

# WIO SuperServer SYS-512B-WR

1U UP WIO with 4 hot-swap 3.5" NVMe/SAS/SATA bays and 3 PCIe 5.0 slots



More details here

## Key Applications

Enterprise Applications, General Purpose Computing, Cloud Computing, Web/Hosting Application, Network Appliance, Database/Storage, Storage Headnode, Entry GPU server,

## Key Features

- WIO systems offer flexible I/O configurations in a cost-effective architecture to deliver truly optimized systems for specific enterprise requirements.;
- Single Intel® Xeon® 6 Processor;
- 8 DIMM slots supporting up to 2TB of memory;
- Tool-less, Top-loading riser design support 3 PCIe 5.0 Expansion (2x FHFL + 1x LP);
- Native SATA drives supported, with option PCIe 5.0 NVMe and SAS.;
- Trusted Platform Module (TPM) 2.0 onboard.;



|                          |  |
|--------------------------|--|
| Form Factor              | 1U<br>Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6")<br>Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7")  |
| Processor                | Single Socket E2 (LGA-4710)<br>Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores<br>P-cores: Up to 86C/172T; Up to 336MB Cache<br>E-cores: Up to 144C/144T; Up to 108MB Cache   |
| GPU                      | Max GPU Count: Up to 1 double-width or 2 single-width GPUs<br>Supported GPU: NVIDIA PCIe: RTX 2000 Ada, RTX 4000 Ada Generation<br>CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect  |
| System Memory            | Slot Count: 8 DIMM slots/8 Channels<br>Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM  |
| Drive Bays Configuration | Default: Total 4 bays <ul style="list-style-type: none"> <li>• 4 front hot-swap 3.5" SAS*/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" PCIe 5.0 x4 NVMe*/SAS*/SATA drive bays</li> </ul> (*NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280/22110; VROC required for RAID) Peripheral Bays: 2 slim peripheral bays |
| Expansion Slots          | Default <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x16 FHFL slots</li> <li>• 1 PCIe 5.0 x8 (in x16) LP slot</li> </ul>  |
| On-Board Devices         | SATA: SATA (6Gbps)<br>NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)<br>Chipset: System on Chip<br>Network Connectivity: 2 RJ45 1GbE with Intel® I210  |
| Input / Output           | LAN: 2 RJ45 1 GbE LAN ports<br>1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1)<br>USB: 2 USB 3.2 Gen1 Type-A ports(rear)<br>2 USB 3.2 Gen1 ports(Header)<br>Video: 1 VGA port<br>Serial: 1 COM port(Rear)<br>1 COM port(Header)<br>TPM: 1 TPM header   |



#### System Cooling

Fans: Up to 1 AOC cooling Fan(s) (optional)  
 Up to 5 middle cooling PWM 40x40x56mm Fan(s)  
 Air Shroud: 1 CPU Air Shroud

#### Power Supply

2x 860W Redundant (1 + 1) Titanium Level (96%) power supplies

#### System BIOS

BIOS Type: AMI 64MB SPI Flash EEPROM

#### Management

SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!

#### PC Health Monitoring

CPU: 8 Phase-switching voltage regulator  
 Monitors for CPU Cores, Chipset Voltages, Memory  
 FAN: Fans with tachometer monitoring  
 Pulse Width Modulated (PWM) fan connectors  
 Status monitor for speed control  
 Temperature: Monitoring for CPU and chassis environment  
 Thermal Control for fan connectors

#### Dimensions and Weight

Weight: Gross Weight: 34.5 lbs (15.46 kg)  
 Net Weight: 21.5 lbs (9.75 kg)  
 Available Color: Black

#### Operating Environment

Operating Temperature: 10°C to 35°C (50°F to 95°F)  
 Non-operating Temperature: -30°C to 60°C (-22°F to 140°F)  
 Operating Relative Humidity: 8% to 80% (non-condensing)  
 Non-operating Relative Humidity: 8% to 90% (non-condensing)

#### Motherboard

[Super X14SBW-F](#)

#### Chassis

[CSE-815BTS-R000WNP](#)