NVIDIA's New Ada Lovelace RTX GPU Arrives for Designers and Creators

RTX 6000 GPU Provides 2-4x Performance Improvement in Enterprise Workflows; Global Manufacturers to Ship Starting in Q4

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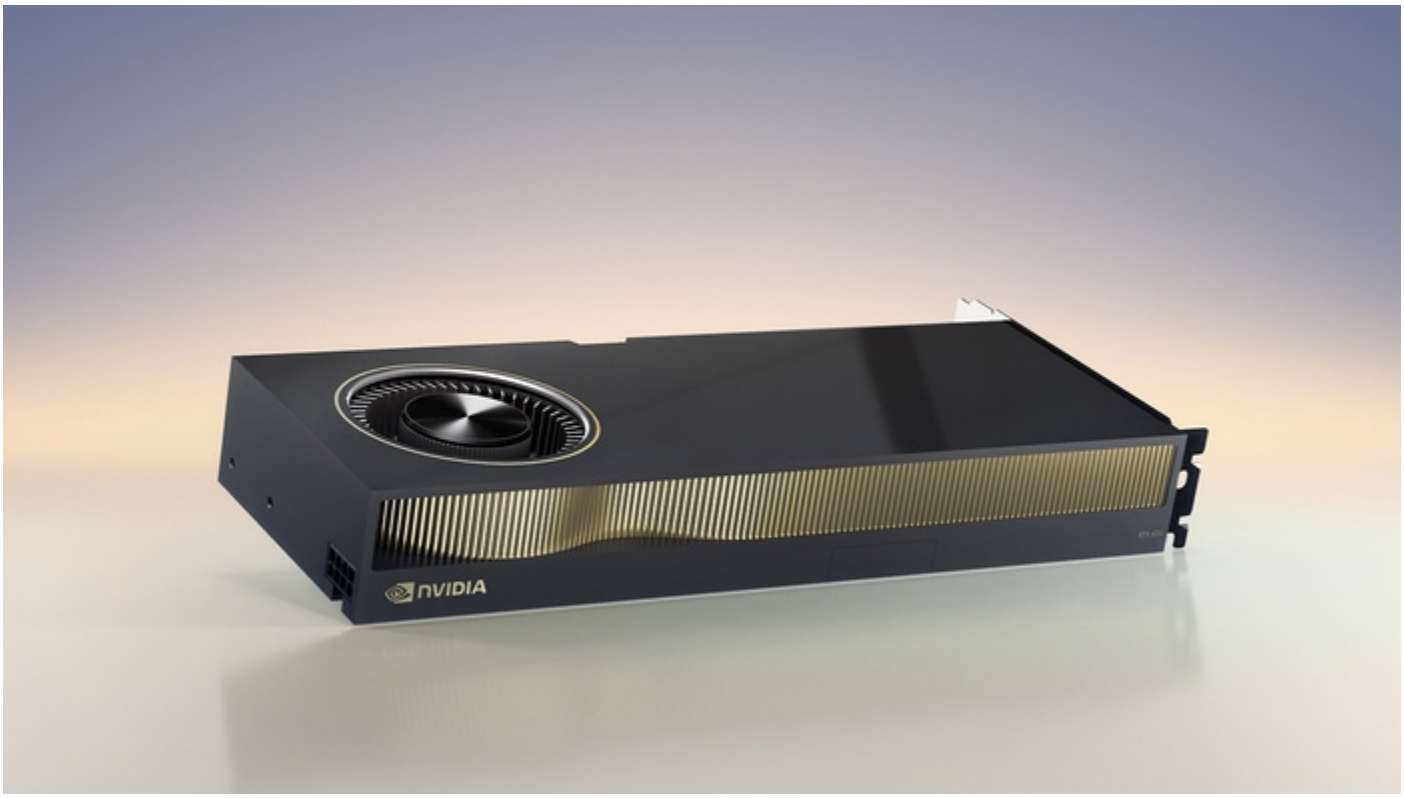

GTC -- Opening a new era of neural graphics that marries AI and simulation, NVIDIA today announced the NVIDIA RTX™ 6000 workstation GPU, based on its new NVIDIA Ada Lovelace architecture.

