

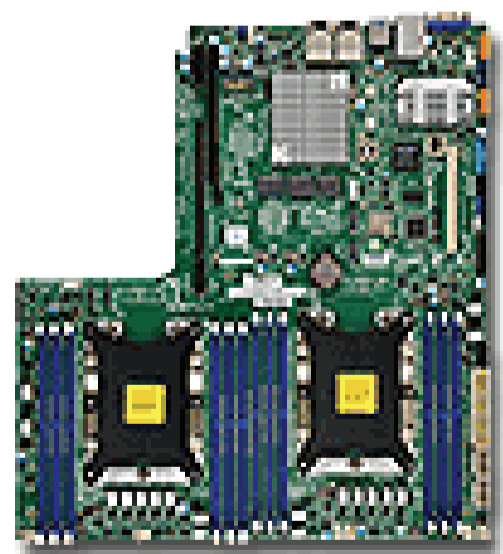
Key Features

- 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. 4 PCI-E 3.0 x8 (FHHL) slots,
2 PCI-E 3.0 x8 (LP) slots,
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 3.5" SAS/SATA drive bays
with SGPIO, 2 Fixed 3.5" drive bays
5. 1 Slim DVD-ROM drive bay (optional)
6. 2x 1GbE LAN ports via Intel C621
7. 1 VGA, 4 USB 3.0 (rear)
8. M.2 support
9. 1000W Redundant Power Supplies
Titanium Level (96% Efficiency)



Integrated Board



Super-X11DDW-L

Specifications

Product SKUs

- SYS-6029P-WTR**
 - SuperServer 6029P-WTR (**Black**)

Motherboard

Super X11DDW-L

Processor/Cache

- CPU**
 - Dual Socket P (LGA 3647)
 - 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[‡], Dual UPI up to 10.4GT/s
 - Support CPU TDP 70-205W

- Cores**
 - Up to 28 Cores

- Note**
 - [‡] 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 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 1GbE LAN ports from Intel 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**
 - 12 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

- 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

Chassis

- Form Factor**
 - 2U Rackmount
- Model**
 - CSE-825TQC-R1K03WB**

Dimensions and Weight

- Width**
 - 17.2" (437mm)
- Height**
 - 3.5" (89mm)
- Depth**
 - 25.5" (648mm)
- Gross Weight**
 - 62 lbs (28.1 kg)
- 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**
 - 4 PCI-E 3.0 x8 (FHHL) slots
 - 2 PCI-E 3.0 x8 (LP) slots
 - 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 3.5" SAS/SATA drive bays with SGPIO
- Internal**
 - 2 Fixed 3.5" drive bays

Peripheral Drives

- DVD-ROM**
 - 1 Slim DVD-ROM drive (optional)

Backplane

SAS/SATA HDD Backplane

System Cooling

- Fans**
 - 3 Heavy duty 8cm fans with PWM fan speed control

Power Supply (76mm Width)

1000W Redundant Power Supplies with PMBus

- Total Output Power**
 - 800W/1000W
- Dimension (W x H x L)**
 - 76 x 40 x 336 mm
- Input**
 - 100-127Vac / 12-9A / 50-60Hz
 - 200-240Vac / 7.2-6A / 50-60Hz
 - 200-240Vdc / 7.2-6A (for CCC only)
- +12V**
 - Max: 66.7A / Min: 0A (100-127Vac)
 - Max: 83A / Min: 0A (200-240Vac)
 - Max: 83A / Min: 0A (200-240Vdc)
- 5Vsb**
 - Max: 4A / Min: 0A
- Output Type**
 - 19 Pairs Gold Finger Connector

