

SuperServer 6019U-TRT (Complete System Only)



Integrated Board



X11DPU

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

Key Features

**Virtualization
Cloud Computing
High End Enterprise Server**

1. Dual Socket P (LGA 3647) support
2nd Gen Intel® Xeon® Scalable
processors (Cascade Lake/Skylake)[‡]
2. 24 DIMMs; up to 6TB 3DS ECC
DDR4-2933MHz[†] RDIMM/LRDIMM,
Supports Intel® Optane™ DCPMM^{††}
3. 2 PCI-E 3.0 x16 slots (FH, 10.5" L),
2 PCI-E 3.0 x8 slots (1 LP, 1 internal LP)
4. 2x 10GBase-T Ethernet ports
5. 4 Hot-swap 3.5" Drive Bays;
Optional M.2 NVMe and SATA3 ports
6. 8 Heavy duty fans w/ optimal
fan speed control
7. 750W Redundant Power Supplies
Platinum Level (94%+)

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 2 CPUs and 4 DIMMs).

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

Specifications

Product SKUs

- SYS-6019U-TRT** ■ SuperServer 6019U-TRT (**Black**)

Motherboard

Super X11DPU

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).

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**
 - 24 DIMM slots
 - Up to 6TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
 - Supports Intel® Optane™ DCPMM^{††}

- Memory Type**
 - 2933[†]/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
 - 2666 ECC DDR4 NVDIMM

- 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 Connectivity** ■ 2 10GBase-T ports via AOC-UR-I2XT (Intel® X540)
- 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
- LAN**
 - 2 RJ45 10GBase-T Ethernet ports
 - 1 RJ45 Dedicated IPMI LAN port

Chassis

- Form Factor** ■ 1U Rackmount
- Model** ■ **CSE-819UTS-R751P-T**

Dimensions and Weight

- Height** ■ 1.7" (43mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 29.7" (754mm)
- Weight**
 - Net Weight: 26 lbs (11.8 kg)
 - Gross Weight: 41 lbs (18.6 kg)
- Available Color** ■ Black

Front Panel

- Buttons**
 - Power On/Off button
 - System Reset button
- LEDs**
 - Power LED
 - Hard drive activity LED
 - Network activity LEDs
 - System Overheat LED / Fan fail LED / UID LED

Expansion Slots

- PCI-Express**
 - 2 PCI-E 3.0 x16 (Full-height, 10.5" L)
 - 2 PCI-E 3.0 x8 (1 LP, 1 internal LP)

(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 / Storage

- Hot-swap**
 - 4 Hot-swap 3.5" drive bays
 - 4 SATA3 (optional SAS3 via AOC)
- M.2**
 - 1 M.2 PCI-E 3.0 x4 M-Key NVMe or 1 M.2 M-Key SATA3 (2240/2260/2280/22110) via optional riser card (see optional parts list)
 - 2 M.2 PCI-E 3.0 x4 M-Key NVMe (2260/2280/22110) via optional add-on card AOC-SLG3-2M2

System Cooling

- Fans** ■ 8 Heavy duty fans with optimal fan speed control
- Air Shroud** ■ 1 Air Shroud

Power Supply


- 750W Redundant AC-DC Power Supplies, +12V/+12Vsb output
- AC Input**
 - 100-127Vac, 50-60Hz
 - 200-240Vac, 50-60Hz

| | |
|--------------------|--|
| USB | <ul style="list-style-type: none"> 3 USB 3.0 ports (2 rear, 1 Type A) |
| Video | <ul style="list-style-type: none"> 2 VGA ports (1 rear, 1 onboard) |
| Serial Port | <ul style="list-style-type: none"> 1 Serial header |
| DOM | <ul style="list-style-type: none"> 2 SATA <u>DOM</u> (Disk on Module) support with embedded power |

| System BIOS | |
|------------------|--|
| BIOS Type | <ul style="list-style-type: none"> AMI 32Mb SPI Flash ROM |

