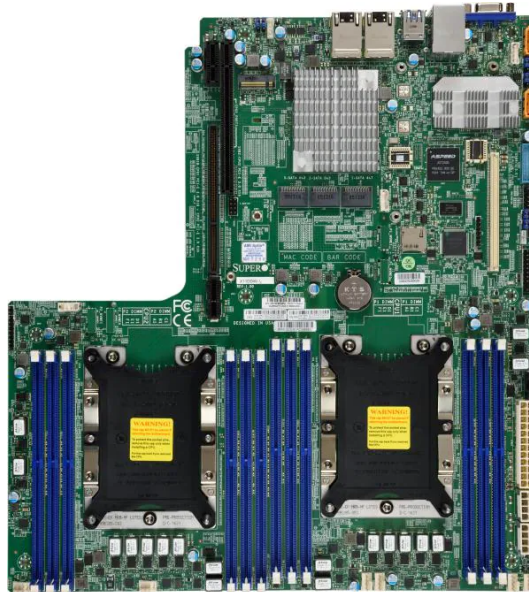


# X11DDW-L

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## Datacenter Optimized

### 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 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
4. 1 PCI-E 3.0 x32 Left Riser Slot,  
1 PCI-E 3.0 x16 Right Riser Slot,  
1 PCI-E 3.0 x16 for Add-On-Module (AOM)  
**M.2 Interface:** PCI-E 3.0 x4  
**M.2 Form Factor:** 2242, 2260, 2280, 22110  
**M.2 Key:** M-Key
5. Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10
6. Dual LAN with GbE from C621
7. 1 VGA port

# Specifications

## Product SKUs

<b>MBD-X11DDW-L</b>	<ul style="list-style-type: none"> <li>X11DDW-L</li> </ul>
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## Physical Stats

<b>Form Factor</b>	<ul style="list-style-type: none"> <li>Proprietary WIO</li> </ul>
<b>Dimension</b>	<ul style="list-style-type: none"> <li>12.3" x 13.4" (31.24cm x 34.04cm)</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>
<b>Note</b>	<ul style="list-style-type: none"> <li>BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)</li> </ul>

## System Memory

<b>Memory Capacity</b>	<ul style="list-style-type: none"> <li>12 DIMM slots</li> <li>Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz</li> <li>Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)</li> </ul>
<b>Memory Type</b>	<ul style="list-style-type: none"> <li>2933/2666/2400/2133MHz ECC DDR4 LRDIMM (3DS), RDIMM (3DS)</li> </ul>
<b>DIMM Sizes</b>	<ul style="list-style-type: none"> <li>LRDIMM: 64GB, 128GB</li> <li>RDIMM: 64GB, 128GB</li> </ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>1.2V</li> </ul>
<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>

## On-Board Devices

<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C621</li> </ul>
<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>
<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>Dual LAN with GbE, from C621</li> </ul>

## Input / Output

<b>LAN</b>	<ul style="list-style-type: none"> <li>2 RJ45 Gigabit Ethernet LAN ports</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 x16 Right Riser Slot,</li> <li>1 PCI-E 3.0 x16 for Add-On-Module (AOM)</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, 2242, 2260</li> <li>Key: M-Key</li> </ul>

## System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>256MB UEFI</li> </ul>
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## 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>, <u>IPMI2.0</u>, Watchdog</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, +1.8V, Memory Voltages</li> </ul>
<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>
<b>Temperature</b>	<ul style="list-style-type: none"> <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>6x 4-pin fan headers (up to 6 fans)</li> <li>PWM fan speed control</li> <li>6 fans with tachometer status monitoring</li> <li>Status monitoring for speed control</li> </ul>
<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 detection</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>

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<b>USB</b>	▪ 6 USB 3.2 Gen1 port(s) (2 via header; 4 rear)
<b>Video Output</b>	▪ 1 VGA port(s)
<b>DOM</b>	▪ 2 SuperDOM (Disk on Module) ports
<b>TPM</b>	▪ 1 TPM Header

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<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-X11DDW-L	1	X11DDW-L Motherboard
IO Cable	CBL-SAST-0388L-02 • <a href="#">eStore</a>	1	IPASS to 4 SATA cable
X11DDW-L	MBD-X11DDW-L	1	Motherboard

Parts List (Retail Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-X11DDW-L	1	X11DDW-L Motherboard
IO Cable	CBL-SAST-0388L-02 • <a href="#">eStore</a>	1	IPASS to 4 SATA cable
Quick Reference Guide	MNL-1907-QRG	1	Quick Reference Guide
X11DDW-L	MBD-X11DDW-L	1	Motherboard

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

### Chassis (Optimized for X11DDW-L)

Embedded Compact	1U	2U	3U	Mid/Mini-Tower	4U/Tower
	<ul style="list-style-type: none"> <li>● <a href="#">SC113AC2-R706WB2</a></li> <li><a href="#">SC113AC2-R706WB2</a></li> <li><a href="#">SC825MBTQC-R802WB</a></li> <li>● <a href="#">SC815TQC-R706WB2</a></li> <li>● <a href="#">SC116AC2-R706WB2</a></li> <li>● <a href="#">SC113AC2-605WB</a></li> <li>● <a href="#">SC825MBTQC-R802WB</a></li> <li><a href="#">SCLA15TQC-563W</a></li> <li>● <a href="#">SC815TQC-605WB</a></li> </ul>	<ul style="list-style-type: none"> <li><a href="#">SC823MTQC-R802WB</a></li> <li>● <a href="#">SC825TQC-R1K03WB</a></li> <li><a href="#">SC825TQC-R802WB</a></li> <li><a href="#">SC825MBTQC-R802WB</a></li> <li>● <a href="#">SC826BAC4-R1K23WB</a></li> </ul>			

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

### Server (Optimized for X11DDW-L)

Server Name
<a href="#">SYS-1029P-WT</a>
<a href="#">SYS-1029P-WTR</a>
<a href="#">SYS-6019P-WT</a>
<a href="#">SYS-6019P-WT8</a>
<a href="#">SYS-6019P-WTR</a>
<a href="#">SYS-6029P-WTR</a>

