**A6000 & A6000 Sync RICH CONTENT**

**NVIDIA RTX A6000**Performance Amplified

**Overview:**

Unlock the next generation of revolutionary designs, scientific breakthroughs, and immersive entertainment with the NVIDIA® RTX™ A6000, the world's most powerful visual computing GPU for desktop workstations. With cutting-edge performance and features, the RTX A6000 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®**  
Increased GPU-to-GPU interconnect bandwidth provides a single scalable memory to accelerate graphics and compute workloads and tackle larger datasets.

**48 Gigabytes (GB) of GPU Memory**  
Ultra-fast GDDR6 memory, scalable up to 96 GB with NVLink, gives data scientists, engineers, and creative professionals the large memory necessary to work with massive datasets and workloads like data science and simulation.

**Virtualization-Ready**  
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.

**Power Efficiency**  
Featuring a dual-slot, power efficient design, the RTX A6000 is up to 2X more power efficient than Turing GPUs and crafted to fit into a wide range of workstations from worldwide OEM vendors.

**NVIDIA RTX A6000 + HW Sync**Performance Amplified

**Overview:**

The NVIDIA Quadro Sync II board works with the RTX A6000 to synchronize up to 4 RTX A6000 boards per card for 16 synchronized displays per Sync II, and with two Sync II cards per system, up to 8 RTX A6000 GPUs per chassis, for a total of 32 synchronized displays per system. The NVIDIA Quadro Sync II, combined with NVIDIA RTX A6000 powered graphics, sets an unprecedented standard for professional synchronized display deployments requiring unparalleled rendering and synchronized graphics performance, all with breakthrough possibilities real-time ray tracing and AI can provide.

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