

# SuperServer 1029P-WT



## Integrated Board



## Super X11DDW-L

**Views: | [Angled View](#) | [Top View](#) |  
| [Front View](#) | [Rear View](#) |**

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Tested M.2 List](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#) ▶ [Quick-References Guide](#) ▶ [Compatible GPU List](#) ▶ [Drive Options](#) ▶ [Network Card \(AOC\) Matrix](#)

Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

## Key Applications

**Web Server, Firewall Apps.  
Corporate-Wins, DNS, Print, Login  
Gateway, provisioning servers  
Compact Network Appliance  
Cloud Computing**

## Key Features

1. Dual Socket P (LGA 3647) support  
2nd Gen Intel® Xeon® Scalable  
processors (Cascade Lake/Skylake)‡
2. 12 DIMMs; up to 3TB 3DS ECC  
DDR4-2933MHz† RDIMM/LRDIMM,  
Supports Intel® Optane™ DCPMM††
3. 2 PCI-E 3.0 x16 (FHHL) slots,  
1 PCI-E 3.0 x8 (LP) slot,  
1 PCI-E 3.0 x16 for Add-on-Module,  
(Support SAS3 Storage controller),  
1 PCI-E 3.0 x4 NVMe M.2 slot
4. 8 Hot-swap 2.5" drive bays,  
1 slim DVD-ROM drive bay (optional)
5. 2x 1GbE LAN ports via Intel C621
6. 1 VGA, 4 USB 3.0 (rear)
7. 2 SuperDOM (Disk on Module) ports
8. 600W Multi Output Power Supply,  
**Platinum Level** High-efficiency

# Specifications

## Product SKUs

**SYS-1029P-WT** ■ SuperServer 1029P-WT (**Black**)

## Motherboard

**Super X11DDW-L**

## Processor

**CPU** ■ Dual Socket P (LGA 3647)  
 ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors<sup>‡</sup>,  
 Dual UPI up to 10.4GT/s  
 ■ Support CPU TDP 70-165W\*

**Cores** ■ Up to 28 Cores

**Note** \* Certain high frequency optimized CPUs within 165W TDP are not supported, such as Intel Gold 6144, 6146, 6244, 6246, 6250 and 6256.

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

Extended thermal solutions may be required to support CPUs higher than 165W TDP, please contact Supermicro Technical Support for additional information.

## System Memory

**Memory Capacity** ■ 12 DIMM slots  
 ■ Up to 3TB 3DS ECC DDR4-2933MHz<sup>†</sup> RDIMM/LRDIMM  
 ■ Supports Intel® Optane™ DCPMM<sup>††</sup>

**Memory Type** ■ 2933<sup>†</sup>/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM

**Note** † 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro  
 †† Cascade Lake only. Contact your Supermicro sales rep for more info.

## On-Board Devices

**Chipset** ■ Intel® C621 chipset

**SATA** ■ SATA3 (6Gbps); RAID 0, 1, 5, 10

**Network Controllers** ■ Dual LAN with Gigabit Ethernet from C621

**IPMI** ■ Support for Intelligent Platform Management Interface v.2.0  
 ■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

**Video** ■ ASPEED AST2500 BMC

## Input / Output

**SATA** ■ 8 SATA3 (6 Gbps) ports

**LAN** ■ 2 RJ45 Gigabit Ethernet ports  
 ■ 1 RJ45 Dedicated IPMI LAN port

**USB** ■ 4 USB 3.0 ports (rear)

## Chassis

**Form Factor** ■ 1U Rackmount

**Model** ■ **CSE-113AC2-605WB**

## Dimensions and Weight

**Width** ■ 17.2" (437mm)

**Height** ■ 1.7" (43mm)

**Depth** ■ 23.5" (597mm)

**Gross Weight** ■ 46 lbs (20.9kg)

**Available Colors** ■ Black

## Front Panel

**Buttons** ■ Power On/Off button  
 ■ UID button

**LEDs** ■ Power status LED  
 ■ HDD activity LED  
 ■ Network activity LEDs  
 ■ Universal Information (UID) LED

## Expansion Slots

**PCI-Express** ■ 2 PCI-E 3.0 x16 (FHHL) slots  
 ■ 1 PCI-E 3.0 x8 (LP) slot  
 ■ 1 PCI-E 3.0 x16 for Add-on-Module (AOM)  
 ■ 1 PCI-E 3.0 x4 NVMe M.2 slot  
**(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and [AOC Support](#) for details.)**

