

## TECHNICAL DATASHEET

SUPERMICRO · GPU &amp; AI SERVERS

# Supermicro 2 OU GPU Server SYS-222GS-NB3OT-ALC

DP Intel 2 OU (OCP ORv3) Liquid-Cooled System with NVIDIA HGX B300 8-GPU  
(complete rack and onsite service are required)

SKU SYS-222GS-NB3OT-ALC

LGA4710

Supermicro



FORM FACTOR

—

MAX POWER (BASE)

565 W

HEAT OUTPUT

1,928 BTU/h

PRICE

On request



CONFIGURE &amp; QUOTE ONLINE

[serverinvest.com/product/sys-222gs-nb3ot-alc](https://serverinvest.com/product/sys-222gs-nb3ot-alc)

## 01 Product overview

The Supermicro SYS-222GS-NB3OT-ALC is a 2 OU GPU Server built on dual Intel Xeon 6 processors with up to 8 TB of memory in 32 DIMM slots.

DP Intel 2 OU (OCP ORv3) Liquid-Cooled System with NVIDIA HGX B300 8-GPU (complete rack and onsite service are required).

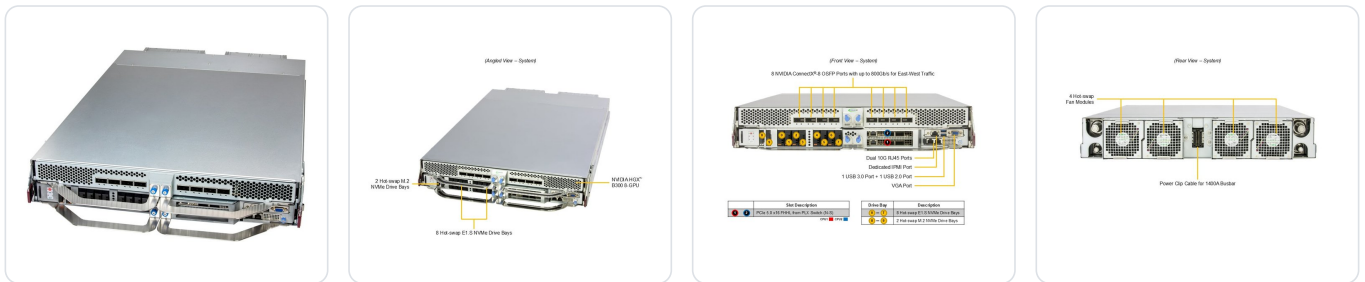
ServerInvest configures every SYS-222GS-NB3OT-ALC to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

### KEY SPECIFICATIONS

|                    |                           |
|--------------------|---------------------------|
| Processor          | 2× Intel Xeon 6           |
| Socket             | LGA4710                   |
| Memory             | 32 DIMM slots, up to 8 TB |
| Memory type        | DDR5-6400 ECC RDIMM       |
| Drive bays         | 8 (8 NVMe)                |
| Typical power draw | 750 W                     |
| Networking         | View AOC Options          |

### HIGHLIGHTS

- Dual Intel Xeon 6
- Up to 8 TB memory · 32 DIMM slots
- Total 8 bays 8 front hot-swap E1.S NVMe drive bays
- Networking: View AOC Options



## 02 Base configuration

Components included in the listed base price — every part can be changed in the online configurator

| COMPONENT          | DESCRIPTION                                                   | QTY |
|--------------------|---------------------------------------------------------------|-----|
| Base system        | Supermicro 2 OU GPU Server SYS-222GS-NB3OT-ALC                | 1   |
| Processor          | Intel Xeon 6710E Processor 64 Cores (96M Cache, 2.40Ghz) 205W | 2   |
| Memory             | 16GB 6400MT/s DDR5 ECC Registered DIMM Module                 | 4   |
| Warranty & support | 3-year return-to-base warranty (included)                     | 1   |

Price on request — contact us for a tailored quotation

### 03 Power & thermal

Calculated for the base configuration

|       |         |         |             |         |          |
|-------|---------|---------|-------------|---------|----------|
| IDLE  | TYPICAL | MAXIMUM | HEAT (MAX)  | COOLING | PSU LOAD |
| 119 W | 367 W   | 565 W   | 1,928 BTU/h | 0.6 kW  | —        |

