

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;



Form Factor	2U Rackmount Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Package: 626 x 261 x 1153mm (24.65" x 10.28" x 45.39")
Processor	Dual Socket SP3 AMD EPYC™ 7002/7003 Series Processors
System Memory	Slot Count: 32 DIMM slots 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"> • 12 front hot-swap 3.5" SATA drive bays Option A: Total 12 bays <ul style="list-style-type: none"> • 8 front hot-swap 3.5" SATA drive bays • 4 front hot-swap 2.5" NVMe* drive bays Option B: Total 12 bays <ul style="list-style-type: none"> • 12 front hot-swap 3.5" SAS* drive bays (*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"> • 2 PCIe 4.0 x16 FH/10.5"L slots • 1 PCIe 4.0 x16 LP slot • 1 PCIe 4.0 x16 FH/9.5"L slot • 1 PCIe 4.0 x8 (in x16) FH/9.5"L slot • 1 PCIe 4.0 x8 internal slot
On-Board Devices	Ultra Riser Card
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 3 USB 3.0 Type-A ports(Rear) Video: 1 VGA port Serial: 1 port DOM: 2 SATA DOM (Disk on Module) ports TPM: 1 TPM header

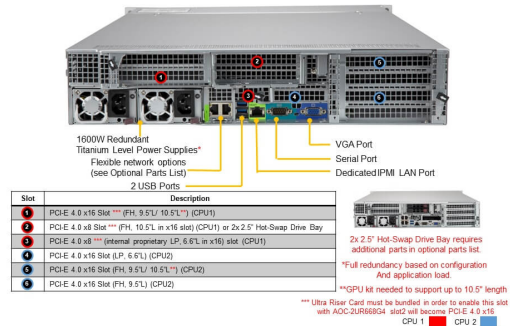
(Front View – System)



Slot	Description
1-11	3.5" Hot-Swap SATA/SAS/NVMe ^{***} Drive Bays
12-13	3.5" Hot-Swap SATA/SAS ^{**} Drive Bays

^{**}SAS3 support requires additional parts in optional parts list
^{***}NVMe support requires additional parts in optional parts list

(Rear View – System)



Slot	Description
1	PCI-E 4.0 x16 Slot ^{***} (FH, 9.5"U, 10.5" L) (CPU1)
2	PCI-E 4.0 x8 Slot ^{***} (FH, 10.5" L in x16 slot) (CPU1) or 2x 2.5" Hot-Swap Drive Bay
3	PCI-E 4.0 x8 Slot ^{***} (internal proprietary LP, 6.6" L in x16 slot) (CPU1)
4	PCI-E 4.0 x16 Slot (LP, 6.6" L) (CPU2)
5	PCI-E 4.0 x16 Slot (FH, 9.5"U, 10.5" L) (CPU2)
6	PCI-E 4.0 x16 Slot (FH, 9.5"U, 10.5" L) (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-2UR688G4 slot2 will become PCI-E 4.0 x16
 CPU 1 CPU 2

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 BIOS Features: Plug and Play (PnP) USB Keyboard support ACPI 5.1 DMI 2.3 PCI 2.2 SMBIOS 3.1.1
Management	SuperCloud Composer [®] ; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor [®] 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); OOB 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. FAN: Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: CPU thermal trip support Monitoring for CPU and chassis environment
Dimensions and Weight	Weight: Gross Weight: 72 lbs (16.4 kg) Net Weight: 36 lbs (16.4 kg) Available Color: N/A
Operating Environment	RoHS Compliant Operating Temperature: 10°C to 35°C (50°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)
Motherboard	Super H12DSU-iN
Chassis	CSE-829U2TS-R1K62P3-T