AI Training SuperServer SYS-820GH-TNR2

Key Applications
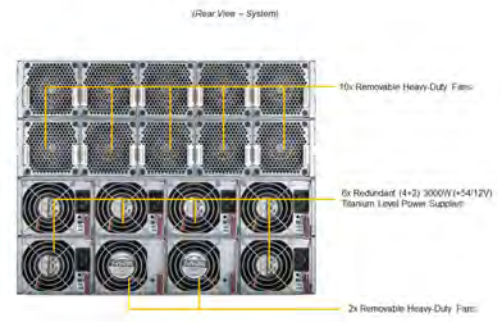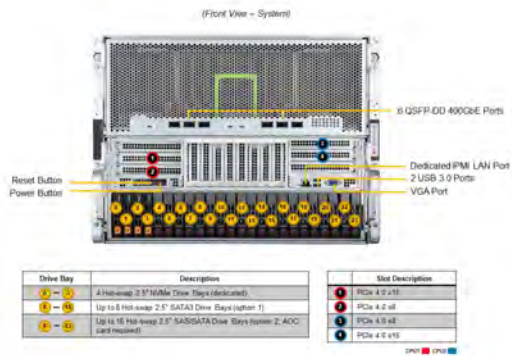
Computer Vision, Natural Language Processing, Recommendation , Purpose Built for AI/Deep Learning Training ,

Key Features

- Dual Intel® Xeon® 3rd Gen Scalable Processors (Ice Lake) TDP up to 270W;
- Intel® C621A Chipset;
- 32x DIMM slots, up to 8TB Registered ECC DDR4 3200MHz SDRAM;
- 2x PCIe 4.0 x16 FHFL slot and 2x PCIe 4.0 x8 FHFL slot;
- 6x 400GbE QSFP-DD for scale-out and 1x 1GbE BaseT (dedicated IPMI port);
- Up to 16x 2.5" SAS or SATA Hot-Swap Drive Bays (Additional SAOC is required); Up to 8x 2.5" SATA Hot-Swap Drive Bays; 4x 2.5"NVMe Hot-Swap Drive Bays;
- 12x Removable Heavy-Duty FANs (Includes 2x Dummy PSU FAN);
- 6x 3000W(54V+12V) Redundant Power Supplies, Titanium Level;

Form Factor	8U Rackmount Enclosure: 447 x 356 x 800mm (17.6" x 14" x 31.5") Package: 1020 x 680 x 1400mm (40" x 26.8" x 55.2")
Processor	Dual Socket P+ (LG-4189) 3rd Gen Intel® Xeon® Scalable Processors Up to 40C/80T; Up to 60MB Cache per CPU Supports up to 270W TDP CPUs (Air Cooled)
System Memory	Memory Capacity: 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 3200/2933/2666MHz ECC DDR4 RDIMM/LRDIMM
Drive Bays	20x 2.5" hot-swap NVMe/SATA/SAS drive bays (4x 2.5" NVMe dedicated; Up to 8x 2.5" SATA dedicated or Up to 16x 2.5" SAS/SATA supported by additional SAOC) 2 M.2 NVMe M-Key, 2280/22110
Expansion Slots	2 PCIe 4.0 x16 FHFL slot(s) 2 PCIe 4.0 x8 FHFL slot(s)
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 6x 400GbE QSFP-DD 1x 1GbE BaseT Note: IPMI LAN port on CPU processor tray, and QSFP-DD ports are for AI Scale-out purpose
Input / Output	USB: 2 USB 3.0 port(s) (2 USB 3.0) Video: 1 VGA port(s)

(Front View – System)

(Rear View – System)

Drive Tray	Descriptions
A – D	4 Hot-swap 2.5" NVMe Drive Trays (dedicated)
E – L	Up to 8 Hot-swap 2.5" SATA3 Drive Bays (option 1)
E – T	Up to 16 Hot-swap 2.5" SAS/SATA Drive Bays (option 2; AOC card required)

Slot Description	
1	PCIe 4.0 x16
2	PCIe 4.0 x8
3	PCIe 4.0 x8
5	PCIe 4.0 x16

System Cooling	10x 8cm heavy duty fan(s)	
Power Supply	18000W Redundant Titanium Level power supplies	
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM	
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory	
	7+1 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: 14" (356 mm)	
	Width: 17.6" (447 mm)	
	Depth: 31.5" (800 mm)	
	Gross Weight: 282 lbs (128 kg)	
	Packaging: 26.8" (H) x 40" (W) x 55.2" (D)	
	Available Color: Silver	
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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)	
Motherboard	Super X12DPG-OA6-GD2	
Chassis	CSE-GP802TS-R000NP	