Typical 367 W · max 565 W

|                                  |                                                                     |
|----------------------------------|---------------------------------------------------------------------|
| Annual IT energy (24/7)          | 2,563 kWh                                                           |
| Annual facility energy (PUE 1.5) | 3,845 kWh                                                           |
| Annual energy cost               | €513 IT · €769 incl. cooling (at 0.20 €/kWh)                        |
| CO <sub>2</sub> emissions / year | 1.00 t (grid factor 0.26 kg/kWh)                                    |
| Power supplies                   | Redundant hot-swap PSUs — rating depends on the final configuration |

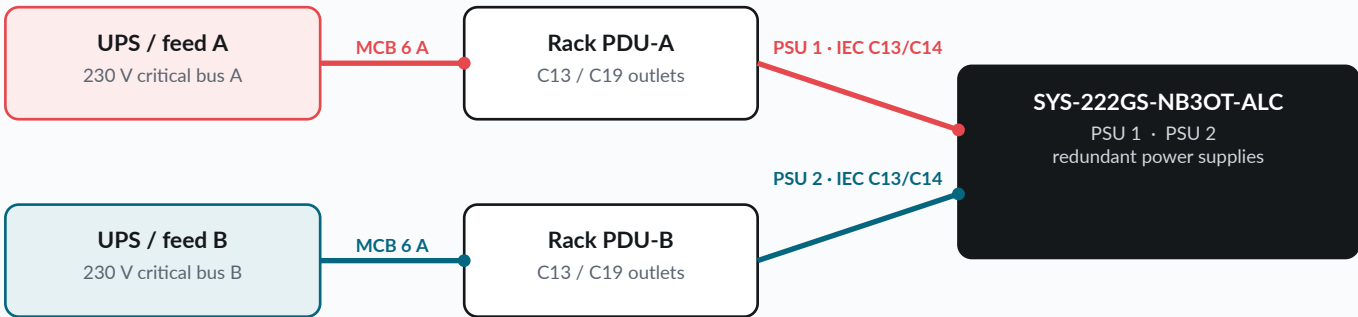
#### POWER BY COMPONENT

|                                              | IDLE | TYPICAL | MAX   |
|----------------------------------------------|------|---------|-------|
| Chassis, motherboard, fans, BMC              | 38 W | 59 W    | 85 W  |
| 2× CPU — Intel Xeon 6710E Processor 64 Cores | 62 W | 266 W   | 410 W |
| 4× Memory 16 GB DIMM                         | 12 W | 20 W    | 36 W  |

DC loads converted to wall power at 94% PSU efficiency; typical load assumed 70% of the time. Engineering estimates — confirm with the manufacturer's power calculator for critical designs.

### 04 Power connection diagram

Dual-feed (A/B) connection for redundant power supplies



- Connect PSU 1 to PDU-A and PSU 2 to PDU-B (independent feeds) using IEC C13/C14 power cords.
- Maximum current per feed: 2.6 A at 230 V — each feed must be able to carry the full load if the other fails.
- Recommended protection per PDU circuit: MCB 6 A, curve C; RCD according to local regulations.
- Heat to remove at full load: 565 W = 1,928 BTU/h (0.6 kW).

### 05 Full specifications

| MOTHERBOARD |                                                                             |
|-------------|-----------------------------------------------------------------------------|
|             | Super X14DBG-LC2                                                            |
| PROCESSOR   |                                                                             |
| CPU         | Dual Socket E2 (LGA-4710)<br>Intel Xeon 6700 series processors with P-cores |
| Core Count  | Up to 86C/172T; Up to 335MB Cache per CPU                                   |

Note Supports up to 350W TDP CPUs (Liquid Cooled)

## GPU

|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| Max GPU Count        | 8 onboard GPUs                                                         |
| Supported GPU        | NVIDIA SXM: HGX B300 8-GPU (288GB)<br><a href="#">View GPU Options</a> |
| CPU-GPU Interconnect | PCIe 5.0 x16 CPU-to-GPU Interconnect                                   |
| GPU-GPU Interconnect | NVIDIA NVLink with NVSwitch                                            |

## SYSTEM MEMORY

|                |                                                                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Memory         | Slot Count: 32 DIMM slots<br>Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM<br>Max Memory (2DPC): Up to 8TB 6000MT/s ECC DDR5 RDIMM<br><a href="#">View Memory Options</a> |
| Memory Voltage | 1.1V                                                                                                                                                                             |

