

TECHNICAL DATASHEET

SUPERMICRO · GPU & AI SERVERS

Supermicro 4U GPU Server SYS-422GL-FNR2

DP Intel 4U Dual-Root PCIe GPU System with up to 8 GPUs

SKU SYS-422GL-FNR2

4U

LGA7529

Supermicro



FORM FACTOR

4U

MAX POWER (BASE)

645 W

HEAT OUTPUT

2,201 BTU/h

PRICE

On request

CONFIGURE & QUOTE ONLINE

serverinvest.com/product/sys-422gl-fnr2

01 Product overview

The Supermicro SYS-422GL-FNR2 is a 4U GPU Server built on dual Intel Xeon 6 processors.

DP Intel 4U Dual-Root PCIe GPU System with up to 8 GPUs.

The chassis accepts up to 8 GPU accelerators for AI, rendering and HPC workloads.

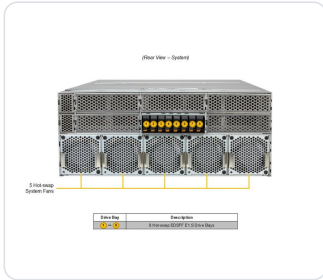
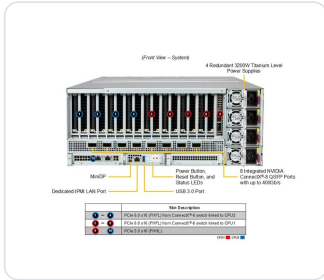
ServerInvest configures every SYS-422GL-FNR2 to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- Dual Intel Xeon 6
- Total 8 bays 8 rear hot-swap E1.S NVMe drive bays
- Up to 8 GPUs
- Power: 4x 3200W
- Networking: 1 RJ45 1GBASE-T with ASPEED AST2600

KEY SPECIFICATIONS

Form factor	4U
Processor	2× Intel Xeon 6
Socket	LGA7529
Memory	24 DIMM slots
Memory type	DDR5-6400 ECC RDIMM
Drive bays	8 (8 NVMe)
GPU	Up to 8 GPUs
Power supply	4× 3200 W
Typical power draw	4350 W
Networking	1 RJ45 1GBASE-T with ASPEED AST2600
Dimensions (W×H×D)	437 × 178 mm



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 4U GPU Server SYS-422GL-FNR2	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
155 W	423 W	645 W	2,201 BTU/h	0.6 kW	20%

Typical 423 W · max 645 W · single PSU rating 3200 W

Annual IT energy (24/7)	3,001 kWh
Annual facility energy (PUE 1.5)	4,502 kWh
Annual energy cost	€600 IT · €900 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	1.17 t (grid factor 0.26 kg/kWh)
Power supplies	4× 3200 W redundant (N+1)

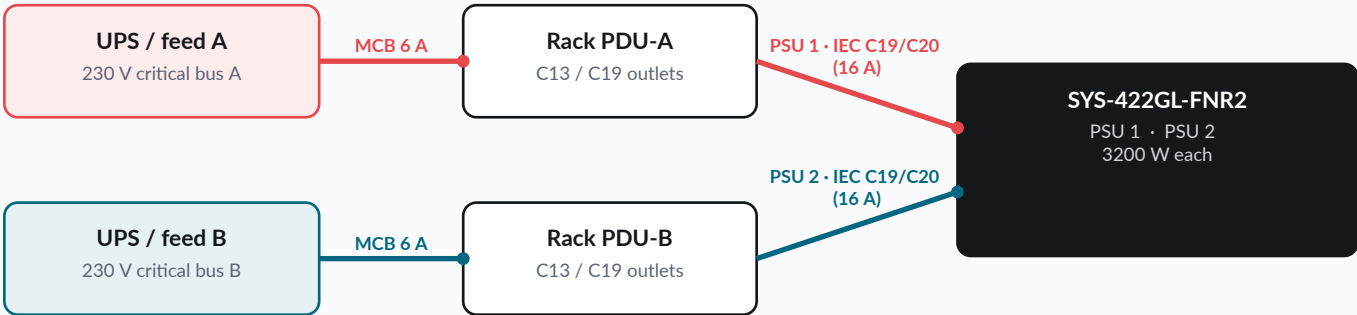
POWER BY COMPONENT

	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	72 W	112 W	160 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 C19/C20 (16 A) power cords.
- Maximum current per feed: 3 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: 645 W = 2,201 BTU/h (0.6 kW).

05 Full specifications

MOTHERBOARD	
	Super X14DBG-MAP
PROCESSOR	
CPU	Dual Socket BR (LGA-7529) Intel Xeon 6900 series processors with P-cores
Core Count	128C/256T

Note	Supports up to 500W TDP CPUs (Air Cooled)
GPU	
Max GPU Count	Up to 8 double-width GPUs
Supported GPU	NVIDIA PCIe: H200 NVL (141GB), NVIDIA RTX PRO 4500 Blackwell Server Edition, NVIDIA RTX PRO 6000 Blackwell Server Edition View GPU Options
CPU-GPU Interconnect	PCIe 5.0 x16 Switch Dual-Root
GPU-GPU Interconnect	NVIDIA NVLink Bridge (optional)
SYSTEM MEMORY	
Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): 6.0TB 6400MT/s ECC DDR5 RDIMM Max Memory (1DPC): 6.0TB 8800MT/s ECC DDR5 MRDIMM View Memory Options
Memory Voltage	1.1V
ON-BOARD DEVICES	
Network Connectivity	1 RJ45 1GBASE-T with ASPEED AST2600 8 QSFP 400GbE with NVIDIA ConnectX-8 SuperNIC View AOC Options
INPUT / OUTPUT	
USB	1 USB 3.0 Type-A port (Rear)
Video	1 mini-DP port
TPM	1 TPM header
SYSTEM BIOS	
BIOS Type	AMI 32MB 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

CERTIFICATIONS

Operating Systems	RHEL 10.0 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	4U Rackmount
Model	CSE-MG401TS-R0BNDFP

DIMENSIONS AND WEIGHT

Height	6.93" (176 mm)
Width	17.26" (438.4 mm)
Depth	31.5" (800 mm)
Package	27.32" (H) x 49.41" (W) x 19.49" (D)
Weight	Gross Weight: 96.45 lbs (43.75 kg) Net Weight: 49.5 lbs (22.45 kg)
Available Color	Silver

FRONT PANEL

Buttons	Power On/Off button
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EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 8 PCIe 6.0 x16 FH double-width slots 2 PCIe 5.0 x16 FHH L slots View AOC Options
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DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 8 bays 8 rear hot-swap E1.S NVMe drive bays View NVMe Options
M.2	2 M.2 PCIe 4.0 x4 NVMe slots (M-key 2280(default)) View M.2 Options

SYSTEM COOLING

Fans	10 Fan 80mm Fan(s)
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POWER SUPPLY

4x 3200W
4x 3200W Redundant (3 + 1) Titanium Level (96%) power supplies
Dimension (WxHxL)
73.5 x 40 x 185 mm

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 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
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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

Official manufacturer datasheet: serverinvest.com/product/sys-422gl-fnr2/datasheet/manufacturer

