

GPU SuperServer SYS-751GE-TNRT-NV1

DP liquid cooled AI development platform



More details here

Key Applications

High Performance Computing, AI/Deep Learning Training, AI Development,

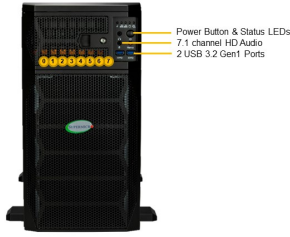
Key Features

- Acoustically optimized for quiet operation
Closed-loop liquid cooling for CPUs and GPUs;
- 4 liquid-cooled NVIDIA A100 GPUs with NVIDIA® NVLink™ (2+2) installed;
- Dual 4th Gen Intel® Xeon® Scalable Processors, 6444Y (16 cores at 3.6Ghz) installed;
- Dual-port active-cooled NVIDIA Connect-X6 Dx 25G Network Adapter installed;
- Supermicro Cloud Orchestrator AI software stack;
- Ubuntu 22.04 LTS installed;



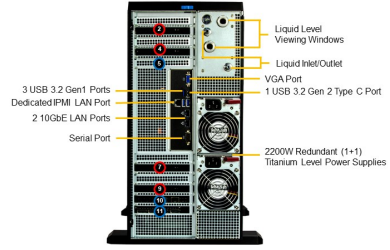
Form Factor	Tower or 5U Rackmount Enclosure: 454.7 x 218.4 x 701mm (17.9" x 8.6" x 27.6") Package: 388 x 655 x 956mm (15.3" x 25.8" x 37.6")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors 16C/32T; 30MB Cache per CPU
GPU	Max GPU Count: Up to 4 double-width GPU(s) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (2+2)
System Memory	Slot Count: 16 DIMM slots Max Memory (2DPC): 512GB 4800MT/s ECC DDR5
Drive Bays Configuration	Default: Total 8 bay(s) • 8 front hot-swap 2.5" NVMe/SAS*/SATA drive bay(s) (*SAS support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 NVMe slot(s) (M-key)
Expansion Slots	Default • 7 PCIe 5.0 x16 FHFL slot(s)
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 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 IPMI LAN port(s) 2 RJ45 10 GbE LAN port(s) 1 SFP28 25 GbE LAN port(s) USB: 2 USB 3.2 Gen1 port(s) (front) 3 USB 3.2 Gen1 port(s) (rear) 1 USB 3.2 Gen2 port(s) (rear) Video: 1 VGA port(s) DOM: 2 SATA DOM (Disk on Module) port(s) Audio: 7.1 HD Audio Line Out Mic in

(Front View – System)



Drive Bay	Description
1 - 6	Default – 6x 2.5" Hot-swap NVMe/SATA/SSD drive bays (SAS3 supported with optional add on card and cables)

(Rear View – System)



Slot	Slot Description
2, 4, 6	NVIDIA Liquid-Cooled A100 GPUs
5	PCIe 5.0 x16
11	NVIDIA T400 GPU (for display)
12	NVIDIA ConnectX6 Dx 25G



System Cooling	Fans: 1 fan 8cm Fan(s) 2 fan 12cm Fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	2200W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0
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 ~ 25°C (50°F ~ 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