Supermicro's HGX B300 GPU Server

SYS-822GS-NB3RT

OVERVIEW

The Supermicro SYS-822GS-NB3RT is an 8U GPU server built for scientific research, AI, and HPC workloads. Supporting up to 8x NVIDIA HGX B300 GPUs (288GB) interconnected with NVLink and NVSwitch, it delivers extreme compute density and scalability for AI training, inference, and large-scale data processing. Powered by dual Intel® Xeon® 6700/6500 series processors with up to 128 cores and 32 DDR5 DIMM slots (up to 8TB), the system is optimized for performance, bandwidth, and reliability in datacenter environments.

SYSTEM SPECIFICATIONS

Form Factor
- 8U rackmount
- Package: 1255 × 700 × 750 mm
  - Enclosure: 449 × 356 × 950 mm
  - Package: 1255 × 700 × 750 mm

GPU
- NVIDIA Blackwell 8-GPU, TDP up to 1200W (HGX B300)

Processors
- Dual Socket E2 (LGA-4710)
- Intel® Xeon® 6700/6500 series with P-cores, up to 128C/256T
- Up to 504MB cache per CPU

System Memory
- Slot Count: 32 DIMM slots
- Max Memory (2DPC): Up to 8TB 6400MT/s ECC DDR5 RDIMM

Storage
- 8× front hot-swap E1.S NVMe bays
- 2× M.2 NVMe slots (M-key; RAID support via S3808N controller)

Warranty
- 3-Year Labour, 3-Year Parts, 1-Year Advanced Cross-Ship Under Limited Warranty
  - 3-Year On-Site NBD Service (available at additional cost)

PRIMARY USE CASES

- Scientific Research
- Conversational AI
- Business Intelligence & Analytics
- Drug Discovery
- Finance Services, and Fraud Detection
- AI/Deep Learning Training & Inference
- Large Language Models (LLM) & Generative AI
- High Performance Computing (HPC)
- Autonomous Vehicle Technologies

WORK WITH US

Expert Guidance: Our team specializes in AI, HPC, and data analytics and can tailor solutions to your exact needs.
Turnkey Deployment: We work with OEMs to streamline installation, configuration, and workload migration.
Superior Support: Global reach and top-tier customer service keep your systems running at peak performance.