IoT SuperServer SYS-322GA-NR

3U Intel DP Edge Data Center System with Up to 10 PCIe 5.0 x16 slots + Up to 14 E1.S NVMe Drives

More details here

Key Applications

High Performance Computing, AI/Deep Learning Training, Industrial Automation, Healthcare, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Climate and Weather Modeling, Finance & Economics, Edge AI,

Key Features

- Dual Intel® Xeon® 6900-Series Processors with P-cores up to 500W;
- 24 DIMMs supporting up to 6TB 6400MT/s DDR5 RDIMM or 6TB 8800MT/s DDR5 MRDIMM;
- Up to 10 PCIe 5.0 x16 FHFL or 20 PCIe 5.0 x8 FHFL slots;
- 6/8/14 hot-swap E1.S NVMe drive bays or 2/4/6 hot-swap 2.5" NVMe drive bays;
- 3x 3200W or 2700W Redundant (2+1) Titanium Level power supplies;
- Support up to 8 Double Width Full Height Full Length GPU or 19 Single Width GPU;

Form Factor	3U Rackmount Enclosure: 438.4 x 132.1 x 800mm (17.26" x 5.2" x 31.5") Package: 740 x 340 x 1190mm (29" x 13" x 47")
Processor	Dual Socket BR (LGA-7529) Intel® Xeon® 6900 series processors with P-cores 128C/256T; 504MB Cache per CPU
GPU	Max GPU Count: Up to 8 double-width or 19 single-width GPUs Supported GPU: NVIDIA PCIe: H100, A10, H200 NVL (141GB), L40S, NVIDIA RTX PRO™ 4000 Blackwell, NVIDIA RTX PRO™ 5000 Blackwell, NVIDIA RTX PRO™ 6000 Blackwell Max-Q Workstation Edition, NVIDIA RTX PRO™ 6000 Blackwell Server Edition, RTX 5000 Ada CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe, NVIDIA® NVLink™
System Memory	Slot Count: 24 DIMM slots/1 Channels Max Memory (1DPC): 6TB 6400MT/s ECC DDR5 RDIMM Max Memory (1DPC): 6TB 8800MT/s ECC DDR5 MRDIMM
Drive Bays Configuration	Option A: Total 6 bays • 6 front hot-swap E1.S PCIe 5.0 x4 NVMe* drive bays Option B: Total 14 bays • 14 front hot-swap E1.S PCIe 5.0 x4 NVMe* drive bays Option C: Total 2 bays • 2 front hot-swap 2.5" PCIe 5.0 x4 NVMe* drive bays Option D: Total 4 bays • 4 front hot-swap 2.5" PCIe 5.0 x4 NVMe* drive bays Option E: Total 6 bays • 6 front hot-swap 2.5" PCIe 5.0 x4 NVMe* drive bays (*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key)
Expansion Slots	PCI-Express (PCIe) Configuration: Default • 8 PCIe 5.0 x16 (in x16) FHFL double-width slots Option A* • 8 PCIe 5.0 x16 (in x16) FHFL double-width slots • 2 PCIe 5.0 x16 (in x16) FHFL slots Option B* • 20 PCIe 5.0 x8 (in x16) FHFL slots CXL Support: Up to 17 CXL 2.0 x16/x8 devices M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 22110(default)/2280)

Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.2 Gen1 Type-A ports Video: 1 VGA port TPM: 1 TPM header

(Front View – System)

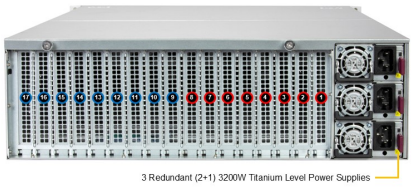
	Slot Description	
	Option 1[1]	Option 2[1]
16	PCIe 5.0 x16 FHFL	PCIe 5.0 x8 FHFL
19	---	PCIe 5.0 x8 FHFL
20	PCIe 5.0 x16 FHFL	PCIe 5.0 x8 FHFL
21	---[2]	PCIe 5.0 x8 FHFL[2]

CPU1 CPU2

Drive Bay	Description
0 – 5	6 Hot-swap E1.S NVMe Drive Bays[1]

[1] Requires additional parts from the optional parts list
[2] Optional location for I/O board

(Rear View – System)



3 Redundant (2+1) 3200W Titanium Level Power Supplies

	Slot Description	
	Option 1	Option 2
2 4 6 8 10 12 14 16	PCIe 5.0 x16 FHFL	PCIe 5.0 x8 FHFL
1 3 5 7 9 11 13 15	---	PCIe 5.0 x8 FHFL
17	---	PCIe 5.0 x8 FHFL[1,2]

CPU1 CPU2

[1] Optional location for I/O board
[2] When Slot 17 is configured as PCIe 5.0 x8, I/O board can only be placed in Slot 21

System Cooling	Fans: Up to 5 Front 8cm Fan(s) Up to 6 Internal 6cm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	3x 3200W Redundant (2 + 1) Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash EEPROM
Management	SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory FAN: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 135 lbs (61.24 kg) Net Weight: 70 lbs (32 kg) Available Color: Silver
Operating Environment	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)
Motherboard	**Super X14DBG-XAP**
Chassis	**CSE-MX301TS-R0NDFP**