With the new NVIDIA RTX 6000 Ada Generation GPU delivering real-time rendering, graphics and AI, designers and engineers can drive cutting-edge, simulation-based workflows to build and validate more sophisticated designs. Artists can take storytelling to the next level, creating more compelling content and building immersive virtual environments. Scientists, researchers and medical professionals can accelerate the development of life-saving medicines and procedures with supercomputing power on their workstations — all at up to 2-4x the performance of the previous-generation RTX A6000.

Designed for neural graphics and advanced virtual world simulation, the RTX 6000, with Ada generation AI and programmable shader technology, is the ideal platform for creating

content and tools for the metaverse with NVIDIA Omniverse™ Enterprise. Incorporating the latest generations of render, AI and shader technologies and 48GB of GPU memory, the RTX 6000 enables users to create incredibly detailed content, develop complex simulations and form the building blocks required to construct compelling and engaging virtual worlds.

“Neural graphics is driving the next wave of innovation in computer graphics and will change the way content is created and experienced,” said Bob Pette, vice president of professional visualization at NVIDIA. “The NVIDIA RTX 6000 is ready to power this new era for engineers, designers and scientists to meet the need for demanding content-creation, rendering, AI and simulation workloads that are required to build worlds in the metaverse.”

Global Leaders Turn to NVIDIA RTX 6000

“NVIDIA’s professional GPUs helped us deliver an experience like none other to baseball fans everywhere by bringing legends of the game back to life with AI-powered facial animation,” said Michael Davies, senior vice president of field operations at Fox Sports. “We’re excited to take advantage of the incredible graphics and AI performance provided by the RTX 6000, which will help us showcase the next chapter of live sports broadcast.”

“Broadcasters are increasingly adopting software and compute to help build the next generation of TV stations,” said Andrew Cross, CEO of Grass Valley. “The new workstation GPUs are truly game changing, providing us with over 300% performance increases — allowing us to improve the quality of video and the value of our products.”

“The new NVIDIA Ada Lovelace architecture will enable designers and engineers to continue pushing the boundaries of engineering simulations,” said Dipankar Choudhury, Ansys Fellow and HPC Center of Excellence lead. “The RTX 6000 GPU’s larger L2 cache, significant increase in number and performance of next-gen cores and increased memory bandwidth will result in impressive performance gains for the broad Ansys application portfolio.”

Next-Generation RTX Technology

Powered by the NVIDIA Ada architecture, the world’s most advanced GPU architecture, the NVIDIA RTX 6000 features state-of-the-art NVIDIA RTX technology. Features include:

- **Third-generation RT Cores**: Up to 2x the throughput of the previous generation with the ability to concurrently run ray tracing with either shading or denoising capabilities.
- **Fourth-generation Tensor Cores**: Up to 2x faster AI training performance than the previous generation with expanded support for the FP8 data format.
- **CUDA cores**: Up to 2x the single-precision floating point throughput compared to the previous generation.
- **GPU memory**: Features 48GB of GDDR6 memory for working with the largest 3D models, render images, simulation and AI datasets.
- **Virtualization**: Will support NVIDIA virtual GPU (vGPU) software for multiple high-performance virtual workstation instances, enabling remote users to share resources and drive high-end design, AI and compute workloads.
- **XR**: Features 3x the video encoding performance of the previous generation, for streaming multiple simultaneous XR sessions using NVIDIA CloudXR.

Availability
The NVIDIA RTX 6000 workstation GPU will be available from global distribution partners and manufacturers starting in December.

To learn more about NVIDIA RTX, watch NVIDIA founder and CEO Jensen Huang's GTC 2022 keynote. Register for GTC for free to attend sessions with NVIDIA and industry leaders.

