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 | Drive Options

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

Key Features

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

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/Cache

CPU	▪ Dual Socket P (LGA 3647) ▪ 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)‡, Dual UPI up to 10.4GT/s ▪ Support CPU TDP 70-165W*
Cores	▪ Up to 28 Cores
Note	* Certain high Frequency optimized CPU within 165Ws are not supported, for example, Intel Gold 6144 and 6146 are not supported on the system.
Note	‡ BIOS version 3.0a or above is required to support 2nd Gen. Intel® Xeon® Scalable processors

System Memory

Memory Capacity	▪ 12 DIMM slots ▪ Up to 3TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM ▪ Supports Intel® Optane™ DCPMM††
Memory Type	▪ 2933†/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)
Video	▪ 1 VGA port
DOM	▪ 2 SuperDOM (Disk on Module) ports

System BIOS

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, I²C, 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]**

BIOS Type	▪ AMI 32Mb SPI Flash ROM

Management

Software	▪ Intel® Node Manager ▪ IPMI 2.0 ▪ KVM with dedicated LAN ▪ SSM, SPM, SUM ▪ SuperDoctor® 5 ▪ Watch Dog
Power Configurations	▪ ACPI / APM Power Management

PC Health Monitoring

CPU	▪ Monitors for CPU Cores, Chipset Voltages, Memory. ▪ 4+1 Phase-switching voltage regulator
FAN	▪ Fans with tachometer monitoring ▪ Status monitor for speed control ▪ Pulse Width Modulated (PWM) fan connectors
Temperature	▪ Monitoring for CPU and chassis environment ▪ Thermal Control for fan connectors

Operating Environment

RoHS	▪ RoHS Compliant
Environmental Spec.	▪ Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) ▪ Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) ▪ Operating Relative Humidity: 8% to 90% (non-condensing) ▪ Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DDW-L	1	Super X11DDW-L Motherboard
	CSE-113AC2-605WB	1	1U Chassis
Backplane	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
Storage Cable	CBL-SAST-0507-01	2	MINI SAS HD-MINI SAS,6G,INT,80CM,SB,28AWG
Rubber Pad	MCP-150-00015-0B	2	Rubber pad, 3.0mm H, 10x10mm
Air Shroud	MCP-310-19019-0B	2	SC113/SC116/SC815/SC515, DP X11DDW Mylar air shroud
Air Block	MCP-320-00061-0B	1	CR foam for air block in SC113/SC116/SC815
Manual	MNL-1962-QRG	1	1029P-WT/WTR Quick Reference Guide
Riser Card (left)	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
Riser Card (right)	RSC-R1UW-E8R	1	1U RHS WIO Riser card with one PCI-E x8 slot
Heatsink w/ Retention	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
*** Power Supply**	PWS-605P-1H	1	1U 600W Multi Output Power Supply PMbus
*** Power Cord**	CBL-0160L	1	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
*** FAN**	FAN-0156L4	4	40x40x56 mm 13K-11K RPM Counter-rotating Fan,RoHS/REACH
*** Rail Set**	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
DVD-ROM / RW & Mounting Kit	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
Add-on card for additional M.2 NVMe	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
Intel VROC RAID Key	AOC-VROCINTMOD	1	Intel VROC, RAID 0, 1, 5, 10 (Intel SSD Only)
	AOC-VROCSTNMOD	1	Intel VROC Standard, RAID 0, 1, 10
	AOC-VROCPREMOD	1	Intel VROC Premium, RAID 0, 1, 5, 10
Additional Fan	FAN-0156L4	-	40x40x56 mm 13K-11K RPM Counter-rotating Fan
Storage Controller Card & Cables	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; 40x40x56 mm 13K-11K RPM Counter-rotating Fan
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0531		Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i & 2x CBL-SAST-0531		Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0531		Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA

CacheVault (for 3108)	BTR-CV3108-1U1	1	CacheVault for Broadcom 3108 with SuperCap mounting in 1U 40x56 fan tray
	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05		CacheVault for Broadcom 3108; SuperCap mounting bracket for PCI-E location
	BTR-TFM8G-LSICVM02 & MCP-240-00127-0N		CacheVault for Broadcom 3108; SuperCap mounting bracket for 2.5" HDD location
Network Card(s)	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel® i350AM2
	AOC-SGP-i4		Standard LP, 4x GbE RJ45, PCI-E x4, Intel® i350AM4
	AOC-STGS-i1T		Standard LP, 1x 10GbE RJ45, PCI-E x4, Intel® X550-AT
	AOC-STGS-i2T		Standard LP, 2x 10GbE RJ45, PCI-E x4, Intel® X550-AT2
	AOC-STG-i4T		Standard LP, 4x 10GBE RJ45, PCI-E x8, Intel® XL710-BM1
	AOC-STGN-i1S		Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel® 82598EN
	AOC-STGN-i2S		Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82598ES
	AOC-STG-i4S		Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel® XL710-BM1
	AOC-S25G-b2S		Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom® BCM57414
	AOC-MCX555A-ECAT		Standard LP, 1x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5
	AOC-MCX556A-ECAT		Standard LP, 2x 100GbE (and EDR IB) QSFP28, PCI-E x16, Mellanox® ConnectX-5
Front Bezel	MCP-210-11601-0B	1	Black Front Bezel for SC113, SC113M, SC116, SC119, SC119U, SC514 (No LED indicator support)
Cable Management Arm	MCP-290-00085-0N	1	Supermicro Cable Management Arm for 1U Chassis
TPM security module (optional, not included)	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor
	AOM-TPM-9671V		SPI capable TPM 1.2 with Infineon 9670 controller; vertical form factor
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)