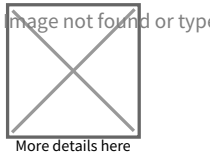# Ultra A+ Server AS -1124US-TNRP

1U Ultra with 12 NVMe/SATA bays (optional SAS)
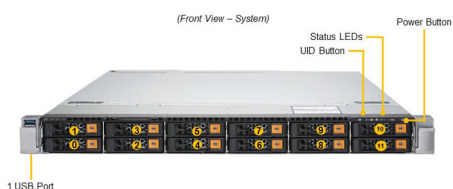
Key Applications

Virtualization, Cloud Computing, High End Enterprise Server,

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;
- 2 PCIe 4.0 x16 FH, 9.5"L,
  1 PCIe 4.0 x16 LP,
  1 PCIe 4.0 x16 (internal proprietary LP slot);
- Dual-port 10GBase-T and Dual-port 10G SFP+ via Intel X710-TM4;
- 12 Hot-swap 2.5" NVMe drive bays
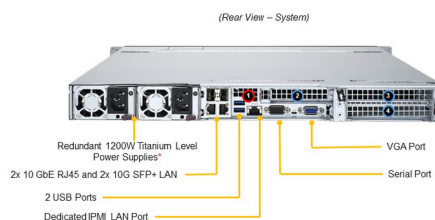 or SATA3/SAS3 (via optional SAS kit);

Form Factor	1U Rackmount Enclosure: 437 x 43 x 739mm (17.2" x 1.7" x 29.1") Package: 605 x 203 x 950mm (23.81" x 7.99" x 37.4")
Processor	Dual Socket SP3 AMD EPYC™ 7002/7003 Series Processors Up to 64C/128T
System Memory	Slot Count: 32 DIMM slots/8 Channels Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM
Drive Bays Configuration	Default: Total 12 bays • 12 front hot-swap 2.5" NVMe/SAS*/SATA* drive bays (*SAS/SATA support may require additional storage controller and/or cables)
Expansion Slots	Default • 1 PCIe 4.0 x16 LP slot • 1 PCIe 4.0 x16 INTERNAL slot • 2 PCIe 4.0 x16 FH/HL, 9.5"L slots

On-Board Devices	SATA: SATA (6Gbps)
	Chipset: System on Chip
	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 USB: 4 USB 3.0 ports Video: 1 VGA port TPM: 1 TPM header

(Front View – System)

Status LEDs
UID Button
Power Button

1 USB Port

Slot	Description
0 - 11	2.5" Hot-Swap NVMe Drive Bays

*SAS3 and SATA support requires additional parts in optional parts list

(Rear View – System)

Redundant 1200W Titanium Level Power Supplies*
2x 10 GbE RJ45 and 2x 10G SFP+ LAN
2 USB Ports
Dedicated IPMI LAN Port

VGA Port
Serial Port

Slot	Description
1	PCI-E 4.0 x16 (internal proprietary LP, 6.6"L) slot (CPU1)
2	PCI-E 4.0 x16 (LP /6.6"L) slot (CPU2)
3	PCI-E 4.0 x16 (FH / 9.5"L) slot (CPU2)
4	PCI-E 4.0 x16 (FH / 9.5"L) slot (CPU2)

CPU 1 CPU 2

*Full redundancy based on configuration and application load.

System Cooling	Fans: 8 heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud
Power Supply	2x 1200W 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	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); KVM with dedicated LAN ; IPMI 2.0; OOB Management Package (SFT-OOB-LIC)
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 4+1 Phase-switching voltage regulator FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 48 lbs (21.8 kg) Available Color: N/A
Operating Environment	RoHS Compliant Operating Temperature: 10°C ~ 30°C (50°F ~ 86°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-119UHTS-R1K22HP-T**