

# ESC A8A-E12U series

Empowering AI and HPC with excellent performance



Form  
Factor

7U

CPU  
Number

2

Memory  
Number

24

ASUS ESC A8A-E12U series is a 7U AMD® 8-GPU server with dual AMD EPYC 9005 processors that designed for large scale of AI and HPC applications.

## FEATURE

- Powered by dual AMD next Gen processors, with DDR5 RDIMM up to 6000MHz 1DPC
- CPU maximum TDP up to 400W
- Powerful Performance
- Enhanced IT-infrastructure management

## Target Market

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

## A + A Solution -

### AMD EPYC 9005 Processors & AMD Instinct™ MI325X Series

ASUS ESC A8A-E12U series is a 7U AMD® eight-GPU server with dual AMD EYCP 9005 processors and 24 DDR5 RDIMM up to 6000 MHz (1DPC), delivering exceptional performance , designed for generative AI and HPC workloads .

## Powerful Performance

Support AMD Instinct™ MI325X Series 8-GPUs. 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.

Industry-leading 256 GB HBM capacity and 6 TB/s bandwidth for large AI models and HPC workloads. Direct GPU-to-GPU interconnect delivers 896 GB/s bandwidth for efficient scaling.

## 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

# SPECIFICATION

<b>Model Name</b>		<b>ESC A8A-E12U</b>
<b>Processor Support</b>		2 x AMD EPYC 9005/9004 Processors (Up to TDP 400W)
<b>Core Logic</b>		(INTEGRATED I/O – NO CHIPSET)
<b>Memory</b>	<b>Total Slots Capacity Memory Type Memory Size</b>	24x DDR5 DIMM slots, up to 6400MHz(1DPC) (12-channel per CPU, 12 DIMM per CPU) Maximum up to 3TB DDR5 6400/5600 RDIMM 128GB, 96GB, 64GB *Refer to Asus server AVL for the latest update
<b>Expansion Slots</b>	<b>Total PCI/PCI-X/PCI-E/PIKE Slots Slot Type</b>	Up to 11 PCIe slots [89104 PCIe Switch directly] -8 x PCIe Gen5 x16 (LP, HL) – GPU group [89048 PCIe Switch directly] -1 x PCIe Gen5 x16 (FH, HL) – CPU 1 extension -1x PCIe Gen5 x8 (FH, HL) – CPU 1 extension [CPU directly] -1 x PCIe Gen5x16 (FH, HL) (CPU2)
<b>Disk Controller</b>	<b>NVMe Controller</b>	2 x M.2 Gen5 x4 (22110, 2280, 2260) Optional kits: Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i *Refer to Asus server AVL for the latest update
	<b>SATA/SAS Controller</b>	Optional kits: ASUS PIKE II 3008-8i/3108-8i Broadcom MegaRAID 9540-8i Broadcom MegaRAID 9560-16i *Refer to Asus server AVL for the latest update
<b>Storage Bays</b>	<b>I = internal A or S will be hot-swappable</b>	10 x 2.5" hot-swap bays 8 x NVMe + 2 x NVMe/SATA*/SAS* *HBA/ RAID card is required to support SAS hard drives
<b>Networking</b>	<b>LAN</b>	1 x Management Port
<b>Graphic</b>	<b>VGA</b>	Aspeed AST2600 64MB
<b>Front I/O Ports</b>		4 x USB3.2 Gen1 ports, 1 x VGA port 2 x 10Gb RJ45 LAN module (Intel-x710 Based) 1 x Mgmt LAN 1 x locate button 1 x power button
<b>Rear I/O Ports</b>		1 x locate button 1 x power button
<b>Switch/LED</b>		Front : 1 x Power Button/LED 1 x Location Button/LED 1 x Message LED 1 x Q-Code/Port 80 LED Rear : 1 x Location LED 1 x Power Button/LED
<b>OS Support</b>		Please find the latest OS support from <a href="http://www.asus.com/">http://www.asus.com/</a>
<b>Management Solution</b>	<b>Software</b>	ASUS Control Center (Classic)
	<b>Out of Band Remote Management</b>	On-Board ASM11-iKVM for KVM-over-IP
<b>Dimension</b>		885mm x 447mm x 306.65mm (7U)
<b>Net Weight Kg (CPU, DRAM &amp; HDD not included)</b>		108kg
<b>Gross Weight Kg (CPU, DRAM &amp; HDD not included, Packing included)</b>		142.4kg
<b>Power Supply (following different configuration by region)</b>		5+1 Redundant 80 PLUS 3000W Titanium PSU
<b>Environment</b>		Operation temperature: 10°C ~ 35°C Non operation temperature: -40°C ~ 70°C Non operation humidity: 20% ~ 90% (Non condensing)