Certification  **Titanium Level [Test Report]**

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-825TQC-R1K03WB	1	2U Chassis
Backplane	BPN-SAS3-825TQ	1	8-port 2U SAS3 12Gbps TQ backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD
Storage Cable	CBL-SAST-0388L-02	2	MINI SAS-4 SATA,INT,75/75/90/90CM,90CM SB,30AWG
Rubber Pads	MCP-150-00017-0B	2	Rubber pad, 6.5mm H, 10x10mm
Chassis Part	MCP-240-00146-0N	1	2U WIO Half Length riser card bkt for SC825, 826, 213, 216,RoHS/REACH
Air Shroud	MCP-310-82602-0B	1	air shroud X11DDW + CSE-826B
Manual	MNL-2031-QRG	1	6029P-WTR Quick Reference Guide,HF,RoHS.
Riser Card (right)	RSC-R2UW-2E8R	1	2U RHS WIO Riser card with two PCI-E x8 slots
Riser Card (left)	RSC-R2UW-4E8	1	2U LHS WIO Riser card with four PCI-E x8 slots
Heatsink w/ Retention	SNK-P0068PS	2	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
* Power Supply	PWS-1K03A-1R	2	1U 1000W Redundant Power Supply Titanium W/PMbus 76x40x336mm,RoHS/REACH
* Power Cord	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* FAN	FAN-0181L4	3	80x80x38 mm, 9.4K RPM, Hot-swappable Middle Cooling Fan for X11 Purley Platform Newly Enabled 2U+ Chassis
* Rail Set	MCP-290-00053-0N	2	Rail set, quick/quick, default for 2,3U 17.2"W

- Notes:
- Parts with * come with the chassis
 - 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
Optional Upgrade for 2U LHS WIO Riser	RSC-R2UW-2E8E16+	1	2U LHS WIO Riser card with 1 PCI-E x16 double width + 2 PCI-E x8 slots
	Or RSC-W2-66	1	2U LHS WIO Riser card with 2 PCI-E x16 double width slots
3.5" to 2.5" Converter Tray	MCP-220-00043-0N	-	Black Hot-swap Gen-4 2.5" to 3.5" HDD tray
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
Internal 2.5" HDD Tray (COM slot)	MCP-220-00023-01	1	Black USB dummy tray support 1x 2.5" slim HDD
Internal 2.5" HDD Tray (DVD Slot)	MCP-290-00036-0B	1	Black DVD dummy tray support 1x 2.5" slim HDD
Cable for internal HDD	CBL-SAST-0624	2	SATA,INT,ROUND,ST-ST,70CM,30AWG
	CBL-0289L	1	Y split, big 4 pin to two RA SATA power extension 30cm, 20AWG
Add-on card for internal M.2 NVMe	AOC-SLG3-2M2	-	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		Intel VROC Standard, RAID 0, 1, 10
	AOC-VROCPREMOD		Intel VROC Premium, RAID 0, 1, 5, 10
Storage Controller Card(s) & Cables(s)	AOM-S3108M-H8 & 2x CBL-SAST-0699	-	Supermicro LP, 8 internal ports (12Gb/s) SAS Mezzanine; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0699		Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i & 2x CBL-SAST-0699		Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0699		Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
CacheVault (for 3108)	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 (Installed in the fixed 3.5" bays)
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® 82599EN
	AOC-STGN-i2S		Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82599ES
	AOC-STG-i4S		Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel® XL710-BM1
	AOC-S25G-i2S		Standard LP, 2x 25GbE SFP28, PCI-E x8, Intel® XXV710 + Marvell Unionville
	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-210-82503-0B	1	Black SC825 front bezel
Cable Management Arm	MCP-290-00073-0N & MCP-120-82503-0N	1	Supermicro Cable Management Arm for 2U, 3U and 4U chassis Cable arm adapter for SC825,213,829H,847B (MCP-290-00073-0N required),HF,RoHS/REACH,PBF
TPM security module (optional, not included)	AOM-TPM-9670V AOM-TPM-9671V	1	SPI capable TPM 2.0 with Infineon 9670 controller; vertical form factor 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)
Note: For special low power setup SKU only (3 optional parts below), contact our sales for details			
Power Supply Dummy Cover	CSE-PT0130L	-	Power Supply Dummy Cover
Power Supply	PWS-802A-1R	-	800W 100-240Vac/47-63Hz, and DC240 input
Fan	FAN-0126L4	-	80x80x38 mm 7K RPM Chassis Middle Fan