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

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

| | |
|----------------------|--|
| +12V | <ul style="list-style-type: none"> Max: 62.5A & Min: 0A (100Vac-127Vac) Max: 62.5A & Min: 0A (200Vac-240Vac) |
| 12V SB | <ul style="list-style-type: none"> Max: 2.1A Min: 0A |
| Certification |  Platinum Level [Test Report] |

| Operating Environment | |
|----------------------------|---|
| RoHS | <ul style="list-style-type: none"> RoHS Compliant |
| Environmental Spec. | <ul style="list-style-type: none"> Operating Temperature: 10°C ~ 35°C (50°F ~ 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

Parts List - (Items Included)

| | Part Number | Qty | Description |
|------------------------------|--------------------|-----|---|
| Motherboard / Chassis | MBD-X11DPU | 1 | Super X11DPU Motherboard |
| | CSE-819UTS-R751P-T | 1 | 1U Chassis |
| Add-on Card / Module | AOC-UR-I2XT | 1 | 1U Ultra Riser based on Intel X540 controller with 2 10Gbase-T ports and 1 internal PCI-E x8 3.0 slot |
| Backplane | BPN-SAS3-815TQ | 1 | 1U 4-Port 12Gbps Backplane Support 4x3.5 |
| Cable 1 | CBL-PWEX-0702 | 1 | PWEX,2X4F/P4.2 TO 1X4F/P5.08/RA,32CM,18AWG,YEL,BLK*2,RED |
| Cable 2 | CBL-SAST-0654 | 1 | MINI SAS(RA-RS EXIT)-4 SATA,INT,52/42/41/51CM,52CM SB,30AWG |
| FAN 1 | FAN-0101L4 | 8 | 40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808 |
| Rear Window | MCP-240-81909-0N | 1 | Ultra I/O Rear Window for SC819U, 119U-T tool-less chassis(i2XT) |
| Air Shroud | MCP-310-81910-0N | 1 | Plastic air shroud for SC819U, 119U (X11 24DIMM, left side) |
| Air Shroud | MCP-310-81911-0N | 1 | Plastic air shroud for SC819U, 119U (X11 24DIMM, right side) |
| Riser Card | RSC-R1UW-2E16 | 1 | 1U LHS WIO Riser card with two PCI-E x16 slots |
| Riser Card | RSC-R1UW-E8R | 1 | 1U RHS WIO Riser card with one PCI-E x8 slot |
| Heatsink / Retention | SNK-P0067PS | 2 | 1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism |
| * Power Supply | PWS-751P-1R | 2 | 1U 750W Redundant Platinum Single Output Power Supply w/Pmbus W73.5xH40xL203mm,RoHS/REACH |

Notes:

1. Parts with * are inside 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 |
|---|---|-----|--|
| Ultra Platform CPRS Power Supply | PWS-1K02A-1R | 2 | 1U 800/1000W Redundant Titanium PSU CRPS 73.5x203x40mm |
| | PWS-1K22A-1R | 2 | 1U 1200W/800W Redundant Titanium PSU CRPS 73.5x203x40mm |
| | PWS-1K62A-1R | 2 | 1U 1000W/1600W Redundant Titanium PSU CRPS |
| | PWS-1K30D-1R | 2 | 73.5x203x40mm |
| | CBL-PWEX-0710-JP | 2 | 1U 1300W -48Vdc Redundant PSU -48V DC Input PSU 400cm Cable, Positronic CBD Connector |
| Add-on card for internal 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 |
| DVD-ROM / DVD-RW | DVM-TEAC-DVD-SBT4 DVM-TEAC-DVDRW-SBT4 DVM-PLDS-DVDRW-SBT5 | 1 | SLIM DVD-ROM / DVD-RW SATA DRIVE |
| DVD-ROM / DVD-RW Installation Kit | MCP-220-81502-0N | 1 | Slim SATA DVD kit |
| Hot-Swap 2.5" Slim HDD Tray (FDD Slot) | MCP-220-81504-0N & CBL-0210L | 1 | 12G 2.5" Hot-swap Slim Floppy Size Drive Kit w/Status LED |
| Hot-Swap 2.5" Slim HDD Tray (DVD Slot) | MCP-220-81506-0N & CBL-0210L | 1 | 12G 2.5" Hot-swap Slim DVD Size Drive Kit with Status LED |
| USB Port Tray (FDD Slot) | MCP-220-00129-0B | 1 | Black 2x USB 3.0 port tray in slim FDD bay |

