SYS-80415R-G10

4U Standard High-Performance GPU Server

SYS-80415R-G10 series product is a high-performance dual-socket GPU server motherboard supporting Intel's 4th/5th Gen Xeon Scalable series processors. This product uses the Intel® C741 high-performance server chipset and is newly designed for the 4th/5th generation Intel Xeon Scalable series processors. It supports up to 10 full-height double-wide GPUs. From its exterior design to internal components, the new server reflects the company's pursuit of "Technology/Innovation/Eco-friendliness" in its business philosophy, providing customers with a high-performance, highly reliable, low-power consumption, and optimally cooled 4U GPU-bay server. Whether for enterprise-class data centers or developing business applications, the product offers multiple flexible configuration options to better meet the growing server needs of customers. It provides reliable hardware support for data storage, high-performance computing, virtualization, animation, 3D modeling and rendering, AI, deep learning training, machine vision, cloud gaming, and more. It is the best choice for large industries, enterprises, research institutions, and government users who require high stability and practicality.
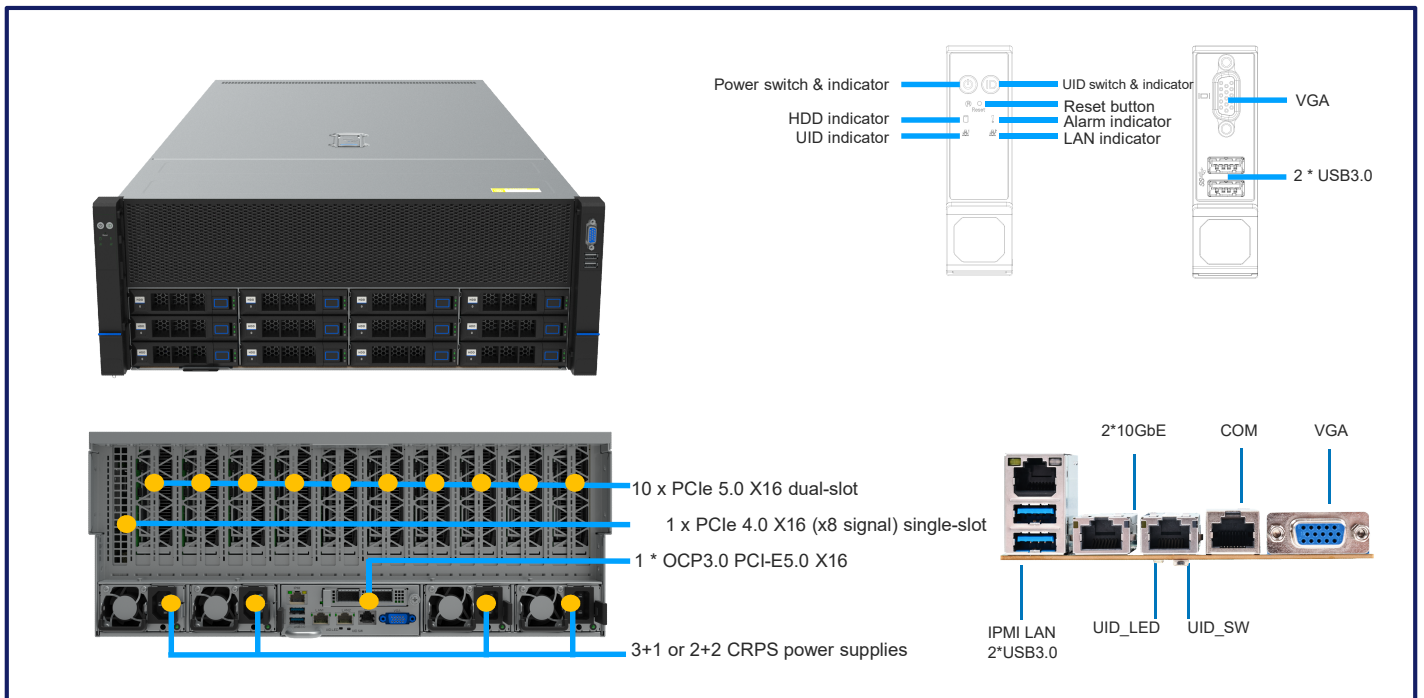
- Based on Intel® C741 high-performance server chipset, using Intel Xeon® 4th/5th Gen Scalable series processors, offering significant performance improvements;
- Provides 32 x DDR5 DIMM memory slots, supporting frequency up to 5600 MHz and up to 8TB 3DS RDIMM.
- Onboard: 20 x MCIO PCIe 5.0 x8 slots (each interface can be configured as 2 NVMe x4), supporting Intel VROC NVMe RAID key; 1 x MCIO PCIe 4.0 x8 slot for flexible expansion;
  Flexible configurations:
  10 x PCIe 5.0 x16 slots (dual-slot), supporting up to 10 full-height double-wide GPUs;
  1 x PCIe 5.0 x16 slot (x8 signal) (single-slot); 1 x OCP3.0 PCIe 5.0 x16; 4 x front-accessible U.2 NVMe slots
- Supports 2 * M.2 PCI-E 3.0 x2（2280/22110）
- Supports 12 x hot-swappable 3.5"/2.5" SAS/SATA drives, optional support for 4 x U.2 drives; providing multiple storage solutions for enterprise applications.
- OCP3.0 modular IO interfaces for expanding network ports, USB, IPMI management, VGA, COM, UID, etc.
- Onboard AST2600 BMC management chip, supporting hardware monitoring, remote monitoring, system maintenance, host power, voltage, temperature, fan operation status, etc.;
- Supports 4 x standard CRPS power supplies, with efficient and safe redundant modes like 2+2 or 3+1.
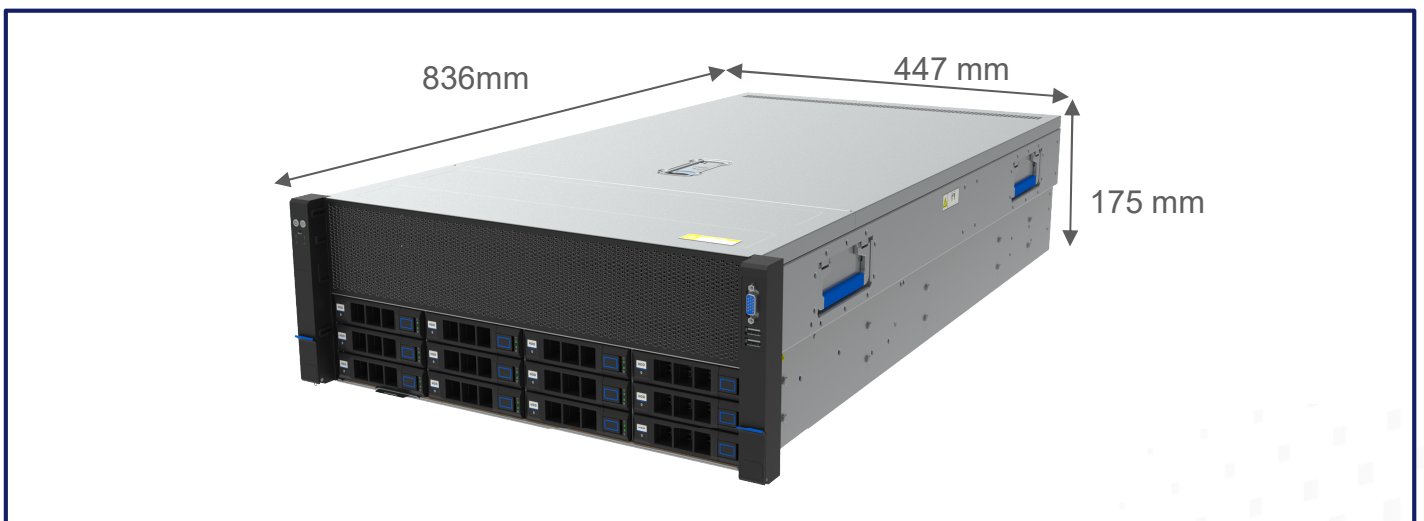
Specifications

