WIO SuperServer SYS-512B-WR

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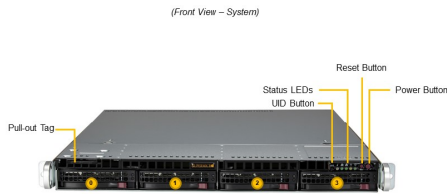
Key Applications

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.;
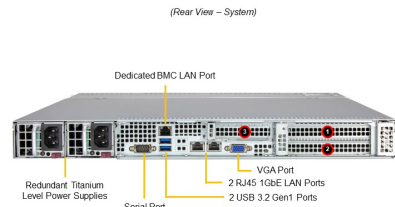- Trusted Platform Module (TPM) 2.0 onboard.;

Form Factor	1U Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7")
Processor	Single Socket E2 (LGA-4710) Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores P-cores: Up to 86C/172T; Up to 336MB Cache E-cores: Up to 144C/144T; Up to 108MB Cache
GPU	Max GPU Count: Up to 1 double-width or 2 single-width GPUs CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect
System Memory	Slot Count: 8 DIMM slots/8 Channels Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM

Drive Bays Configuration	Default: Total 4 bays
	  • 4 front hot-swap 3.5" SAS*/SATA drive bays
	Option A: Total 4 bays
	  • 4 front hot-swap 3.5"/2.5" PCIe 5.0 x4 NVMe*/SAS*/SATA drive bays
	(*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
	  • 2 PCIe 5.0 x16 FHFL slots
	  • 1 PCIe 5.0 x8 (in x16) LP slot

On-Board Devices	SATA: SATA (6Gbps) NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required) Chipset: System on Chip Network Connectivity: 2 RJ45 1GbE with Intel® I210

Input / Output	LAN: 2 RJ45 1 GbE LAN ports
	     1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1)
	USB: 2 USB 3.2 Gen1 Type-A ports(rear)
	     2 USB 3.2 Gen1 ports(Header)
	Video: 1 VGA port
	Serial: 1 COM port(Rear)
	     1 COM port(Header)
	TPM: 1 TPM header

(Front View – System)

(Rear View – System)

Pull-out Tag
Status LEDs
UID Button
Reset Button
Power Button

Drive Bay	Description
0 – 3	3.5" Hot-swap PCIe 5.0 NVMe*/SAS3*/SATA3 Drive Bays

*NVMe or SAS3 support requires additional parts from the optional parts list

Dedicated BMC LAN Port
Redundant Titanium Level Power Supplies
Serial Port
VGA Port
2 RJ45 1GbE LAN Ports
2 USB 3.2 Gen1 Ports

Slot Description	
1	PCIe 5.0 x16 FHFL
2	PCIe 5.0 x16 FHFL
3	PCIe 5.0 x8 (in x16) LP

System Cooling

Fans: 1 AOC cooling Fan(s) (optional)
    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

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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: Monitors for CPU Cores, Chipset Voltages, Memory
    8 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: 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