SuperWorkstation SYS-751GE-TNRT

DP rackmount tower 4-GPU workstation with closed-loop liquid cooling

Key Applications

High Performance Computing, Engineering/scientific research, AI/Deep Learning Training,

Key Features

- Acoustically optimized for quiet operation;
- 5th/4th Gen Intel® Xeon® Scalable processor support;
- Intel® C741 Chipset;
- 6 PCIe 5.0 x16;
- 8x 2.5" peripheral drive bays
  Up to 8x NVMe SSD support;
- Closed-loop liquid cooling for CPUs and GPUs;
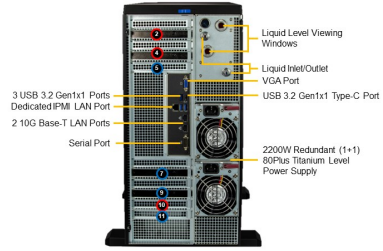- Supports up to four liquid-cooled GPUs;

Form Factor	Tower or 5U Rackmount Enclosure: 454.7 x 218.4 x 701mm (17.9" x 8.6" x 27.6") Package: 388 x 655 x 956mm (15.3" x 25.8" x 37.6")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB Cache per CPU
GPU	Max GPU Count: Up to 4 double-width GPUs Supported GPU: NVIDIA PCIe: A100 CPU-GPU Interconnect: PCIe 4.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (optional)
System Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 2TB 5600MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bays • 8 front hot-swap 2.5" NVMe/SAS*/SATA drive bays (*SAS support may require additional storage controller and/or cables) M.2: 2 M.2 NVMe slots (M-key 2280/22110)
Expansion Slots	Default • 6 PCIe 5.0 x16 FHFL slots
On-Board Devices	SATA: SATA (6Gbps) ; RAID 0/1/5/10 support Chipset: Intel® C741 Network Connectivity: 2 RJ45 10GbE with Intel® X550-AT2 　　　　　　　　　　　1 RJ45 1GbE with ASPEED AST2600 　　　　　　　　　　　1 SFP28 25GbE (optional)
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port 　　　2 RJ45 10 GbE LAN ports USB: 2 USB 3.2 Gen1 ports(front) 　　　3 USB 3.2 Gen1 ports(rear) 　　　1 USB 3.2 Gen2 port(rear) Video: 1 VGA port DOM: 2 SATA DOM (Disk on Module) ports Audio: 7.1 HD Audio 　　　　Line Out 　　　　Mic in

(Front View – System)

Power Button & Status LEDs
7.1 Channel HD Audio
2 USB 3.2 Gen1 Ports

Drive Bay	Description
0 – 7	2.5" Hot-swap NVMe/SATA3 SSD drive bays (default; SAS3 supported with optional add-on card and cables)

(Rear View – System)

Liquid Level Viewing Windows
Liquid Inlet/Outlet
VGA Port
3 USB 3.2 Gen1x1 Ports
Dedicated IPMI LAN Port
USB 3.2 Gen1x1 Type-C Port
2 10G Base-T LAN Ports
Serial Port
2200W Redundant (1+1) 80Plus Titanium Level Power Supply

	Slot Description
2 4 5 7 9 10 11	PCIe 5.0 x16

CPU1 ■ CPU2 ■

System Cooling

Fans: 1 fan 8cm Fan(s)
     2 fan 12cm Fan(s)
     1 liquid cooling Fan(s)
Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)

Power Supply

1x 2200W Redundant Titanium Level (96%) power supply

System BIOS

BIOS Type: AMI 32MB SPI Flash EEPROM

Management

SuperCloud Composer®; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); 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+4 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: 121 lbs (55 kg)
    Net Weight: 88 lbs (44 kg)
Available Color: Black Front & Black Body

Operating Environment

Operating Temperature: 10°C to 25°C (50°F to 77°F)
Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)
Operating Relative Humidity: 8% to 90% (non-condensing)
Non-operating Relative Humidity: 5% to 95% (non-condensing)

Motherboard

Super X13DEG-QT

Chassis

CSE-759TS-R2K21BP