

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, Retail, Healthcare, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Climate and Weather Modeling, Finance & Economics, Edge AI Inferencing,

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, 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, H200 NVL (141GB), L40S, A10 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 <ul style="list-style-type: none"> • 6 front hot-swap E1.S PCIe 5.0 x4 NVMe* drive bays Option B: Total 14 bays <ul style="list-style-type: none"> • 14 front hot-swap E1.S PCIe 5.0 x4 NVMe* drive bays Option C: Total 2 bays <ul style="list-style-type: none"> • 2 front hot-swap 2.5" PCIe 5.0 x4 NVMe* drive bays Option D: Total 4 bays <ul style="list-style-type: none"> • 4 front hot-swap 2.5" PCIe 5.0 x4 NVMe* drive bays Option E: Total 6 bays <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 8 PCIe 5.0 x16 (in x16) FHFL double-width slots Option A* <ul style="list-style-type: none"> • 8 PCIe 5.0 x16 (in x16) FHFL double-width slots • 2 PCIe 5.0 x16 (in x16) FHFL slots Option B* <ul style="list-style-type: none"> • 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

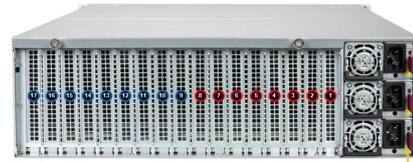
(Front View – System)



| Slot Description | | Drive Bay | Description |
|-------------------|------------------|-----------|---------------------------------|
| Option 1 | Option 2 | 4 – 5 | 6 Hot-swap E1.5 NVMe Drive Bays |
| PCIe 5.0 x16 FHFL | PCIe 5.0 x8 FHFL | | |
| ... | PCIe 5.0 x8 FHFL | | |
| PCIe 5.0 x16 FHFL | PCIe 5.0 x8 FHFL | | |
| ... | PCIe 5.0 x8 FHFL | | |

*Requires additional parts from the optional parts list
 † Optional location for I/O board

(Rear View – System)



| Slot Description | |
|-------------------|---------------------------------|
| Option 1 | Option 2 |
| PCIe 5.0 x16 FHFL | PCIe 5.0 x8 FHFL |
| ... | PCIe 5.0 x8 FHFL |
| ... | PCIe 5.0 x8 FHFL ^{1,2} |

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 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 | 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 |