Optimized CPU & GPU performance
The XE8545 uses the highest core count AMD CPUs with the highest powered NVIDIA A100 Tensor Core GPUs for a large and powerful range of processing needs.

- Combine the **highest core counts (128)** of the new generation of AMD EPYC processors and the **most GPU memory and bandwidth** available today to break through the bounds of AI computing.
- Host multi-tenant environments using a **flexible set of virtualization options**: NVIDIA’s vGPU software and their new Multi-Instance GPU (MIG) capability.
- Choose between 400 W and 500 W GPU options, while maintaining air-cooled (35C/25C) efficiency
- NVIDIA-Certified System tested for performance, manageability, security, and scalability

Accelerated I/O throughput
The XE8545 stands out by combining all its components - NVLink, PCIe Gen 4.0, and NVMe SSDs to push the boundaries of data flow and computing possibility.

- Achieve **6-7x the machine learning performance** (2x the HPC performance) over today’s accelerators with PCIe Gen 4 A100 SXM4 GPUs with the highest peer to peer bandwidth (600Gb/s) in a low latency switchless design.
- Improve machine learning training with **20x performance gain** based on sparsity-enabled matrix multiplication and 600GB/s bandwidth for GPU-GPU communication, 2x more than the previous generation.

Simplified management
The XE8545 simplifies data center operations with the full OpenManage stack, standard rack depth, and air cooling.

- Manage your data center efficiently and consistently with full **iDRAC compliance** and Open Management Enterprise (OME) support.
- Readily integrate this innovative technology into your data center with a **standard depth rack**, and **air-cooled** (35C) chassis, avoiding expensive costs.

Fortify your data center with integrated security
Every PowerEdge server is designed with a cyber resilient architecture, integrating security deeply into every phase in the lifecycle, from design to retirement.

- Enhance security with platform enablement of AMD Secure Memory Encryption (SME) and Secure Encrypted Virtualization (SEV).
- Operate your workloads on a secure platform anchored by cryptographically trusted booting and silicon root of trust.
- Maintain server firmware safety with digitally signed firmware packages.
- Detect and remediate unauthorized or malicious change with drift detection and system lockdown.
- Securely and quickly wipe all data from storage media including hard drives, SSDs and system memory with System Erase.
# PowerEdge XE8545

## Features | Technical Specification
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**CPU** | Two 3rd Generation AMD EPYC™ processors (280 W) with up to 64 cores per processor
**Memory** | 32 x DDR4
Bandwidth up to 3200 MT/s
**Accelerators** | 4 x NVIDIA A100 GPUs with NVIDIA NVLink
Options: 40 GB/400 W or 80 GB/500 W
**Front Storage** | 10 x 2.5” Hot Plug SAS/SATA
Up to 8 x 2.5” NVMe
**Controllers** | BOSS S1.5, H745
**I/O** | 1 x PCIe Gen4 LP (x16)
1 x PCIe Gen4 FH (x16)
1 x PCIe Gen4 FH (x16) or 2 x PCIe Gen4 FH (x8)
**Thermal** | Air Cooled Up to 35C for 400 W GPUs or 25C for 500 W GPUs
**Fans** | 12 x Front Hot Plug Fans, 6 x Internal Fans (CPU)
**Embedded Management** | iDRAC9
iDRAC Direct
Quick Sync 2.0
**OpenManage SW** | iDRAC9 Enterprise
Power Manager
SupportAssist
Update Manager
**Power Supplies** | 4 x Hot-plug redundant 2400 W AC Power Supply
**Rack Height** | 4U
**Ports** | Front: 1 x USB 2.0 – iDRAC dedicated
Rear: 1 x USB 3.0, 1 x USB 2.0
**Security** | Cryptographically signed firmware
Secure Boot
Secure Erase
Silicon Root of Trust
System Lockdown
TPM 1.2/2.0, TCM 2.0 optional
Secure Memory Encryption™
Secure Encrypted Virtualization™
**Dimensions (add LxW)** | Depth: 810 mm Width: 447 mm Height: 86.8 mm
**Rack Unit** | 4U Rack Server
**Embedded NIC** | 2x 1GbE LOM
**Networking Options** | OCP x16 mezz 3.0
**Operating Systems & Hypervisors** | Ubuntu®
Windows Server® with Hyper-V
Red Hat® Enterprise Linux
VMware® ESXi®
**OEM-ready version available** | From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you.
For more information, visit Dell.com/OEM.
**Recommended support** | Dell ProSupport Plus for critical systems or Dell ProSupport for premium hardware and software support for your PowerEdge solution. Consulting and deployment offerings are also available. Contact your Dell representative today for more information. Availability and terms of Dell Services vary by region. For more information, visit Dell.com/ServiceDescriptions
**Recommended services** | ProSupport Plus with SupportAssist provides proactive and predictive support for critical systems. ProSupport provides comprehensive hardware and software support. Get more from your technology starting on day one with ProDeploy Enterprise Suite deployment offers. For more information, visit Dell.com/Services.

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