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

Supermicro SYS-822GA-NGR3

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	CPU
8U Rackmount	Intel® Xeon® 6900 series processors with P-cores
GPU	**Memory**
8 onboard GPUs	Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM/LRDIMM

Key Features

- Dual Intel® Xeon® 6900 series processors with P-cores
- Support for up to 24 DIMMs DDR5-6400 and 8800MT/s MRDIMMs
- Support for 8 Gaudi® 3 OAM GPUs
- 6 On-board OSFP 800GbE ports
- Up to 2 PCIe 5.0 x16 FHFL and 2 PCIe 5.0 x8 FHFL slotsDefault AIOM dual port 10GBase-T
- Up to 8 2.5" hot-swap NVMe Gen5 drive bays
- 8x 3000W (4+4) redundant Titanium level power supplies

Form Factor	8U Rackmount
Platform	Intel Xeon (X14)
CPU	Dual Socket BR (LGA-7529) Intel® Xeon® 6900 series processors with P-cores
Max GPU Count	8 onboard GPUs
Supported GPU	Intel OAM: Gaudi 3
Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM/LRDIMM
Drive Bays	Default: Total 8 bays8 front hot-swap 2.5" PCIe 5.0 NVMe drive bays
Fans	Up to 10 Removable Heavy-Duty 80 x 80 x 80mm Fan(s)
Power Supply	8x 3000W Redundant Titanium Level (96%) power supplies

Full Specifications — SYS-822GA-NGR3

Product SKUs

Part numbers	SYS-822GA-NGR3

Motherboard

Motherboard	Super X14DBG-GD

Processor

CPU	Dual Socket BR (LGA-7529) Intel® Xeon® 6900 series processors with P-cores
Core Count	Up to 128C/256T; Up to 504MB Cache per CPU
Note	Supports up to 500W TDP CPUs (Air Cooled)

GPU

Max GPU Count	8 onboard GPUs
Supported GPU	Intel OAM: Gaudi 3
CPU-GPU Interconnect	PCIe Gen5 x16
GPU-GPU Interconnect	24x 200Gbe (48 x 112Gbps) PAM4 SerDes links split

System Memory

Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM/LRDIMM Max Memory (1DPC): Up to 6TB 8800MT/s ECC DDR5 MRDIMM View Memory Options
Memory Voltage	1.1V

On-Board Devices

Network Connectivity	6 OSFP 800GbE View AIOM Options View AOC Options

Input / Output

LAN	1 RJ45 1 GbE Dedicated BMC LAN port
USB	2 USB 3.0 Type-A ports
Video	1 VGA port

System BIOS

BIOS Type	AMI 32MB SPI Flash EEPROM

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 System Lockdown

PC Health Monitoring

CPU	7+1 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	RHEL 9.6, RHEL 9.7, RHEL 10.1 View all OS Compatibility and Certification Matrix

Chassis

Form Factor	8U Rackmount
Model	CSE-GP806TS-R000NPF

Dimensions and Weight

Height	13.8" (356 mm)
Width	17.6" (447 mm)
Depth	33.2" (800 mm)
Package	27.6" (H) x 29.5" (W) x 51" (D)

Weight	Gross Weight: 282 lbs (128 kg) Net Weight: 308 lbs (140 kg)
Available Color	Silver

Front Panel

Buttons	Power On/Off

Expansion Slots

PCI-Express (PCIe) Configuration	Default2 PCIe 5.0 x16 FHFL slots 2 PCIe 5.0 x8 FHFL slots 1 PCIe 5.0 x4 AIOM slot (OCP 3.0 compatible) View AOC Options

Drive Bays / Storage

Drive Bays Configuration	Default: Total 8 bays8 front hot-swap 2.5" PCIe 5.0 NVMe drive bays View NVMe Options
M.2	2 M.2 PCIe 5.0 x2 NVMe slots (M-key 22110(default)) View M.2 Options

System Cooling

Fans	Up to 10 Removable Heavy-Duty 80 x 80 x 80mm Fan(s)

Power Supply

8x 3000W Redundant Titanium Level (96%) power supplies

Dimension (WxHxL)	106.5 x 82.4 x 203.5 mm
Input	2880W: 200-207Vac / 50-60Hz 3000W: 207.1-240Vac / 50-60Hz 3000W: 240Vdc / 50-60Hz
+12V	Max: 91.66A / Min: 0A (Vdc-240Vdc) Max: 91.66A / Min: 0A (200Vac-240Vac)
12V SB	Max: 4A / Min: 0A
Output Type	Backplanes (gold finger)

Operating Environment

RoHS	RoHS Compliant
Environmental Spec.	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)