

Ultra A+ Server AS -2124US-TNRP

2U Ultra with 24 NVMe bays and dual 10GbE + dual 10G SFP+

Key Applications

Virtualization, Cloud Computing, High End Enterprise Server, Hyperconverged Storage,

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;
- 1 PCIe 4.0 x16 slot (FH, 9.5" L)
Additional PCIe slots may available if using the 24 SAS Kits solution (Please contact SMC for more information);
- 24 Hot-swap 2.5" NVMe drive bays
Up to 24 SATA/SAS drive support via optional SAS kit;



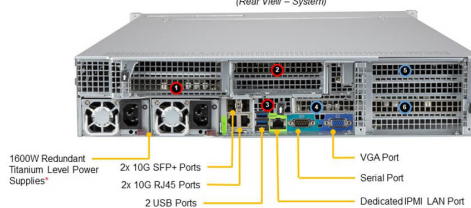
Form Factor	2U Rackmount Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Package: 626 x 261 x 1153mm (24.65" x 10.28" x 45.39")
Processor	Dual Socket SP3 AMD EPYC™ 7002/7003 Series Processors
System Memory	Slot Count: 32 DIMM slots Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM
Drive Bays Configuration	Default: Total 24 bays <ul style="list-style-type: none"> • 24 front hot-swap 2.5" NVMe drive bays Option A: Total 24 bays <ul style="list-style-type: none"> • 24 front hot-swap 2.5" SAS*/SATA* drive bays (*SAS/SATA 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"> • 1 PCIe 4.0 x16 FH, 9.5"L slot
On-Board Devices	Network Connectivity: 2 RJ45 10GbE 2 SFP+ 10GbE IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port 2 RJ45 10 GBASE-T LAN ports 2 SFP+ 10 GbE LAN ports USB: 2 USB 3.0 ports(rear) 1 USB 3.0 Type-A port Video: 2 VGA ports DOM: 2 SATA DOM (Disk on Module) ports TPM: 1 TPM header

(Front View – System)



Drive Bay	Description
1-24	24x 2.5" Hot-Swap NVMe Drive Bays

(Rear View – System)



Slot	Description
1	PCI-E 4.0 x16 Slot (FH, 9.5"/10.5" L*) (CPU1) Occupied, Not Available
2	PCI-E 4.0 x8 Slot (FH, 10.5" L in x16 slot) (CPU1) Occupied, Not Available
3	PCI-E 4.0 x8 (internal proprietary LP, 6.8" L in x16 slot) (CPU1) Occupied, Not Available
4	PCI-E 4.0 x16 Slot (LP, 6.8" L) (CPU2) Occupied, Not Available
5	PCI-E 4.0 x16 Slot (FH, 9.5"/10.5" L*) (CPU2)
6	PCI-E 4.0 x16 Slot (FH, 9.5" L) (CPU2) Occupied, Not Available

*Full redundancy based on configuration and application load.

**GPU kit needed to support up to 10.5" length

CPU 1 CPU 2

System Cooling

Fans: Up to 4 heavy-duty PWM with optimal fan speed control Fan(s)

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!; IPMICFG; SMCIPMITool; IPMIView

PC Health Monitoring

CPU: CPU switching voltage regulator

Monitors CPU Core Voltages, +12V, +3.3V, +5V, +5V standby, 3.3V standby, VBAT

FAN: Pulse Width Modulated (PWM) fan connectors

Status monitor for speed control

Up to 4-fan status tachometer monitoring

Up to four 4-pin fan headers

Other Features: Chassis Intrusion Detection

Chassis Intrusion Header

Temperature: CPU thermal trip support

Monitoring for CPU and chassis environment

Thermal control for 4x Fan connectors

Dimensions and Weight

Weight: Gross Weight: 63 lbs (28.6 kg)

Net Weight: 39 lbs (17.7 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