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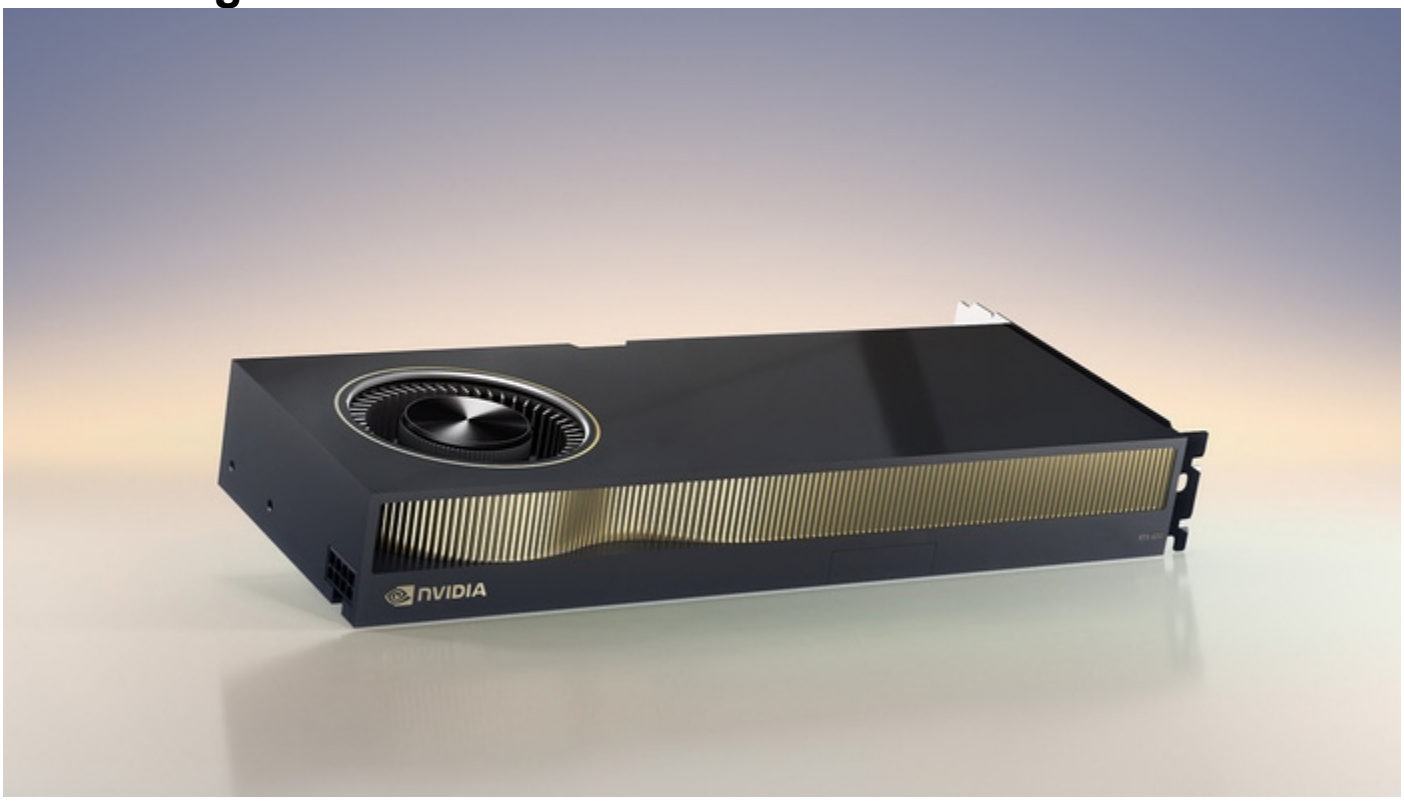