## Drive Bays

**Hot-swap** ■ 8 Hot-swap 2.5" SAS/SATA drive bays

**Peripheral** ■ 1 slim DVD-ROM drive bay (optional)

## Backplane

SAS/SATA HDD Backplane

## System Cooling

**Fans** ■ 4 Counter-rotating 4cm PWM fans, 2 fans for cooling AOC

## Power Supply

600W High-Efficiency Power Supply w/PMBus 1.2, I<sup>2</sup>C, PFC, and Digital Switching

**AC Input** ■ 100-240V, 50-60Hz

**DC Output** ■ +3.3V: 15A  
 ■ +5V: 18A  
 ■ +5V standby: 3A  
 ■ +12V: 49A  
 ■ -12V: 0.5A

## Certification



Platinum Certified

[ [Test Report](#) ]

<b>Video</b>	<ul style="list-style-type: none"> <li>1 VGA port</li> </ul>
<b>DOM</b>	<ul style="list-style-type: none"> <li>2 SuperDOM (Disk on Module) ports</li> </ul>

#### System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>AMI 32Mb SPI Flash ROM</li> </ul>
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#### Management

<b>Software</b>	<ul style="list-style-type: none"> <li>Intel® Node Manager</li> <li><u>IPMI 2.0</u></li> <li>KVM with dedicated LAN</li> <li><u>SSM, SPM, SUM</u></li> <li><u>SuperDoctor® 5</u></li> <li>Watch Dog</li> </ul>
<b>Power Configurations</b>	<ul style="list-style-type: none"> <li>ACPI / APM Power Management</li> </ul>

#### PC Health Monitoring

<b>CPU</b>	<ul style="list-style-type: none"> <li>Monitors for CPU Cores, Chipset Voltages, Memory.</li> <li>4+1 Phase-switching voltage regulator</li> </ul>
<b>FAN</b>	<ul style="list-style-type: none"> <li>Fans with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>Thermal Control for fan connectors</li> </ul>

#### Operating Environment

<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
<b>Environmental Spec.</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</li> <li>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X11DDW-L	1	Super X11DDW-L Motherboard
	CSE-113AC2-605WB	1	1U Chassis
<b>Backplane</b>	BPN-SAS3-113A-N2	1	8-port 1U SAS3 12Gbps Hybrid backplane, support up to 6x 2.5-inch SAS3/SATA3 HDD/SSD and 2x SAS3/SATA3/NVMe Storage Devices
<b>Storage Cable</b>	CBL-SAST-0507-01	2	MINI SAS HD-MINI SAS,6G,INT,80CM,SB,28AWG
<b>Rubber Pad</b>	MCP-150-00015-0B	2	Rubber pad, 3.0mm H, 10x10mm
<b>Air Shroud</b>	MCP-310-19019-0B	2	SC113/SC116/SC815/SC515, DP X11DDW Mylar air shroud
<b>Air Block</b>	MCP-320-00061-0B	1	CR foam for air block in SC113/SC116/SC815
<b>Manual</b>	MNL-1962-QRG	1	1029P-WT/WTR Quick Reference Guide
<b>Riser Card (left)</b>	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
<b>Riser Card (right)</b>	RSC-R1UW-E8R	1	1U RHS WIO Riser card with one PCI-E x8 slot
<b>Heatsink w/ Retention</b>	SNK-P0067PSMB	2	1U Passive High Performance Front CPU Heat Sink w/ an 18-mm Wide Middle Air Channel for X11 Purley Platform Equipped w/ a Narrow Retention Mechanism/Bolster
<b>* Power Supply</b>	PWS-605P-1H	1	1U 600W Multi Output Power Supply PMbus
<b>* Power Cord</b>	CBL-0160L	1	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
<b>* FAN</b>	FAN-0156L4	4	40x40x56 mm 13K-11K RPM Counter-rotating Fan,RoHS/REACH
<b>* Rail Set</b>	MCP-290-00063-0N	1	Rail set, quick/quick, default for 1U 17.2"W for SC113/SC116,RoHS/REACH

