



Integrated Board



Super X11SPW-TF

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

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

Key Features

**Multi-Access Edge Computing (MEC)
Universal Customer Premise
Equipment (uCPE)
Network Function Virtualization
(NFV)
Artificial Intelligence (AI) on Edge,
Machine Learning (ML)
Industrial Automation, Retail, Smart
Medical Expert Systems**

1. Single Socket P (LGA 3647) supports 2nd Gen Intel® Xeon® Scalable processor †
2. 6 DIMMs; up to 1.5TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM
3. 2 PCI-E 3.0 x16 or 2 PCI-E 3.0 x8 + 1 PCI-E 3.0 x16 (FHFL) slots †
4. 4 Internal 2.5" drive bays
5. M.2: 1 M-Key 2280/22110 PCI-E 3.0 x4 and SATA
6. 2x 10GBase-T ports with Intel X722 + X557
7. 1 VGA, 1 COM, 4 USB 3.0, 2 USB 2.0
8. 600W Multi-output Gold Level Power Supply

Product SKUs

- **SYS-E403-9P-FN2T** ■ SuperServer E403-9P-FN2T (Black)

Motherboard

Super X11SPW-TF

Processor

- **CPU** ■ Single Socket P (LGA 3647)
■ 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake-SP)[‡]
■ 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).

Operating Temperature: 0°C ~ 35°C (32°F ~ 95°F) for Cascade Lake-R CPUs above 165W TDP, please contact Supermicro Technical Support for additional information.

System Memory

- **Memory Capacity** ■ 6 DIMM slots
■ Up to 1.5TB 3DS ECC DDR4-2933MHz RDIMM/LRDIMM

- **Memory Type** ■ 2933/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM

On-Board Devices

- **Chipset** ■ System on Intel® C622 chipset

- **SATA** ■ Intel® C622 controller; RAID 0, 1, 5, 10

- **Network Controllers** ■ Dual 10GBase-T LAN with Intel® X722 + X557

- **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** ■ 4 SATA3 (6Gbps) ports

- **LAN** ■ 2 RJ45 10GBase-T LAN ports
■ 1 RJ45 Dedicated IPMI LAN port

- **USB** ■ 4 USB 3.0 ports (front)
■ 2 USB 2.0 ports (front)

- **Video** ■ 1 VGA port

- **Serial Port** ■ 1 COM port (front)

- **SuperDOM** ■ 2 SuperDOM (Disk on Module) ports with built-in power

System BIOS

- **BIOS Type** ■ AMI 32Mb SPI Flash ROM

Management

- **Software** ■ Intel® Node Manager
■ IPMI 2.0
■ KVM with dedicated LAN
■ NMI
■ SPM, SUM
■ SuperDoctor® 5
■ Watch Dog

- **Power Configurations** ■ ACPI Power Management
■ Power-on mode for AC power recovery

Chassis

- **Form Factor** ■ Box PC

- **Model** ■ CSE-E403iF

Dimensions and Weight

- **Height** ■ 4.3" (109mm)

- **Width** ■ 10.5" (267mm)

- **Depth** ■ 16" (406mm)

- **Package** ■ 26" (W) x 10.4" (H) x 16.4" (D)

- **Weight** ■ Gross Weight: 24 lbs (10.89 kg)
■ Net Weight: 18 lbs (8.16 kg)

- **Available Colors** ■ Black

Front Panel

- **Buttons** ■ Power On/Off button
■ System Reset button

- **LEDs** ■ Power LED
■ Hard drive activity LED
■ Network activity LEDs
■ System Information LED
■ Overheat LED

Expansion Slots

- **PCI-Express** ■ 2 PCI-E 3.0 x16 (FHFL) slots or
■ 2 PCI-E 3.0 x8, 1 PCI-E 3.0 x16 (FHFL) slots[†]

