

# Ultra A+ Server AS -1024US-TNR

1U DP Ultra with up to 4 hot-swap 2.5" NVMe/SAS/SATA bays and 2 PCIe 4.0 x16 slots



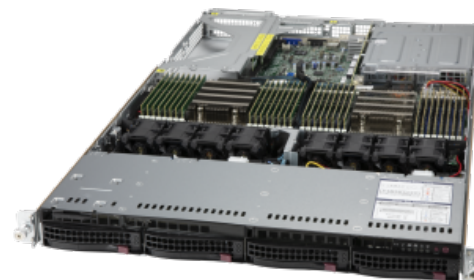
More details here

## Key Applications

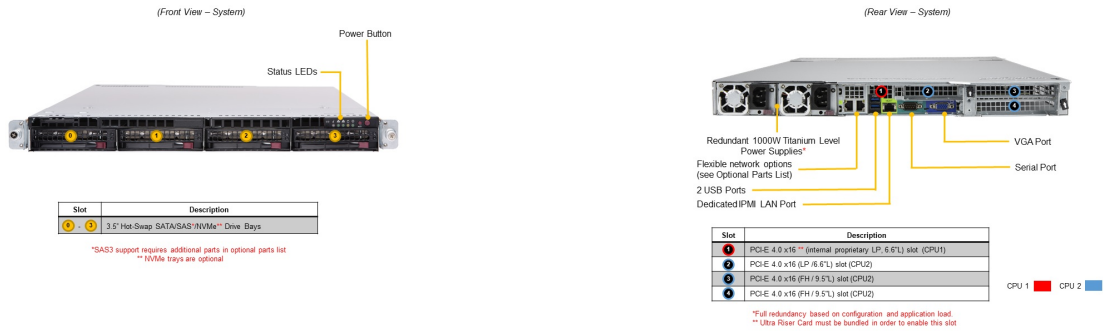
Virtualization, Cloud Computing, High End Enterprise Server,

## 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;
- Must bundle with optional Ultra Riser Card  
2 PCIe 4.0 x16 FH / 9.5"L slots  
1 PCIe 4.0 x16 LP slot  
1 PCIe 4.0 x16 (internal proprietary LP slot), Ultra Riser Card must be bundled in order to enable this slot;
- 4 hot-swap 3.5" SATA3 by default  
or 4 NVMe (via optional drive tray)  
or 4 SAS3 (via optional SAS kit);



Form Factor	1U Rackmount Enclosure: 437 x 43 x 737mm (17.2" x 1.7" x 29") Package: 605 x 203 x 950mm (23.81" x 7.99" x 37.4")
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 4 bays <ul style="list-style-type: none"> <li>• 4 front hot-swap 3.5" SATA drive bays</li> </ul> Option A: Total 4 bays <ul style="list-style-type: none"> <li>• 4 front hot-swap 3.5"/2.5" NVMe* drive bays</li> </ul> Option B: Total 4 bays <ul style="list-style-type: none"> <li>• 4 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>• 1 PCIe 4.0 x16 LP slot</li> <li>• 2 PCIe 4.0 x16 FH, 9.5"L slots</li> <li>• 1 PCIe 4.0 x16 INTERNAL slot</li> </ul>
On-Board Devices	Chipset: System on Chip Network Connectivity: 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 DOM: 1 SATA <a href="#">DOM</a> (Disk on Module) port TPM: 1 TPM header



System Cooling	Fans: 8 heavy duty fans with optimal fan speed control
Power Supply	2x 1000W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	<p>BIOS Type: AMI 32MB SPI Flash EEPROM</p> <p>BIOS Features: Plug and Play (PnP)</p> <ul style="list-style-type: none"> <li>USB Keyboard support</li> <li>ACPI 5.1</li> <li>DMI 2.3</li> <li>PCI 2.2</li> <li>SMBIOS 3.1.1</li> </ul>
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	<p>Temperature: Monitoring for CPU and chassis environment</p> <ul style="list-style-type: none"> <li>CPU thermal trip support</li> <li>Thermal Control for 4x 4-pin fan connectors</li> </ul> <p>FAN: Status monitor for speed control</p> <ul style="list-style-type: none"> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul> <p>CPU: Monitors for CPU Cores, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages.</p>
Dimensions and Weight	<p>Weight: Gross Weight: 41 lbs (18.6 kg)</p> <p>Net Weight: 26 lbs (11.8 kg)</p> <p>Available Color: N/A</p>
Operating Environment	<p>RoHS Compliant</p> <p>Operating Temperature: 10°C to 35°C (50°F to 95°F)</p> <p>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</p> <p>Operating Relative Humidity: 8% to 90% (non-condensing)</p> <p>Non-operating Relative Humidity: 5% to 95% (non-condensing)</p>
Motherboard	<a href="#">Super H12DSU-iN</a>
Chassis	<b>CSE-819UTS-R1K02P-A</b>