4 PCI-E 3.0 NVMe x4 Internal Port(s)
5. Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10
6. 1 VGA port
7. Networking options provided via Ultra Riser

# Specifications

## Product SKUs

<b>MBD-X11DPU-XLL</b>	<ul style="list-style-type: none"> <li>X11DPU-XLL</li> </ul>
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## Physical Stats

<b>Form Factor</b>	<ul style="list-style-type: none"> <li>Proprietary Ultra</li> </ul>
<b>Dimension</b>	<ul style="list-style-type: none"> <li>17" x 16.8" (43.18cm x 42.67cm)</li> </ul>

## Processor

<b>CPU</b>	<ul style="list-style-type: none"> <li>2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors</li> <li>Dual Socket LGA-3647 (Socket P) supported, CPU TDP supports Up to 205W TDP, Dual UPI up to 10.4 GT/s</li> </ul>
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<b>Core</b>	<ul style="list-style-type: none"> <li>Up to 28 cores</li> </ul>
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<b>Note</b>	<ul style="list-style-type: none"> <li>BIOS version 3.0a or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP</li> <li>BIOS version 3.0a or above is required to support 2nd Generation Intel Xeon Scalable Processors-SP</li> <li>BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)</li> </ul>
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## System Memory

<b>Memory Capacity</b>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz</li> </ul>
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<b>Memory Type</b>	<ul style="list-style-type: none"> <li>2933/2666/2400/2133MHz ECC DDR4 LRDIMM (3DS), RDIMM (3DS)</li> </ul>
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<b>DIMM Sizes</b>	<ul style="list-style-type: none"> <li>LRDIMM: 128GB</li> <li>RDIMM: 64GB</li> </ul>
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<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>1.2V</li> </ul>
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<b>Error Detection</b>	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> <li>Detects double-bit errors (using ECC memory)</li> </ul>
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## On-Board Devices

<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C621</li> </ul>
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<b>SATA</b>	<ul style="list-style-type: none"> <li>Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10</li> </ul>
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<b>IPMI</b>	<ul style="list-style-type: none"> <li>ASPEED AST2500</li> </ul>
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<b>Graphics</b>	<ul style="list-style-type: none"> <li>ASPEED AST2500 BMC</li> </ul>
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<b>Network Controllers</b>	<ul style="list-style-type: none"> <li>Networking options provided via Ultra Riser</li> </ul>
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## Expansion Slots

<b>PCI-E</b>	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x32 Left Riser Slot,</li> <li>1 PCI-E 3.0 x8 Center Right Riser Slot,</li> <li>1 PCI-E 3.0 x40 Far Right Riser Slot</li> </ul>
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## System BIOS

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

<b>Software</b>	<ul style="list-style-type: none"> <li>SuperDoctor® 5, <a href="#">SUM</a>, KVM with dedicated LAN, <a href="#">SPM</a>, Intel® Node Manager, <a href="#">SSM</a>, <a href="#">IPMI2.0</a>, Watchdog</li> </ul>
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<b>Power Configurations</b>	<ul style="list-style-type: none"> <li>Power-on mode for AC power recovery, ACPI Power Management</li> </ul>
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## PC Health Monitoring

<b>Voltage</b>	<ul style="list-style-type: none"> <li>Monitors CPU voltages, +5V standby, +5V, +3.3V, +12V</li> </ul>
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<b>LED</b>	<ul style="list-style-type: none"> <li>UID/Remote UID</li> <li>Power LED</li> <li>BMC/IPMI Heartbeat LED</li> <li>CPU / System Overheat LED</li> </ul>
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<b>Temperature</b>	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>CPU thermal trip support</li> <li>Support to monitor Supermicro AOC temperatures from IPMI or SD 5</li> <li>Thermal Control for 8 Fan Connectors</li> </ul>
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<b>FAN</b>	<ul style="list-style-type: none"> <li>8x 4-pin fan headers (up to 8 fans)</li> <li>PWM fan speed control</li> </ul>
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<b>Other Features</b>	<ul style="list-style-type: none"> <li>UID, RoHS, Node Manager Support, CPU thermal trip support for processor protection, Control of power-on for recovery from AC power loss, Chassis intrusion header, Chassis intrusion detection, ATX Power connector, ACPI power management, SDDC, Hyper-Speed Technology hardware acceleration</li> </ul>
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## Operating Environment

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

<b>SATA</b>	▪ 14 SATA3 (6Gbps) port(s)
<b>USB</b>	▪ 1 USB 3.2 Gen1 port(s) (1 type A) ▪ 2 USB 3.0 port(s) (2 rear)
<b>Video Output</b>	▪ 1 VGA port(s)
<b>Serial Port</b>	▪ 1 COM Port(s) (1 rear)
<b>DOM</b>	▪ 2 SuperDOM (Disk on Module) ports
<b>TPM</b>	▪ 1 TPM Header
<b>Others</b>	▪ 1 ports SuperDOM

<b>Non Operating Relative Humidity Range</b>	▪ 5% - 95% (non-condensing)
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## Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11DPU-XLL	1	X11DPU-XLL Motherboard

### Chassis (Optimized for X11DPU-XLL)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
Heatsink:SNK-P0067PS	<ul style="list-style-type: none"> <li>● SC819UTS-R751P-T</li> <li>● SC119UTS-R1K02P-T</li> <li>● SC819UTS-R1K02P-T</li> <li>● SC119UTS-R751P-T</li> </ul> Heatsink:SNK-P0067PS	<ul style="list-style-type: none"> <li>● SC Heatsink:SNK-P0068PS</li> </ul>			

● = Most optimized Chassis for SuperServer Configuration  
● = Compatible  
● = Global SKU & Compatible  
● & ● = Optimized + Global SKU

### Server (Optimized for X11DPU-XLL)

Server Name
<a href="#"><u>SYS-1029UX-LL1-C16</u></a>
<a href="#"><u>SYS-1029UX-LL1-S16</u></a>
<a href="#"><u>SYS-1029UX-LL2-C16</u></a>
<a href="#"><u>SYS-1029UX-LL2-S16</u></a>
<a href="#"><u>SYS-1029UX-LL3-C16</u></a>
<a href="#"><u>SYS-1029UX-LL3-S16</u></a>
<a href="#"><u>SYS-1029UX-LL4-C16</u></a>

