



Integrated Board



X11SDV-8C-TP8F

**Views: | [Angled View](#) | [Top View](#) |
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Key Applications / Features

**Network Security Appliance
Software Defined WAN (SD-WAN)
vCPE controller box
NFV Edge Computing Server
Virtualization Server
IoT Edge Computing**

1. Intel® Xeon® processor D-2146NT, 8-Core, 16 Threads, 80W
2. 2 Hot-swap 2.5" drive bays
3. 1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0 x8 slot
4. Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2666Mz; in 4 DIMM slots
5. 4x 1GbE, 2x 10GBase-T, 2x 10G SFP+, and dedicated LAN for IPMI 2.0
6. 1 VGA, 2 USB 3.0
7. 3x 40x28mm 4-PIN PWM fans
8. 300W redundant power supplies
9. Built in Intel QAT up to 40Gbps Crypto/Compression

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

Product SKUs

- **SYS-5019D-RN8TP**
- SuperServer 5019D-RN8TP (**Black**)

Motherboard

Super X11SDV-8C-TP8F

Processor

- **CPU**
- Intel® Xeon® processor D-2146NT, CPU TDP support 80W
- **Cores / Cache**
- 8 Cores, 16 Threads

System Memory

- **Memory Capacity**
- Up to 512GB DDR4 ECC LRDIMM
- Up to 256GB DDR4 ECC RDIMM
- 4 DIMM slots
- **Memory Type**
- 2666/2400/2133MHz ECC DDR4 ECC LRDIMM and ECC RDIMM
- **DIMM Sizes**
- 128GB, 64GB, 32GB, 16GB
- **Memory Voltage**
- 1.2 V
- **Error Detection**
- Corrects single-bit errors
- Detects double-bit errors (using ECC memory)

On-Board Devices

- **SATA**
- SATA3 (6Gbps) ports via SoC controller
- **Network Controllers**
- Dual 10G SFP+ via SoC
- Quad 1GbE with Intel I350-AM4
- Dual 10GBase-T with Intel X557
- **IPMI**
- Support for Intelligent Platform Management Interface v.2.0
- IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- **Graphics**
- Aspeed AST2500 BMC

Input / Output

- **SATA**
- 4 SATA3 (6Gbps) ports (SATA/SAS HDD/SSD)
- **LAN**
- 2 10G SFP+ ports
- 4 RJ45 1GbE LAN ports
- 2 RJ45 10GBase-T LAN ports
- 1 RJ45 Dedicated IPMI LAN port
- **USB**
- 2 USB 3.0 ports (rear)
- **VGA**
- 1 VGA port
- **Others**
- TPM 2.0 header

Chassis

- **Form Factor**
- 1U Rackmount
- **Model**
- **CSE-506-R300**

Dimensions and Weight

- **Height**
- 1.7" (43mm) / 6.1" (155mm) - pkg.
- **Width**
- 17.2" (437mm) / 25.8" (655mm) - pkg.
- **Depth**
- 9.8" (249mm) / 18.3" (465mm) - pkg.
- **Weight**
- Net Weight: 8 lbs (3.63 kg)
- Gross Weight: 12 lbs (5.44 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
- Information LED (temp., status)

Expansion Slots

- **PCI-E**
- 1 PCI-E 3.0 x8 slot
- 1 Mini-PCI-E with mSATA Support
- **M.2**
- 1 M.2 slot M key for SSD, 2242/8
- 1 M.2 B Key for SSD/ WAN card

Drive Bays

- **Hot-swap**
- 2 Hot-swap 2.5" drive bays

System Cooling

- **Fans**
- 2x 40x28mm 4-PIN PWM fans

Power Supply

300W Redundant Power Supplies

- **AC Voltage**
- 100 - 240V, 50-60Hz
- **+5V**
- 20 Amp (max.)
- **+5V standby**
- 3 Amp (max.)
- **+12V**
- 25 Amp (max.)
- 1 Amp (min.) (100Vac-240Vac)
- **-12V**
- 0.5 Amp (max.)
- **+3.3V**
- 20 Amp (max.)

Certification



Gold Certified
(Certification Pending)

System BIOS

- **BIOS Type**
- 128Mb SPI Flash with AMI BIOS
- **BIOS Features**
- PCI 3.0
- ACPI 5.0
- USB Keyboard support
- Hardware BIOS Virus protection
- SMBIOS 2.8
- UEFI 2.4
- RTC (Real Time Clock) Wakeup

Operating Environment / Compliance

- **RoHS**
- RoHS Compliant
- **Environmental Spec.**
- Operating Temperature: 0°C to 35°C (32°F to 95°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-X11SDV-8C-TP8F	1	Super X11SDV-8C-TP8F Motherboard
	CSE-506-R300	1	1U Chassis
FAN 1	FAN-0065L4	3	4028mm 13K RPM 4-PIN PWM FAN for SC813MF, SC113M
Fan Holder	MCP-320-81302-0B	3	Optional fan tray for one 40x28mm fan in SC813T/SC813LT-single PWS (Fan tray only)
Power Supply	PWS-301R-1R	1	1 set of 300W Redundant Power supplies,RoHS

Optional Parts List

	Part Number	Qty	Description
Rail kit	MCP-290-50404-0N	1	SC504 / 505 / 510 Fix Rail kit Set
Riser Card	RSC-RR1U-E8	1	Note: Server can only support Low Profile Added-On-Card
	RSC-RR1U-E16	1	
Riser Card Bracket	MCP-240-00091-0N	2	1U universal riser card bracket for standard chassis,HF,RoHS/REACH,PBF
SuperDOM	-	-	Supermicro SATA DOM Solutions [Details]