

# Ultra A+ Server AS -2024US-TNR

2U DP Ultra with up to 12 hot-swap 3.5" NVMe/SAS/SATA bays and 4 PCIe 4.0 slots



## Key Applications

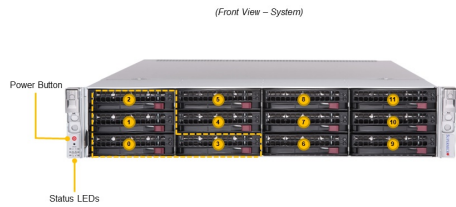
Virtualization, Cloud Computing, High End Enterprise Server, Hyperconverged Storage, Flexible Networking Options,

## Key Features

- Dual AMD EPYC™ 7003/7002 Series Processors  
(The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer);
- 8TB Registered ECC DDR4 3200MHz SDRAM in 32 DIMMs;
- Must bundle with optional Ultra Riser Card
  - 1 PCIe 4.0 x16 (FH/10.5" L) slot
  - 1 PCIe 4.0 x16 (FH, 9.5" L) slot
  - 1 PCIe 4.0 x16 (LP) slot,
  - 1 PCIe 4.0 x16 (FH, 10.5" L) slot, 1 PCIe 4.0 x8 (internal proprietary LP in x16) slot\*
  - 1 PCIe 4.0 x8 FH, 9.5" L (in x16) slot (with AOC-2UR668G4 this slot will become PCIe 4.0 x16);
- 12 hot-swap 3.5" Drive Bays:
  - 12 SATA3 by default
  - or 8 SATA3 + 4 NVMe via optional tray;

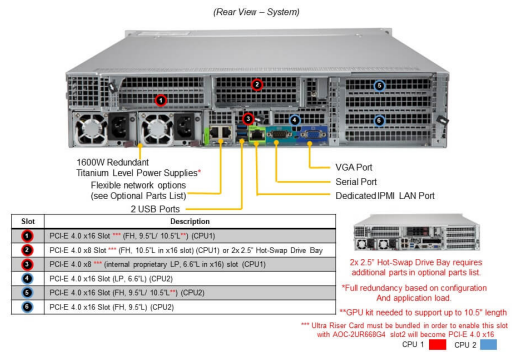


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|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor              | 2U Rackmount<br>Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46")<br>Package: 626 x 261 x 1153mm (24.65" x 10.28" x 45.39")                                                                                                                                                                                                                                                                                                                                                                                                        |
| Processor                | Dual Socket SP3<br>AMD EPYC™ 7002/7003 Series Processors                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| System Memory            | Slot Count: 32 DIMM slots<br>Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Drive Bays Configuration | Default: Total 12 bays <ul style="list-style-type: none"> <li>• 12 front hot-swap 3.5" SATA drive bays</li> </ul> Option A: Total 12 bays <ul style="list-style-type: none"> <li>• 8 front hot-swap 3.5" SATA drive bays</li> <li>• 4 front hot-swap 2.5" NVMe* drive bays</li> </ul> Option B: Total 12 bays <ul style="list-style-type: none"> <li>• 12 front hot-swap 3.5" SAS* drive bays</li> </ul> (*NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details) |
| Expansion Slots          | Default <ul style="list-style-type: none"> <li>• 2 PCIe 4.0 x16 FH/10.5"L slots</li> <li>• 1 PCIe 4.0 x16 LP slot</li> <li>• 1 PCIe 4.0 x16 FH/9.5"L slot</li> <li>• 1 PCIe 4.0 x8 (in x16) FH/9.5"L slot</li> <li>• 1 PCIe 4.0 x8 internal slot</li> </ul>                                                                                                                                                                                                                                                                          |
| On-Board Devices         | Ultra Riser Card                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Input / Output           | LAN: 1 RJ45 1 GbE Dedicated BMC LAN port<br>USB: 3 USB 3.0 Type-A ports (Rear)<br>Video: 1 VGA port<br>Serial: 1 port<br>DOM: 2 SATA <a href="#">DOM</a> (Disk on Module) ports<br>TPM: 1 TPM header                                                                                                                                                                                                                                                                                                                                 |



| Slot  | Description                               |
|-------|-------------------------------------------|
| 1-12  | 3.5" Hot-Swap SATA3/SAS3/NVMe™ Drive Bays |
| 13-16 | 3.5" Hot-Swap SATA3/SAS3* Drive Bays      |

\*SAS3 support requires additional parts in optional parts list  
 \*\*NVMe support requires additional parts in optional parts list



| Slot | Description                                                                    |
|------|--------------------------------------------------------------------------------|
| 1    | PCI-E 4.0 x16 Slot (FH, 9.5L/10.5L) (CPU1)                                     |
| 2    | PCI-E 4.0 x8 Slot (FH, 10.5L in x16 slot) (CPU1) or 2x 2.5" Hot-Swap Drive Bay |
| 3    | PCI-E 4.0 x8 (internal proprietary LP, 6.6L in x16) slot (CPU1)                |
| 4    | PCI-E 4.0 x16 Slot (LP, 6.6L) (CPU2)                                           |
| 5    | PCI-E 4.0 x16 Slot (FH, 9.5L/10.5L) (CPU2)                                     |
| 6    | PCI-E 4.0 x16 Slot (FH, 9.5L) (CPU2)                                           |

2x 2.5" Hot-Swap Drive Bay requires additional parts in optional parts list.

\*Full redundancy based on configuration And application load

\*\*GPU kit needed to support up to 10.5" length  
 \*\*\* Ultra Risar Card must be bundled in order to enable this slot with AOC-2UR68G4 slot2 will become PCI-E 4.0 x16

|                       |                                                                                                                                                                                                                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Cooling        | Fans: Up to 4 heavy duty fans with optimal fan speed control                                                                                                                                                                                                                                  |
| Power Supply          | 2x 1600W Redundant (1 + 1) Titanium Level (96%) power supplies                                                                                                                                                                                                                                |
| System BIOS           | BIOS Type: AMI 32MB SPI Flash EEPROM<br>BIOS Features: Plug and Play (PnP)<br>USB Keyboard support<br>ACPI 5.1<br>DMI 2.3<br>PCI 2.2<br>SMBIOS 3.1.1                                                                                                                                          |
| Management            | SuperCloud Composer® (SCC); Supermicro Server Manager (SSM); Supermicro Update Manager (SUM);<br>Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); OOB<br>Management Package (SFT-OOB-LIC ); SuperServer Automation Assistant (SAA) New! |
| PC Health Monitoring  | CPU: Monitors for CPU Cores, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages.<br>Fan: Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control<br>Temperature: CPU thermal trip support<br>Monitoring for CPU and chassis environment      |
| Dimensions and Weight | Weight: Gross Weight: 72 lbs (16.4 kg)<br>Net Weight: 36 lbs (16.4 kg)<br>Available Color: N/A                                                                                                                                                                                                |
| Operating Environment | RoHS Compliant<br>Operating Temperature: 10°C to 35°C (50°F to 95°F)<br>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)<br>Operating Relative Humidity: 8% to 90% (non-condensing)<br>Non-operating Relative Humidity: 5% to 95% (non-condensing)                                   |
| Motherboard           | <a href="#">Super H12DSU-iN</a>                                                                                                                                                                                                                                                               |
| Chassis               | CSE-829U2TS-R1K62P3-T                                                                                                                                                                                                                                                                         |