GPU SuperServer SYS-421GU-TNXR

Universal 4U Dual Processor (4th and 5th Gen Intel Scalable Processors) GPU System with NVIDIA HGX™ H100 4-GPU SXM5 board, NVLINK™ GPU-GPU Interconnect, and Redundant 3000W Titanium Level Power Supplies.

More details here

Key Applications

High Performance Computing, AI/Deep Learning Training, Large Language Model (LLM) Natural Language Processing,
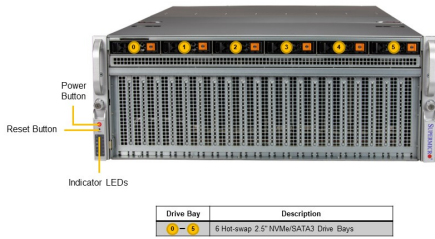
Key Features

- 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 5600MTs ECC DDR5; 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 4800MHz ECC DDR5;
- 8 PCIe Gen 5.0 X16 LP Slots;
- Flexible networking options; ;
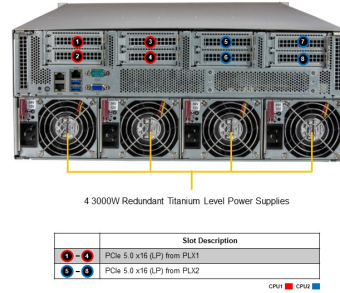- 6x 2.5" Hot-swap NVMe/SATA/SAS drive bays; 2 M.2 NVMe and SATA for boot drive only;

Form Factor	4U Rackmount Enclosure: 449 x 175.6 x 833mm (17.67" x 7" x 32.79") Package: 700 x 370 x 1260mm (27.55" x 14.57" x 49.6")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors Up to 56C/112T; Up to 112.5MB Cache per CPU
GPU	Max GPU Count: Up to 4 onboard GPU(s) Supported GPU: NVIDIA SXM: HGX H100 4-GPU (80GB) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink®
System Memory	Slot Count: 32 DIMM slots Max Memory (2DPC): Up to 8TB 5600MT/s ECC DDR5
Drive Bays	6x 2.5" hot-swap NVMe/SATA drive bays (6x 2.5" NVMe hybrid) 2 M.2 NVMe OR 2 M.2 SATA3
Expansion Slots	1 PCIe 5.0 x16 LP slot(s) 7 PCIe 5.0 X16 slot(s)
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2x 10GbE BaseT with Intel® X710-AT2 IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	Video: 1 VGA port(s)

(Front View – System)

(Rear View – System)

Power Button

Reset Button

Indicator LEDs

Drive Bay	Description
0 — 5	6 Hot-swap 2.5" NVMe/SATA3 Drive Bays

4 3000W Redundant Titanium Level Power Supplies

	Slot Description
1 — 4	PCIe 5.0 x16 (LP) from PLX1
5 — 8	PCIe 5.0 x16 (LP) from PLX2

CPU1 ■ CPU2 ■

System Cooling	Fans: 5 heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud(s) Liquid Cooling: 1Direct to Chip (D2C) Cold Plate (optional)
Power Supply	4x 3000W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0

PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory
	        8+4 Phase-switching voltage regulator
	FAN: Fans with tachometer monitoring
	        Status monitor for speed control
	        Pulse Width Modulated (PWM) fan connectors
	Temperature: Monitoring for CPU and chassis environment
	                Thermal Control for fan connectors

Dimensions and Weight	Height: 7" (175.6 mm) Width: 17.67" (449 mm) Depth: 32.79" (833 mm) Gross Weight: 140 lbs (64 kg) Net Weight: 105 lbs (48 kg) Packaging: 14.57" (H) x 27.55" (W) x 49.6" (D) Available Color: Black Front & Silver Body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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)
Motherboard	[Super X13DGU](#)
Chassis	CSE-458GTS-R3K06P

Parts List

Standard Parts (Parts Included)

Motherboard / Chassis

Part Number	MBD-X13DGU	CSE-458GTS-R3K06P
Qty	1	1
Description	Super X13DGU Motherboard	4U Chassis

Backplane

Part Number	BPN-NVME5-HE211N-S6
Qty	1
Description	1U 6-port all hybrids backplane support up to 6x SAS3/SATA3/NVME5 storage devices

Cable

Part Number	CBL-0223L	CBL-CDAT-0680-55	CBL-LPST-1395QQL4-100	CBL-MCIO-1245M5FJ2	CBL-MCIO-1250M5FJ1
	CBL-MCIO-1255M5	CBL-MCIO-1338RM5B1	CBL-MCIO-1338RM5B2	CBL-MCIO-1339RM5B1	CBL-MCIO-1339RM5B2
	CBL-PWEX-1129-60	CBL-PWEX-1131-30	CBL-PWEX-1141B-50		
Qty	4	1	2	1	1
	1	2	2	2	2
	1	4	1		
Description	BLADE PWS POWER CORD C-19 TO C-20, PBF	NCSI,2x10F to 2x10F,IDC,PH2.54,55cm,shield,28AWG,RoHS	SlimSASLP x4 (STR to STR),95CM,32#,100 OHM,RoHS	MCIO x8 (STR to STR),FFC,Fold,45cm,30AWG,RoHS	MCIO x8 (STR to STR),FFC,Fold,50cm,30AWG,RoHS
	MCIO x8 (STR to STR),55CM,30AWG,RoHS	2 MCIO X8 (RA to STR),35/38cm,32AWG,RoHS	2 MCIO X8 (RA to STR),27/36cm,32AWG,RoHS	2 MCIO x8 (RA to STR),29/39cm,32AWG,RoHS	2 MCIO x8 (RA to STR),32/37cm,32AWG,RoHS
	Micro Hi,2x2,PH3.0 to ATXPWR,2x2F,60cm,8A/p,18AWG,RoHS	MicroHi (2x2 to 2x2),PH3.0,30CM,9.5A/p,18 AWG, RoHS	MicroHi (2x4F to 2x4F), PH3.0, 50cm, 10.5 A/p, 16AWG, R		

Drive Tray(s)

Part Number	MCP-220-00178-0B
Qty	6
Description	2.5 thin profile drive tray, Orange tab (for hotswap NVMe drive), for SC119UH

Air Shroud

Part Number	MCP-310-45809-0B
Qty	1
Description	CSE-458G 4U Plastic Air Shroud for X13 MB

Riser Card

Part Number	RSC-G-66G5	RSC-GR-66G5
Qty	2	2
Description	1U LHS GPU Riser card with two PCIe 5.0 X16 slots,HF,Ro	1U RHS GPU Riser card with two PCIe 5.0 X16 slots,HF,Ro

Software

Part Number	SFT-OOB-LIC
Qty	1
Description	License key for enabling OOB BIOS management

Heatsink / Retention

Part Number	SNK-P0088PB
Qty	2
Description	2U Proprietary L-shape Passive CPU HS for X13 Universal GPU System

*Power Supply

Part Number	PWS-3K06G-2R
Qty	4
Description	AC-DC 3000W, Titanium efficiency, DC output: 54Vdc/45A

*Power Distributor

Part Number	PDB-PT458G-48
Qty	1
Description	Input 4 powers with 54V and 12V also 12Vsb pass through boar

Notes:
1. Parts with * are inside the chassis
2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.