NVIDIA RTX

8 Reasons You Need Ampere GPUs

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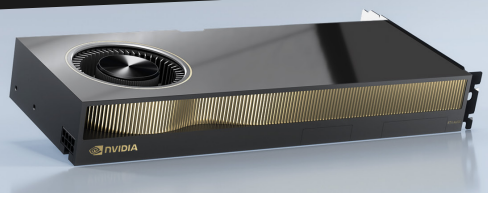

Performance Amplified, Realized, and Ready To Do Your Life's Best Work

Unlock the next generation of revolutionary designs, scientific breakthroughs, and immersive entertainment with the NVIDIA® RTX™ A6000, RTX A5000, and RTX A4000, the world's most powerful and innovative visual computing GPUs in their class for desktop workstations. With cutting-edge performance and features, any of these boards lets you work at the speed of inspiration – to tackle the urgent needs of today and meet the rapidly evolving, compute-intensive tasks of tomorrow.

NVIDIA Ampere Architecture Based CUDA Cores

Double-speed processing for single-precision floating point (FP32) operations and improved power efficiency provide significant performance improvements for graphics and simulation workflows, such as complex 3D computer-aided design (CAD) and computer-aided engineering (CAE), on the desktop.

Second-Generation RT Cores

With up to 2x the throughput over the previous generation and the ability to concurrently run ray tracing with either shading or denoising capabilities, second-generation RT Cores deliver massive speedups for workloads like photorealistic rendering of movie content, architectural design evaluations, and virtual prototyping of product designs. This technology also speeds up the rendering of ray-traced motion blur for faster results with greater visual accuracy.

Third-Generation Tensor Cores

New Tensor Float 32 (TF32) precision provides up to 5x the training throughput over the previous generation to accelerate AI and data science model training without requiring any code changes. Hardware support for structural sparsity doubles the throughput for inferencing. Tensor Cores also bring AI to graphics with capabilities like DLSS, AI denoising, and enhanced editing for select applications.

Third-Generation NVIDIA NVLink (RTX A6000 and RTX A5000)

Increased GPU-to-GPU interconnect bandwidth provides a single scalable memory to accelerate graphics and compute workloads and tackle larger datasets.

Up to 48 Gigabytes (GB) of GPU Memory with Optional ECC

Ultra-fast GDDR6 memory, scalable up to 96 GB with NVLink with the RTX A6000, gives data scientists, engineers, and creative professionals the large memory necessary to work with massive datasets and workloads like data science and simulation. The RTX A5000 features 24 GB (48 GB with NVLink) and supports ECC, while the RTX A4000 provides 16 GB of ECC capable memory – 2x that of the prior generation product.

Virtualization-Ready (RTX A6000 and RTX A5000)

Support for NVIDIA virtual GPU (vGPU) software allows a personal workstation to be repurposed into multiple high-performance virtual workstation instances? Enabling remote users, to share resources to drive high-end design, AI, and compute workloads.

PCI Express Gen 4

Support for PCI Express Gen 4 provides double the bandwidth of PCIe Gen 3, improving data-transfer speeds from CPU memory for data-intensive tasks like AI and data science.

FOR MORE INFORMATION:

Contact your **PNY Account Manager** or email **GOPNY@PNY.COM**

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