

## **GPU SuperServer SYS-522GA-NRT**

DP Intel 5U Dual-Root PCIe GPU System with up to 10 GPUs and extended thermal capacity



## **Key Applications**

High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging,

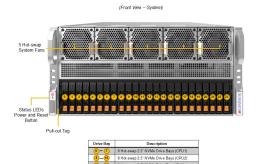
## **Key Features**

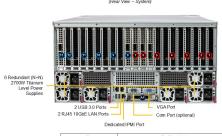
- Support for up to 10 double-width PCIe GPU accelerator cards;
- Flexible networking with up to AIOM slots;
- Up to 13 PCIe 5.0 x16 FHFL slots;
- 16 front hot-swap 2.5" NVMe + 8 front hot-swap 2.5" NVMe for Storage RDMA;



Form Factor	5U Rackmount
	Enclosure: 437 x 222.5 x 737mm (17.2" x 8.75" x 29")
	Package: 720 x 440 x 1080mm (28.34" x 17.32" x 42.51")
Processor	Dual Socket BR (LGA-7529)
	Intel® Xeon® 6900 series processors with P-cores
	Up to 128C/256T; Up to 504MB Cache per CPU
GPU	Max GPU Count: Up to 10 double-width or 10 single-width GPUs
	Supported GPU: NVIDIA PCIe: H100 NVL, L40S, L4
	CPU-GPU Interconnect: PCIe 5.0 x16 Switch Dual-Root
	GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (optional)
System Memory	Slot Count: 24 DIMM slots
	Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM
	Max Memory (1DPC): Up to 6TB 8800MT/s ECC DDR5 MRDIMM
Drive Bays Configuration	Default: Total 24 bays
	• 24 front hot-swap 2.5" PCIe 5.0 NVMe drive bays
	M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	Default
	• 13 PCIe 5.0 x16 FHFL slots
On-Board Devices	Chipset: System on Chip
	Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
Input / Output	LAN: 2 RJ45 10 GbE LAN ports (Intel® I350)
	USB: 2 USB 3.0 Type-A ports(Rear)
	Video: 1 VGA port







Slot	Slot Description
000000	PCle 5.0 x16 (FHFL) from PLX switch linked to CPU1
0	PCIe 5.0 x16 (FHFL) from CPU1
000000	PCIe 5.0 x16 (FHFL) from PLX switch linked to CPU2
₩.	PCIe 5.0 AIOM (OCP 3.0)
	CPUI CPU2

System Cooling	Fans: 10 heavy duty fans with optimal fan speed control
	Air Shroud: 1 Air Shroud
	Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	6x 2700W Redundant Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB 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+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: 100 lbs (45.3 kg)
	Net Weight: 65.5 lbs (29.7 kg)
	Available Color: Black Front & Silver Body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°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 X14DBG-AP
Chassis	CSE-528G2TS-R5K40P