| | | | |
|---|--|----------------|--|
| Internal Drive Tray for Two 2.5" Drives | MCP-120-82916-0N | 1 | Internal drive plate Supports Two 2.5" Drive, PCI slots Power cable for Two internal 2.5" drives |
| | CBL-PWEX-0650 CBL-0080L | 1 2 | |
| | CBL-0484L Or CBL-SAST-0654 Or CBL-SAST-0948 | 2 1 1 | |
| Hot-swap 3.5" to 2.5" SATA/SAS Drive Trays | MCP-220-00118-0B | 1~4 | Tool-less black hot-swap 3.5-to-2.5 converter HDD drive tray (Red tab) |
| | MCP-220-00043-0N | | Black hot-swap 3.5-to-2.5 converter HDD drive tray (Red tab) |
| 2 Internal M.2 slots (1 SATA, 1 NVMe) | RSC-UMR-8 & CBL-SAST-0538 & FST-SCRW-0074L | 1 | 1U Ultra RHS Riser Card with 1 PCIE/SATA Hybrid M.2 & 1 PCIE X8 |
| Storage Control Card and Cable(s) | AOC-S3008L-L8e & 1x CBL-SAST-0948 | 1 | Std LP, 8 internal ports, 12Gb/s per port- Gen3, 122HDD, HBA; MINI SAS HD,12G,INT,60CM,30AWG |
| | AOC-S3008L-L8i & 1x CBL-SAST-0948 | | Std LP, 8 internal ports, 12Gb/s per port- Gen3, 63HDD, RAID 0, 1, 1E; MINI SAS HD,12G,INT,60CM,30AWG |
| | AOC-S3108L-H8iR & 1x CBL-SAST-0948 | | Std LP, 8 internal ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60; MINI SAS HD,12G,INT,60CM,30AWG |
| | AOC-S3108L-H8iR-16DD & 1x CBL-SAST-0948 | | Std LP, 8 internal ports, 12Gb/s per port- Gen3, 16HDD, RAID 0, 1, 5, 6, 10, 50, 60; MINI SAS HD,12G,INT,60CM,30AWG |
| Network Card(s) | AOC-SGP-i2/4 | - | Standard LP, 2/4x GbE RJ45, PCI-E x4, Intel i350 |
| | AOC-STGN-i1S/i2S | - | Standard LP, 1/2x 10GbE SFP+, PCI-E x8, Intel 82599EN |
| | AOC-STGF-i2S | - | Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel XL710-BM2 |
| | AOC-STG-i4S | - | Standard LP, 4x 10GbE SFP+, PCI-E x8, Intel XL710 |
| | AOC-STG-b4S | - | Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S |
| | AOC-STG-i2T | - | Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540 |
| | AOC-STGS-i1/2T | - | Standard LP, 1/2x 10GbE RJ45, PCI-E x8, Intel X550 |
| | AOC-STG-i4T | - | Standard LP, 4x 10GbE RJ45, PCI-E x8, Intel XL710 |
| | AOC-STG-i2 | - | Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB |
| | AOC-S25G-m2S | - | Standard LP, 2x 25GbE SFP28, Mellanox ConnectX-4 LX EN |
| | AOC-S40G-i2Q | - | Standard LP 2-port 40GbE controller, Intel Fortville XL710 |
| | More | - | AOC Compatibility Matrix |
| | CacheVault(s) | BTR-CV3108-1U1 | - |
| BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05 | | - | 40x56 fan tray CacheVault for Broadcom 3108; Supercap mounting bracket for PCI-E location |
| 1U Cable Management Arm | MCP-290-00152-0N | 1 | 1U Supermicro Cable Management Arm 2nd Gen |
| TPM security module | AOM-TPM-9670H-S | 1 | TCG 2.0 compliant trusted platform module (TPM), Horizontal FF |
| | AOM-TPM-9671H-S | 1 | TCG 1.2 compliant trusted platform module (TPM), Horizontal FF |
| 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 |
| 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) |