System Control	CPU	Supports 3rd/4th Gen Intel® Xeon® scalable series processors; EGS （Sapphire Rapids/Emerald Rapids）, TDP 350W
	Number of CPUs	2个Socket E (LGA4677)
	Chipset	Intel® C741 chipset
Memory	Type	32 x memory slots (8-channel/CPU), Support 5600/4800/4400MHz DDR5 RDIMM, 3DS RDIMM；Supports RDIMM: 16G, 32G, 64GB, 128GB；3DS RDIMM 256GB；Support up to 8TB 3DS RDIMM，
Graphics	Chip/Interface	ASPEED AST2600 BMC, 1 x rear VGA interface, 1 x front VGA interface
Storage	Hot-swap	Supports 12 x hot-swappable 3.5"/2.5" 12Gb/s direct-attached SAS/SATA drives (optional support for 4 x U.2 NVMe or expander backplane)
	RAID controller	8 x SATA3 6Gb/s interfaces, supporting Raid 0, 1, 5, 10 (2 x MinisasHD) Optional RAID card, supports RAID 0/1/10/5/6/50/60/1E (optional RAID card cache protection module); Optional Intel VROC NVMe RAID key;
	M.2	2 x M.2 interfaces, supporting 2242/2280 (PCI-E 3.0 x2)
1GbE network	Network card IC	Intel X550-AT2 enterprise-grade 10GbE network controller; 2 x 10GbE RJ45 networks, supporting 100/1000/10000 Mbps
IPMI management interface	Type	1 x standard RJ45, 10/100/1000 Mbps network interface
USB	USB 3.0	2 * USB 3.0 (rear IO), 2 * USB 3.0 (front)
	USB 2.0	1 * USB 2.0 (internal TYPE A)
Serial port	Serial port	1 x RJ45 COM port, 1 x serial port header
PCIe Expansion	PCIe Expansion	Onboard: 20 x MCIO PCIe 5.0 x8 slots (each interface can be configured as 2 NVMe x4), supporting Intel VROC NVMe RAID key; 1 x MCIO PCIe 4.0 x8 slot for flexible expansion; Flexible configurations: 10 x PCIe 5.0 x16 slots (dual-slot), supporting up to 10 full-height double-wide GPUs; 1 x PCIe 5.0 x16 slot (x8 signal) (single-slot); 1 * OCP3.0 PCI E 5.0 x16; 4 x Front-accessible U.2 NVMe slots
Back panel	Rear window indicator lights	1 x RJ45 IPMI dedicated management interface; 2 x RJ45 10GbE network ports; 1 x RJ45 COM port; 1 x UID switch; 1 x UID LED indicator; 1 x VGA;
Front panel	Switch	1 x Illuminated power switch; 1 x illuminated UID switch; 1 x reset switch;
	Indicator lights	1 x HDD activity indicator; 2 x network indicators; 1 x alarm indicator
Power supply	Power input	Optional CRPS 1600W/2000W/2700W power supplies, supporting 3+1 or 2+2 redundancy
Fan	Fan	Internal 8 8056 fans; optional rear 4 x 8038 fans
Dimensions	Dimensions	Dimensions: 836mm (D) * 437.5mm (W) * 176.5mm (H)
Temperature / humidity requirements	Temperature	Operating temperature: 10℃ to 35℃; Storage temperature: -40℃ to 70℃
	Humidity	Operating humidity: 8% to 90% non-condensing; storage humidity: 5% to 95% non-condensing
Installation kit	Rails	Supports rails (optional)

