XA NB3I-E12 NVIDIA HGX™ B300

ASUS NVIDIA HGX Architecture: The Best Choice for Heavy AI Workloads

Form Factor / **9U**   **CPU Number** / **2**   **Memory Number** / **32**
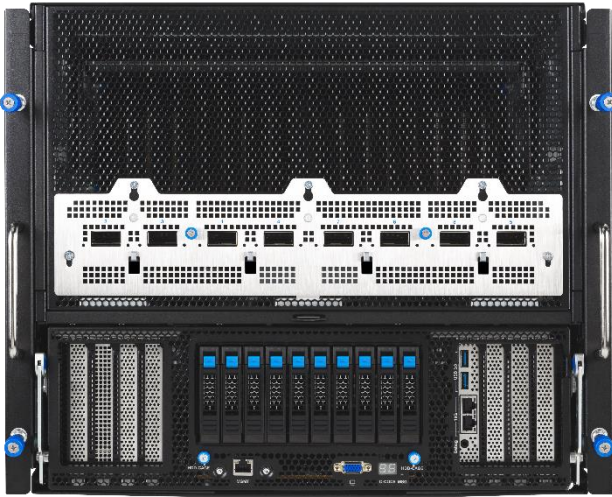
9U NVIDIA HGX B300 8-GPU server with dual 6th Gen Intel Xeon Scalable processors that designed for large scale of AI and HPC, 5 PCIe slots, 32 DIMM, 10 NVMe, dual 10G LAN. NIC and storage are placed close to the GPUs, use a ratio of up to 1:1 GPUs to network interface card and have GPU Direct Storage design could reduce read/write latency. XA NB3I-E12 is optimal for cultivating AI advancements for enterprise applications.

FEATURE

- 6th Gen Intel® Xeon® Scalable Processors
- PCIe 5.0 Ready
- Powerful Performance
- Enhanced IT-infrastructure management

Target market

- High Performance Computing
- Generative AI
- Deep Learning/Machine Leaning
- Data Analysis
- Scientific Research

6th Gen Intel® Xeon® Scalable Processors
Powered by 6th Gen Intel® Xeon® Scalable Processors with 8-channel, up to 6400 MHz DDR5 and support for a maximum TDP of up to 350 watts per socket

PCIe Gen5.0 Ready
PCI Express® (PCIe®) 5.0 delivers 32 GT/s bandwidth, which is double the speed of PCIe 4.0, offering lower power consumption, better lane scalability and backwards compatibility.
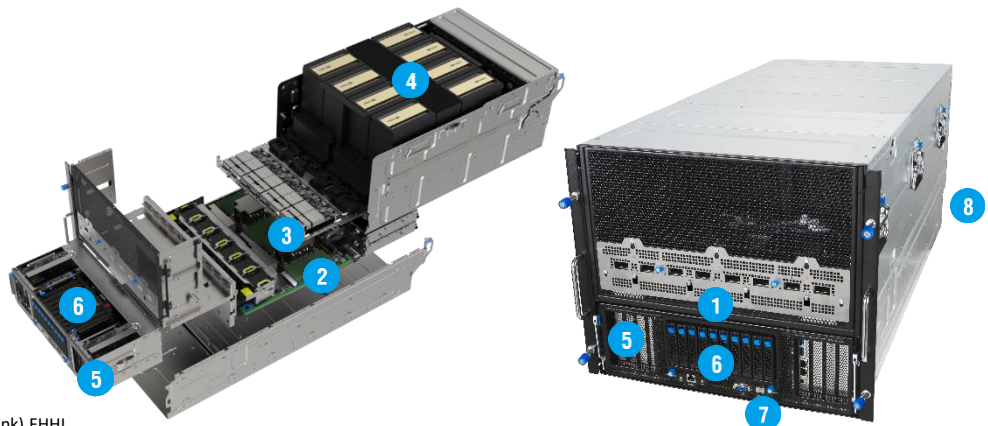
Powerful Performance
Support NVIDIA HGX B300 8-GPUs and connected with latest NVSwitch design. CX8 emdedded and storage are placed close to the GPUs, use a ratio of up to 1:1 GPUs to network interface card and have GPU Direct Storage design could reduce read/write latency.

Enhanced IT-infrastructure management
ASUS ASMB11-iKVM remote control with ASPEED AST2600, ASUS Control Center IT management software and hardware-level Root-of-Trust solution

1. Asset Tag
2. 32 x DIMM, DDR5 6400 RDIMM/ 3DS RDIMM
3. 2 x 6th Gen Intel® Xeon® Scalable Processors
4. 8 x HGX B300 GPUs with NVLink NVSwitch
5. 4 x PCI-E x16 (Gen5 x16 link) HHHL + 1 x PCI-E x16 (Gen4 x8 link) FHHL
6. 10 x 2.5" NVMe hot-swap drive bays
7. I/O port
7. 5+5 Redundant 3200W 80 PLUS Titanium Power Supply

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SPECIFICATION

XA NB3I-E12

Processor Support		2 x Socket
		6th Gen Intel® Xeon® Scalable Processors
Memory	**Total Slots**	32 (8-channel per CPU, 16 DIMM per CPU)
	Capacity	Maximum up to 4 TB per CPU
	Memory Type	DDR5 6400 RDIMM/RDIMM 3DS (2DIMM per Channel) *Please refer to www.asus.com for latest momory AVL update
	Memory Size	128GB, 96GB, 64GB Intel® Optane™ persistent memory 300 series * Refer to www.asus.com/support for more information
Expansion Slots	**Total PCI/PCI-X/PCI-E/PIKE Slots**	SKU1: 5
	Slot Type	SKU1: 5 x PCIe Gen5 slots [PCIe Switch directly] - 4 x PCIe Gen5 x16 link - 1 x PCIe Gen5 x8 link (Raid Only) *Support PCIe x16 link support DPU ** For Raid card to connect storage
Storage Bays	**I = internal** **A or S will be hot-swappable**	10 x 2.5" hot-swap drive bays (10 NVMe) [PCIe Switch directly] SKU1: 2 x Gen5 NVMe needs Raid card + 8 x Gen5 NVMe SKU2: 10 x Gen5 NVMe
Networking	**LAN**	2 x 10 Gigabit LAN ports (Intel X710-AT2 Controller) 1 x Management Port
Graphic	**VGA**	Aspeed AST2600 64MB

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Front I/O Ports		2 x USB 3.2 ports 1 x VGA port 2 x 10GbE RJ45 LAN port 1 x RJ-45 Mgmt LAN port
Switch/LED		Front : 1 x Power Switch/LED 1 x Location Switch/LED 1 x Message LED 1 x Port80 LED (Q-Code) LAN 1-2 LED (on NIC module)
OS Support		RedHat® Enterprise Linux Rocky Ubuntu VMware *Please find the latest OS support from https://www.asus.com/event/Server/OS_support_list/OS.html
Management Solution	**Software**	ASUS Control Center
	Out of Band Remote Management	On-Board ASMB11-iKVM
Dimension		945mm * 447mm * 394.5 mm
Net Weight Kg (CPU, DRAM & HDD not included)		120 kg
Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)		150 kg
Power Supply (following different configuration by region)		5+5 3200W 80 PLUS Titanium Power Supply
Environment		Operation temperature: 10℃ ~ 35℃ Non operation temperature: -40℃ ~ 70℃ Non operation humidity: 20% ~ 90% (Non condensing)