

# ESC8000A-E13P

## New Generation, High Performance 4U NVIDIA MGX™ Server



4U



2



24

ESC8000A-E13P is a dual-socket server powered by AMD EPYC™ processors, designed for enterprise AI infrastructure with exceptional computational capabilities, accelerating GPU interconnects and high-bandwidth fabric, supporting up to eight 600W dual-slot GPUs, and offering scalable performance through configurable NVIDIA® NVLink™ 2-Way or 4-Way Bridges to optimize bandwidth and performance for demanding AI and HPC workloads.

### FEATURE

- AMD EPYC 9005 Series Processors
- Modularized Design
- 8 x 600W dual-slot GPU Support
- Optimized Server Configuration
- Toolless Design

#### 5th Gen AMD EPYC™ Processors

Powered by AMD EPYC 9005 processors with up to 192 Zen 5/5c cores and support for a maximum TDP of 500 watts per socket.

#### Modularized Design

Fully compliant with NVIDIA MGX™ architecture, it can enable multiple configurations and rapidly deploy in large-scale enterprise AI infrastructures.

#### GPU and NVIDIA® NVLink™ bridge Support

Support up to eight dual-slot 600W GPUs, NVIDIA® NVLink™ 2-Way or 4-Way bridges, and NVIDIA BlueField®-3 DPUs to enable performance scaling.

#### Optimized Server Configuration

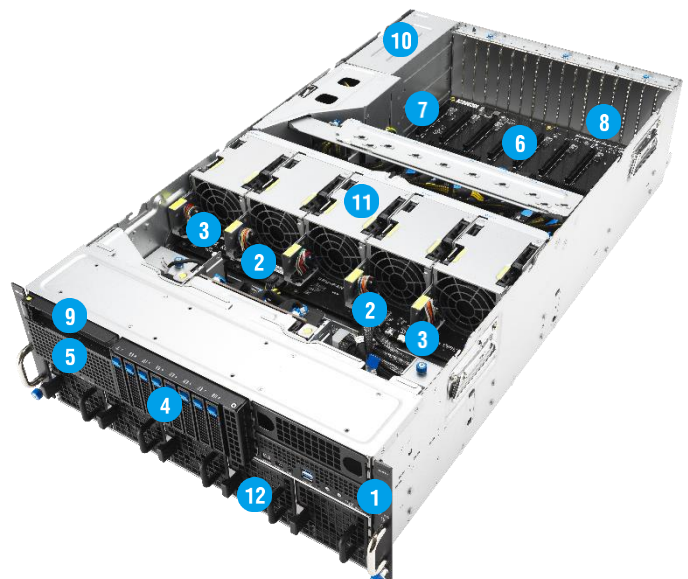
Based on the NVIDIA OVX™ system, the server is configured with a 2-8-5 topology (CPU-GPU-DPU/NIC). Five high-bandwidth PCIe NICs and DPUs enhance network traffic and system performance.

#### Toolless Design

The ASUS-exclusive toolless design empowers easy service and saves over 90% maintenance time for maximum efficiency.

### Target market

- Virtual Machines
- Data Center
- HPC Application
- AI Training
- LLM Inference



1. Asset Tag
2. 24 x DDR5 DIMM up to 6000Mhz
3. 2 x AMD EPYC™ 9005 Series Processor
4. 8 x 2.5" Hot-swap HDD Bays
5. 2 x M.2 (Gen 5 x4 link, up to 22110)
6. 8 x PCIe slot for dual-slot GPU (Gen5 x16 link, support up 600W)
7. 1 x PCIe slot for NIC (Gen5, x16 link, FHHL)
8. 4 x PCIe slot for NIC/ NVIDIA BlueField®-3 DPUs (Gen5, x16 link, FHHL)
9. 1 x PCIe slot for PCIe card (Gen5 x8 link, FHHL)
10. 3+1 Redundant 3200W 80 PLUS Titanium Power Supply
11. 5 x GPU Fan
12. 5 x System Fan

# ESC8000A-E13P

## SPECIFICATION

### Processor Support

2 x Socket SP5 (LGA 6096)  
AMD EPYC™ 9005 series processors\*  
\* At 25°C Operating temperature, cTDP up to 500W

### Core Logic

System on Chip (SOC)

### Memory

#### Total Slots

24 x DIMM slots (12 channel per CPU, 12 DIMM per CPU)

#### Capacity

Maximum up to 3TB per CPU socket

#### Memory Type

DDR5 6400/6000/5600 RDIMM/ 3DS RDIMM

\*Refer to ASUS server AVL for the latest update

#### Memory Size

128GB, 64GB, 32GB RDIMM

\*Refer to ASUS server AVL for the latest update

### Expansion Slots

#### Total Slots

14

#### Slot Type

Rear:

- 8 x PCIe x16 (Gen5 x16 link, FHFL) for dual-slot GPU cards

- 5 x PCIe x16 (Gen5 x16 link, FHHL) for NIC cards or NVIDIA BlueField®-3 DPUs

Front:

- 1 x PCIe x8 (Gen5 x8 link, FHHL)

### Storage Bays

8 x 2.5" Front Hot-swap Storage Bays  
(Backplane supports up to 8 x NVMe)

2 x M.2 socket (Gen 5 x4 link, up to 22110)

### Networking

#### LAN

2 x 10GbE LAN ports (RJ45, X710-AT2)

1 x Management Port (RJ45)

### Graphic

#### VGA

Aspeed AST2600 64MB

### Front I/O Ports

1 x Mini display port

2 x USB 5Gbps ports

### Rear I/O Ports

1 x USB 5Gbps port

2 x RJ-45 LAN ports

1 x RJ-45 management LAN port

### Switch/LED

Front Switch/LED:

1 x Power switch/LED, 1 x Location switch/LED, 1 x Message LED,

1 x Clear CMOS switch, 1 x Reset switch, 2 x M.2 LEDs, 2 x LAN LEDs, 1 x Q-Code/Port 80 LED

Rear Switch/LED:

1 x Power switch/LED, 1 x Location switch/LED, 1 x Message LED

### OS Support

Windows Server

RedHat® Enterprise Linux, SuSE® Linux Enterprise Server, CentOS, Ubuntu, VMware

Please find the latest OS support from [OS Compatibility Guide | ASUS](#)

### Management Solution

#### Software

ASUS Control Center (Classic)

#### Out of Band Remote Management

On-Board ASMB12-iKVM for KVM-over-IP

### Dimension

800mm x 439.5mm x 175 mm (4U)

31.5"x17.3"x 6.9"

### Net Weight Kg (CPU, DRAM & HDD not included)

42 kg

### Gross Weight Kg (CPU, DRAM & HDD not included, Packing include)

44.23 kg

### Power Supply (following different configuration by region)

3+1 Redundant 3200W 80 PLUS Titanium power

Rating: 220-240 Vac, 16A (x4) 50/60Hz

### Environment

Operating temperature: 10°C ~ 35°C

Non-operating temperature: -40°C ~ 60°C

Non-operating humidity: 20% ~ 95% (Non-condensing)