#### Notes:

1. Parts with \* come with the chassis
2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

### Optional Parts List

	Part Number	Qty	Description
<b>DVD-ROM / RW &amp; Mounting Kit</b>	DVM-TEAC-DVD-SBT5 & MCP-220-81502-0N	1	BLACK TEAC SLIM DVD SATA DRIVE, HF, RoHS Slim SATA DVD mounting kit
	DVM-TEAC-DVDRW-SBT5 & MCP-220-81502-0N		BLACK TEAC SLIM DVD-RW SATA DRIVE, HF, RoHS Slim SATA DVD mounting kit
	DVM-PLDS-DVDRW-SBT5 & MCP-220-81502-0N		PHILIPS SLIM BLACK DVD-RW SATA DRIVE, HF, RoHS/REACH Slim SATA DVD mounting kit
<b>Add-on card for additional M.2 NVMe</b>	AOC-SLG3-2M2	1	Low Profile PCI-E x8 add-on card supports 2 PCI-E 3.0 x4 M-Key M.2 NVMe Modules
<b>Intel VROC RAID Key</b>	<u>AOC-VROCINTMOD</u>	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
	<u>AOC-VROCSTNMOD</u>	1	Intel VROC Standard, RAID 0, 1, 10
	<u>AOC-VROCPREMOD</u>	1	Intel VROC Premium, RAID 0, 1, 5, 10
<b>Additional Fan</b>	FAN-0156L4	-	40x40x56 mm 13K-11K RPM Counter-rotating Fan
<b>Storage Controller Card &amp; Cables</b>	AOM-S3108M-H8 & 2x CBL-SAST-0531 & 1x FAN-0156L4	-	Supermicro LP, 8 internal ports (12Gb/s) SAS Mezzanine; RAID 0, 1, 5, 6, 10, 50, 60; 80cm MiniSAS HD Cable 40x40x56 mm 13K-11K RPM Counter-rotating Fan
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0593		Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60; 60cm MiniSAS HD Cable
	AOC-S3008L-L8i & 2x CBL-SAST-0593		Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10; 60cm MiniSAS HD Cable
	AOC-S3008L-L8e & 2x CBL-SAST-0593		Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA; 60cm MiniSAS HD Cable
<b>Alternative Storage Controller Cable</b>	CBL-SAST-0531	-	Internal Mini-SAS HD to Mini-SAS HD 80cm,30AWG,12Gb/s, up to 4 drives per cable

<b>CacheVault (for 3108)</b>	<a href="#">BTR-CV3108-1U1</a>	1	CacheVault for Broadcom 3108 with SuperCap mounting in 1U 40x56 fan tray
	<a href="#">BTR-TFM8G-LSICVM02 &amp; BKT-BBU-BRACKET-05</a>		CacheVault for Broadcom 3108; SuperCap mounting bracket for PCI-E location
	<a href="#">BTR-TFM8G-LSICVM02 &amp; MCP-240-00127-0N</a>		CacheVault for Broadcom 3108; SuperCap mounting bracket for 2.5" HDD location
<b>Network Card(s)</b>	<a href="#">AOC-SGP-i2</a>	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel® i350AM2
	<a href="#">AOC-SGP-i4</a>		Standard LP, 4x GbE RJ45, PCI-E x4, Intel® i350AM4
	<a href="#">AOC-STGS-i1T</a>		Standard LP, 1x 10GbE RJ45, PCI-E x4, Intel® X550-AT
	<a href="#">AOC-STGS-i2T</a>		Standard LP, 2x 10GbE RJ45, PCI-E x4, Intel® X550-AT2
	<a href="#">AOC-STG-i4T</a>		Standard LP, 4x 10GbE RJ45, PCI-E x8, Intel® XL710-BM1
	<a href="#">AOC-STGN-i1S</a>		Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel® 82599EN
	<a href="#">AOC-STGN-i2S</a>		Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82599ES
	<a href="#">AOC-STG-i4S</a>		Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel® XL710-BM1
	<a href="#">AOC-S25G-i2S</a>		Standard LP, 2x 25GbE SFP28, PCI-E x8, Intel® XXV710 + Marvell Unionville
	<a href="#">AOC-MCX555A-ECAT</a>		Standard LP, 1x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5
	<a href="#">AOC-MCX556A-ECAT</a>	Standard LP, 2x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5	
<b>Front Bezel</b>	<a href="#">MCP-210-11601-0B</a>	1	Black Front Bezel for SC113, SC113M, SC116, SC119, SC119U, SC514 (No LED indicator support)
<b>Cable Management Arm</b>	<a href="#">MCP-290-00085-0N</a>	1	Supermicro Cable Management Arm for 1U Chassis
<b>Inlet Thermal Sensor</b>	<a href="#">MCP-280-00033-0N</a>	-	Universal Thermal sensor kit with 80cm I2C cable
<b>TPM security module (optional, not included)</b>	<a href="#">AOM-TPM-9670V-S</a>	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor
	<a href="#">AOM-TPM-9671V-S</a>		SPI capable TPM 1.2 with Infineon 9670 controller; vertical form factor
<b>Global Services &amp; Support</b>	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
<b>Software</b>	<a href="#">SFT-OOB-LIC</a> • <a href="#">eStore</a>	1	OOB Management Package (per node license)
<b>Software</b>	<a href="#">SFT-DCMS-Single</a>	1	DataCenter Management Package (per node license)