Intel Xeon (X14) | 8U Rackmount | GPU Server

Supermicro SYS-822GS-NB3RT

Intel Xeon (X14) · 8U Rackmount · GPU Server Server

Specifications reproduced from the official Supermicro product page, as of 17 Nov 2026. Taknet Systems (Thailand) is a Supermicro Authorized Distributor.



Form Factor **8U Rackmount**	CPU **Intel® Xeon® 6700 series processors with P-cores**
GPU **8 onboard GPUs**	Memory **Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM**

Key Features

- Dual Intel® Xeon® 6700 series processors with P-cores, up to 350W TDP
- NVIDIA HGX B300 8-GPU with 5th Generation NVLink® 1.8TB/s, 2.3TB of HBM3e GPU memory per system
- 8x NVIDIA ConnectX®-8 SuperNICs, up to 800Gb/s, up to two North/South NICs
- 8x Hot-swap E1.S NVMe storage drive bays and 2x M.2 NVMe boot drives
- 32x DIMMs with up to 8TB at 5200MT/s or up to 4TB at 6400MT/s DDR5 RDIMM
- 6x redundant (3+3) 6.6kW Titanium level power supplies

Form Factor	8U Rackmount
Platform	Intel Xeon (X14)
CPU	Dual Socket E2 (LGA-4710) Intel® Xeon® 6700 series processors with P-cores
Max GPU Count	8 onboard GPUs
Supported GPU	NVIDIA SXM: HGX B300 8-GPU (288GB)
Memory	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM
Drive Bays	Default: Total 8 bays8 front hot-swap E1.S NVMe drive bays
Fans	Up to 12 heavy duty fans with optimal fan speed control
Power Supply	6x 6600W Redundant (3 + 3) Titanium Level (96%) power supplies

Full Specifications — SYS-822GS-NB3RT

Product SKUs

Part numbers	SYS-822GS-NB3RT SYS-822GS-NB3RT-01-G2 Gold Series version with pre-configured components SYS-822GS-NB3RT-02-G2 Gold Series version with pre-configured components

Motherboard

Motherboard	Super X14DBG-LC

Processor

CPU	Dual Socket E2 (LGA-4710) Intel® Xeon® 6700 series processors with P-cores
Core Count	Up to 86C/172T; Up to 336MB Cache per CPU
Note	Supports up to 350W TDP CPUs (Air Cooled)

GPU

Max GPU Count	8 onboard GPUs
Supported GPU	NVIDIA SXM: HGX B300 8-GPU (288GB) View GPU Options
GPU-GPU Interconnect	NVIDIA® NVLink™ with NVSwitch™

System Memory

Memory	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 8TB 6000MT/s ECC DDR5 RDIMM View Memory Options
Memory Voltage	1.1V

On-Board Devices

Network Connectivity	View AOC Options

Input / Output

LAN	2 RJ45 10 GbE LAN ports (Intel® X710) 8 OSFP 800 GbE LAN ports (NVIDIA ConnectX®-8 SuperNIC™)
USB	1 USB 3.0 Type-A port (Front) 1 USB 2.0 Type-A port (Front)
Video	1 VGA port 1 mini-DP port

System BIOS

BIOS Type	AMI 64MB UEFI

Management

Software	SuperCloud Composer® (SCC) Supermicro Server Manager (SSM) Super Diagnostics Offline (SDO) Supermicro Thin-Agent Service (TAS) SuperServer Automation Assistant (SAA) New!
Power configurations	Power-on mode for AC power recovery ACPI Power Management

Security

Hardware	Trusted Platform Module (TPM) 2.0 Silicon Root of Trust (RoT) – NIST 800-193 Compliant
Features	Cryptographically Signed Firmware Secure Boot Secure Firmware Updates Automatic Firmware Recovery Supply Chain Security: Remote Attestation Runtime BMC Protections System Lockdown

PC Health Monitoring

CPU	8+4 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

Certifications

Operating Systems	ESXi 8.0U3, ESXi 9.0, ESXi 9.1, Oracle Linux 9.6, RHEL 9.6, RHEL 10.0, RHEL AI 3.3 View all OS Compatibility and Certification Matrix

Chassis

Form Factor	8U Rackmount
Model	CSE-GP807TS-R000NP

Dimensions and Weight

Height	13.8" (356 mm)
Width	17.6" (449 mm)
Depth	37.4" (950 mm)
Package	26.38" (H) x 28.74" (W) x 50.39" (D)
Weight	Gross Weight: 302 lbs (137 kg) Net Weight: 263 lbs (119 kg)
Available Color	Silver

Front Panel

Buttons	Power On/Off UID
LED	HDD activity LAN1 activity LAN2 activity Power Fail Power status System information (overheat/UID)

Expansion Slots

PCI-Express (PCIe) Configuration	Default2 PCIe 5.0 x16 FHHL slots View AOC Options

Drive Bays / Storage

Drive Bays Configuration	Default: Total 8 bays8 front hot-swap E1.S NVMe drive bays View NVMe Options
M.2	2 M.2 NVMe slots (M-key; RAID support via S3808N controller) View M.2 Options

System Cooling

Fans	Up to 12 heavy duty fans with optimal fan speed control

Power Supply

6x 6600W Redundant (3 + 3) Titanium Level (96%) power supplies

Dimension (WxHxL)	106.5 x 82.1 x 245.3 mm
Input	5900W: 200-207.9Vac / 50-60Hz 6000W: 208-219.9Vac / 50-60Hz 6300W: 220-229.9Vac / 50-60Hz 6500W: 230-238.9Vac / 50-60Hz 6600W: 239-240Vac / 50-60Hz

+12V	Max: 130A / Min: 0A (200Vac-207.9Vac) Max: 130A / Min: 0A (208Vac-219.9Vac) Max: 130A / Min: 0A (220Vac-229.9Vac) Max: 130A / Min: 0A (230Vac-238.9Vac) Max: 130A / Min: 0A (239Vac-240Vac)
12V SB	Max: 4A / Min: 0A
Output Type	Backplanes (gold finger)
Certification	Titanium Level [Test Report]

Operating Environment

Environmental Spec.	Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)