## ON-BOARD DEVICES

|                      |                                  |
|----------------------|----------------------------------|
| Network Connectivity | <a href="#">View AOC Options</a> |
|----------------------|----------------------------------|

## INPUT / OUTPUT

|       |                                                                                                                                                                                |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LAN   | 2 RJ45 10 GbE LAN ports (Intel X710)<br>8 OSFP 800 Gb/s InfiniBand LAN ports (NVIDIA ConnectX-8 SuperNIC)<br>1 RJ45 1 GbE Dedicated BMC LAN port (ASPEED AST2600) (via DC-SCM) |
| Video | 1 VGA port (Front)                                                                                                                                                             |
| TPM   | 1 TPM header                                                                                                                                                                   |

## SYSTEM BIOS

|           |               |
|-----------|---------------|
| BIOS Type | AMI 64MB UEFI |
|-----------|---------------|

## MANAGEMENT

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

## SECURITY

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

## PC HEALTH MONITORING

|             |                                                                                                                   |
|-------------|-------------------------------------------------------------------------------------------------------------------|
| CPU         | Monitors for CPU Cores, Chipset Voltages, Memory                                                                  |
| Fan         | Fans with tachometer monitoring<br>Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control |
| Temperature | Monitoring for CPU and chassis environment<br>Thermal Control for fan connectors                                  |

## CERTIFICATIONS

|                   |                                                                                   |
|-------------------|-----------------------------------------------------------------------------------|
| Operating Systems | RHEL 10.0, Ubuntu 24.04 LTS<br>View all OS Compatibility and Certification Matrix |
|-------------------|-----------------------------------------------------------------------------------|

## CHASSIS

|             |                   |
|-------------|-------------------|
| Form Factor | 2 OU Rackmount    |
| Model       | CSE-GP202TS-000NP |

## DIMENSIONS AND WEIGHT

|                 |                                                              |
|-----------------|--------------------------------------------------------------|
| Height          | 3.7" (94 mm)                                                 |
| Width           | 21.1" (537 mm)                                               |
| Depth           | 31.69" (805 mm)                                              |
| Package         | 12.79" (H) x 28.74" (W) x 50.39" (D)                         |
| Weight          | Gross Weight: 176 lbs (80 kg)<br>Net Weight: 154 lbs (70 kg) |
| Available Color | Silver                                                       |

## FRONT PANEL

|         |                              |
|---------|------------------------------|
| Buttons | Power On/Off                 |
| LED     | Network activity LEDs<br>UID |

## EXPANSION SLOTS

|                                  |                                                                   |
|----------------------------------|-------------------------------------------------------------------|
| PCI-Express (PCIe) Configuration | Default<br>2 PCIe 5.0 x16 (in x16) FHHL slots<br>View AOC Options |
|----------------------------------|-------------------------------------------------------------------|

## DRIVE BAYS / STORAGE

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

## SYSTEM COOLING

|                |                                                    |
|----------------|----------------------------------------------------|
| Fans           | Up to 4 Fan 80mm Fan(s)<br>Up to 4 Fan 40mm Fan(s) |
| Air Shroud     | 3 Air Shrouds                                      |
| Liquid Cooling | Direct to Chip (D2C) Cold Plate                    |

## OPERATING ENVIRONMENT

### Environmental Spec.

Operating Temperature: 10°C to 35°C (50°F to 95°F)  
Non-operating Temperature: -5°C to 60°C (23°F to 140°F)  
Operating Relative Humidity: 8% to 80% (non-condensing)  
Non-operating Relative Humidity: 5% to 95% (non-condensing)

## 06 Built, tested & supported by ServerInvest

### Engineered configuration

Every option validated for socket, memory channels, PCIe lanes, power and cooling.

### 48-hour burn-in

Assembled, firmware-updated and stress-tested before it leaves our workshop.

### 3-year warranty

Standard on every system, with on-site next-business-day upgrades available.

### Rack-ready delivery

Rails, cable management and labelling included — delivered across Europe.



## Ready to order or need changes?

Configure this system online or talk to a solutions engineer — we reply within one business day.

[office@serverinvest.com](mailto:office@serverinvest.com)

Official manufacturer datasheet: [serverinvest.com/product/sys-222gs-nb3ot-alc/datasheet/manufacture](https://serverinvest.com/product/sys-222gs-nb3ot-alc/datasheet/manufacture)