- **Note** ■ [†] See Manuals for settings on Expansion Card and BIOS

Drive Bays

- **Internal** ■ 4 Internal 2.5" drive bays

- **M.2** ■ M.2 Interface: PCI-E 3.0 x4 and SATA
■ Form Factor: 2280, 22110
■ Key: M-Key
■ Double Height Connector

System Cooling

- **Fans** ■ 3x 80x38mm PWM hot sw ap fans

Power Supply

600W AC multi output power supply w / PFC

- **AC Voltage** ■ 100-240 V, 50-60 Hz, 7.5-3.1 Amp

- **+5V** ■ 20 Amp

- **+5V standby** ■ 3 Amp

- **+12V** ■ 49 Amp

- **+3.3V** ■ 16 Amp

- **Certification**



Gold Certified
[Test Report]

Operating Environment / Compliance

- **RoHS** ■ RoHS Compliant

- **Environmental Spec.** ■ Operating Temperature:
0°C ~ 45°C (32°F ~ 113°F)
■ Non-operating Temperature:
-40°C to 70°C (-40°F to 158°F)
■ Operating Relative Humidity:
8% to 90% (non-condensing)
■ Non-operating Relative Humidity:
5% to 95% (non-condensing)

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-MBD-X11SPW-TF	1	Super MBD-X11SPW-TF Motherboard
	CSE-E403iF	1	Black 2.5U Embedded Server Box W/O PWS
Riser Card	AOM-SDW-B16X2-P	1	AOM-SDW-B16X2, Dual PCIE x16 slot WIO Riser Card for Intel FlexRAN project,RoHS
Cable 1	CBL-0082L	2	Y split , big 4 pin to two RA SATA power extension 15cm, 18AWG
Cable 2	CBL-0206L	4	CBL-SAST-0641 / 4 / SATA,INT,ROUND,ST-RA,45CM,30AWG
Cable 3	CBL-CUSB-0832	1	USB 3.0(F) Type A 2x to USB3.0 20pin,73CM,30AWG
Cooling Fan	FAN-0200L4	3	80x80x38 mm, 13.5K RPM Cooling Fan for E403iF
Cooling Fan Accessory	MCP-320-40302-0N	1	Fan bracket with extension cable for 3x 8038 hot-sw ap,E403
Heat Sink	SNK-P0071VS	1	1U Proprietary Passive CPU Heat Sink (124 mm Long) for SYS-2029BZ-HNR Series Servers (X11 2U4N 3UPI Big Twin)
Air Shroud 1	MCP-310-40301-0B	1	Air shroud for CSE-E403iF+ X11SPW
Power Supply	PWS-601-1H	1	1U 600/680W MULTI OUTPUT PWS 80+ GOLD
Part 1	MCP-260-00078-0B	1	1U I/O shield for X11 Server MB with 5X5mm vent hole and EMI Gasket, Black
* Cable 4	CBL-0156L	1	CBL,FRONT CNTL,16 TO 16 PIN,RA,RND TUBE,40CM,28AWG
* Tray	MCP-220-40301-0N	4	Fixed HDD tray 4x 2.5in for CSE-E403iF
* Front Panel 1	FPB-FP826-D	1	Front control board Dual color LED(FP826-D)forSC826,213,216,219
* Front Panel 2	TB826	1	Front panel adaptor board (TB826) forSC826,213,216,219
* Part 2	MCP-240-40301-0B	1	Black riser card bracket 3x slot for WIO M, CSE-E403iF
* Part 3	MCP-260-40301-0B	1	I/O Shield support 2x USB for CSE-E403iF

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
Network Card(s)	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350-AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STGN-i2S	-	Standard Lp, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STGF-i2S	-	Standard Lp, 2x 10GbE SFP+, PCI-E x8, Intel X710-BM2
	AOC-STG-B4S	-	Standard Lp, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGS-i2T	-	Standard Lp, 2x 10GbE RJ45, PCI-E x8, Intel X550-AT2
	AOC-S25G-b2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom BCM57414
	AOC-S25G-m2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX