

GPU Options for ThinkSystem Servers

Reference Information

Lenovo ThinkSystem servers support GPU technology from NVIDIA and AMD to accelerate different computing workloads, maximize performance for graphic design, virtualization, artificial intelligence and high performance computing applications in Lenovo servers.

- [NVIDIA AI and Virtualization GPUs](#)
- [AMD AI and Virtualization GPUs](#)
- [NVIDIA 3D Graphics GPUs](#)

NVIDIA AI and Virtualization GPUs

Dual-Slot Adapters

ThinkSystem NVIDIA Tesla V100S GPU

NVIDIA Tesla V100S GPU adapter is a dual-slot 10.5 inch PCIe 3.0 card with a single NVIDIA Volta GV100 graphics processing unit (GPU). The GPU supports double precision (FP64), single precision (FP32) and half precision (FP16) compute tasks, unified virtual memory and page migration engine. The V100S GPU offers improved performance over the V100, featuring a ~25% increase in memory bandwidth and higher FLOPS.



Learn more:

- [ThinkSystem GPU summary](#)

ThinkSystem NVIDIA Tesla V100 GPU

NVIDIA Tesla V100 GPU adapter is a dual-slot 10.5 inch PCIe 3.0 card with a single NVIDIA Volta GV100 graphics processing unit (GPU). The GPU supports double precision (FP64), single precision (FP32) and half precision (FP16) compute tasks, unified virtual memory and page migration engine. Available with either 16GB or 32GB of HBM2 high-bandwidth memory.



Learn more:

- [ThinkSystem GPU summary](#)

ThinkSystem NVIDIA Tesla P40 GPU

The NVIDIA Tesla P40 GPU accelerator is purpose-built to deliver maximum throughput for deep learning deployment. The P40 is powered by the revolutionary NVIDIA Pascal architecture provide the computational engine for the new era of artificial intelligence, enabling amazing user experiences by accelerating deep learning applications at scale.



Learn more:

- [ThinkSystem GPU summary](#)

ThinkSystem NVIDIA Tesla M10 GPU

ThinkSystem NVIDIA Tesla M10 GPU accelerator works with NVIDIA GRID software to provide the industry's highest user density for virtualized desktops and applications. It supports 64 desktops per board and 128 desktops per server, giving your business the power to deliver great experiences to all of your employees at an affordable cost.



Learn more:

- [ThinkSystem GPU summary](#)

Single-Slot Adapters

ThinkSystem NVIDIA Tesla V100 FHHL GPU

The NVIDIA Tesla V100 FHHL GPU Accelerator is the latest NVIDIA Volta family product, a full-height half-length (FHHL) form factor, suitable for advanced data center functions to accelerate AI, HPC, and graphics. The Tesla V100 FHHL offers significant performance and great power efficiency.



Learn more:

- [ThinkSystem GPU summary](#)

ThinkSystem NVIDIA Tesla T4 GPU

The NVIDIA Tesla T4 GPU supports diverse cloud workloads, including high-performance computing, deep learning training and inference, machine learning, data analytics, and graphics. Based on the new NVIDIA Turing Architecture and packaged in an energy-efficient 70-watt, small PCIe form factor, Tesla T4 is optimized for scale-out computing environments with its multi-precision Turing Tensor Cores and new RT Cores.



Learn more:

- [ThinkSystem GPU summary](#)

AMD AI and Virtualization GPUs

Dual-Slot Adapters

ThinkSystem AMD Radeon Instinct MI25 GPU

The AMD Radeon Instinct MI25 accelerator provides a powerful, flexible heterogeneous compute solution that allows datacenter designers to meet the challenges of a new era of compute and Machine Intelligence. The GPU delivers 24.6 TFLOPS of FP16 and 12.3 TFLOPS of FP32 peak performance through its 64 compute units with 4,096 stream processors.

Learn more:

- [ThinkSystem GPU summary](#)



NVIDIA 3D Graphics GPUs

Dual-Slot Adapters

ThinkSystem NVIDIA Quadro RTX 6000 GPU

NVIDIA Quadro RTX 6000, powered by the NVIDIA Turing architecture and the NVIDIA RTX platform, brings the most significant advancement in computer graphics in over a decade to professional workflows. Designers and artists can now wield the power of hardware-accelerated ray tracing, deep learning, and advanced shading to dramatically boost productivity and create amazing content faster than ever before.

Learn more:

- [ThinkSystem GPU summary](#)



ThinkSystem NVIDIA Quadro RTX 5000 GPU

Shatter the boundaries of what's possible with the NVIDIA Quadro RTX 5000, powered by NVIDIA Turing GPU to bring real-time ray tracing and accelerated AI to next-generation workflows. Creative and technical professionals can supercharge demanding design and visualization workloads and make more informed decisions faster than ever before.

Learn more:

- [ThinkSystem GPU summary](#)



ThinkSystem NVIDIA Quadro P6000 GPU

Most advanced professional graphics solution with unprecedented performance. P6000 is the world's most advanced professional graphics solution ever created, features 24GB memory capacity, bringing unprecedented power, performance, and capabilities to professional users.

Learn more:

- [ThinkSystem GPU summary](#)



Single-Slot Adapters

ThinkSystem NVIDIA Quadro RTX 4000 GPU

Meet the challenge of today's demanding professional workflows with NVIDIA Quadro RTX 4000, powered by NVIDIA Turing architecture and the NVIDIA RTX platform. The NVIDIA Quadro RTX 4000 delivers GPU accelerated ray tracing, deep learning, and advanced shading in an accessible single slot form factor. It gives designers the power to accelerate their creative efforts with faster time to insight and faster time to solution.

Learn more:

- [ThinkSystem GPU summary](#)



ThinkSystem NVIDIA Quadro P4000 GPU

NVIDIA Quadro P4000 combines a 1792 CUDA core Pascal GPU, large 8 GB GDDR5 memory and advanced display technologies to deliver the performance and features that are required by demanding professional applications.

Learn more:

- [ThinkSystem GPU summary](#)



ThinkSystem NVIDIA Quadro P2200 GPU

The perfect balance of performance, compelling features, and compact form factor. Powered by NVIDIA Pascal with 1280 CUDA cores. GPU technology features 5 GB memory capacity. It also enables an expansive visual workspace with the ability to drive up to four 5K displays, combining outstanding performance and features in a compact form factor.

Learn more:

- [ThinkSystem GPU summary](#)



ThinkSystem NVIDIA Quadro P620 GPU

The NVIDIA Quadro P600 combines a 512 CUDA core Pascal GPU, 2 GB GDDR5 on-board memory and advanced display technologies to deliver amazing performance for a range of professional workflows. Suitable for professional CAD, DCC and visualization designers, engineers and users.

Learn more:

- [ThinkSystem GPU summary](#)



Related product families

Product families related to this document are the following:

- [GPU adapters](#)

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