02 Product View

Power switch & indicator
HDD indicator
UID indicator

UID switch & indicator
Reset button
Alarm indicator
LAN indicator

VGA

2 * USB3.0

10 x PCIe 5.0 X16 dual-slot
1 x PCIe 4.0 X16 (x8 signal) single-slot
1 * OCP3.0 PCI-E5.0 X16
3+1 or 2+2 CRPS power supplies

2*10GbE   COM   VGA

IPMI LAN
2*USB3.0

UID_LED   UID_SW

03 Dimensions

836mm   447 mm   175 mm

04 Product Selection

Model	Product Configurations
SYS-80415R-G10–R1600	Neutral server P15DEN-OA, 4U 10GPU server, supporting 2 x Intel Xeon® 4th/5th Gen Scalable series processors, 32 x DDR5 RECC, 2 x 10GbE RJ45, IPMI, 1600W 3+1 redundant power supply, barebone system
SYS-80415R-G10–R2000	Neutral server P15DEN-OA, 4U 10GPU server, supporting 2 x Intel Xeon® 4th/5th Gen Scalable series processors, 32 x DDR5 RECC, 2 x 10GbE RJ45, IPMI, 2000W 3+1 redundant power supply, barebone system
SYS-80415R-G10–R2700	Neutral server P15DEN-OA, 4U 10GPU server, supporting 2 x Intel Xeon® 4th/5th Gen Scalable series processors, 32 x DDR5 RECC, 2 x 10GbE RJ45, IPMI, 2700W 3+1 redundant power supply, barebone system