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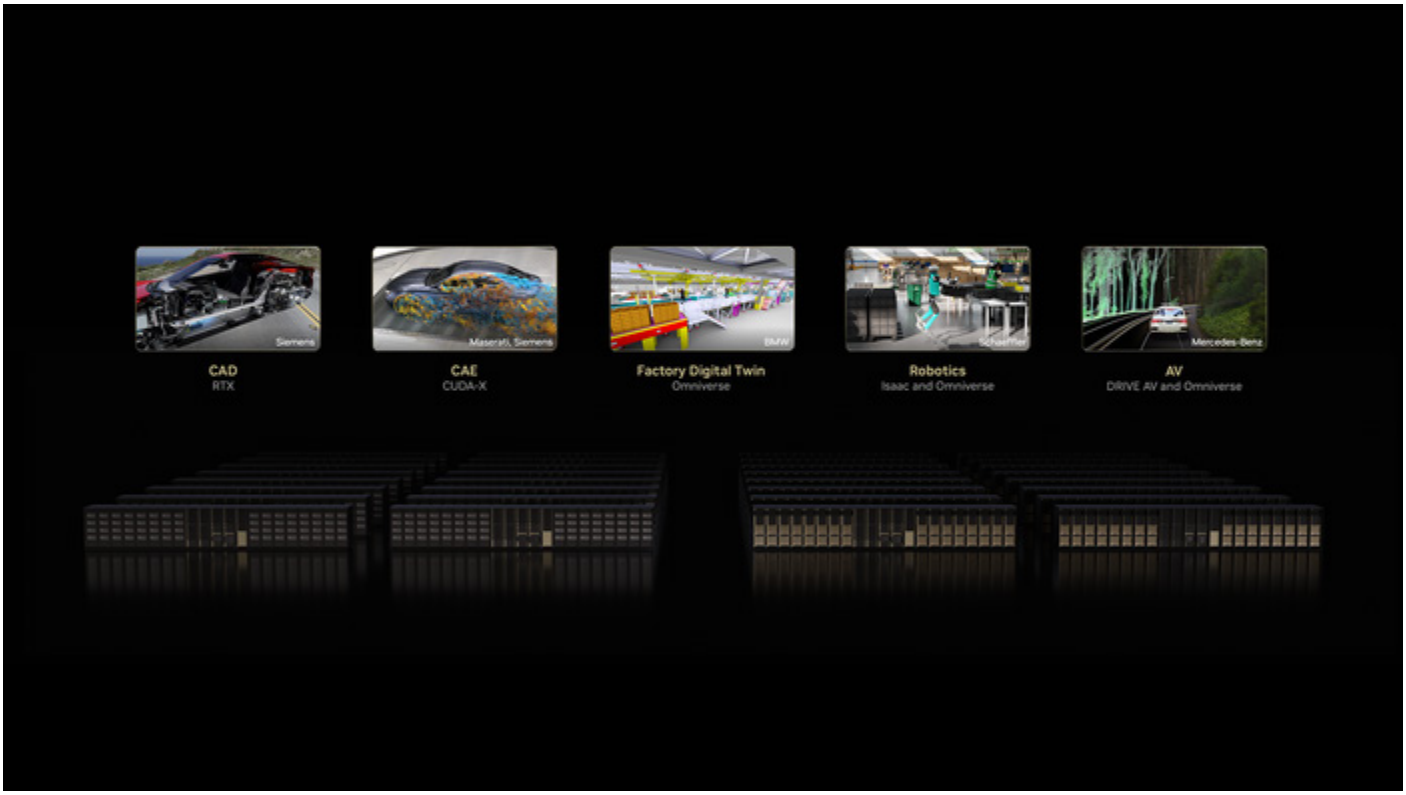

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About NVIDIA

Since its founding in 1993, NVIDIA (NASDAQ: NVDA) has been a pioneer in accelerated computing. The company's invention of the GPU in 1999 sparked the growth of the PC gaming market, redefined computer graphics and ignited the era of modern AI. NVIDIA is now a full-stack computing company with data-center-scale offerings that are reshaping industry. More information at https://nvidianews.nvidia.com/.

Certain statements in this press release including, but not limited to, statements as to: the benefits, impact, performance, features and availability of the NVIDIA RTX 6000 workstation GPU and the NVIDIA Ada Lovelace architecture; and neural graphics driving the next wave of innovation in computer graphics and changing the way content is created and experienced are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software defects; changes in consumer preferences or demands; changes in industry standards and interfaces; unexpected loss of performance of our products or technologies when integrated into systems; as well as other factors detailed from time to time in the most recent reports NVIDIA files with the Securities and Exchange Commission, or SEC, including, but not limited to, its annual report on Form 10-K and quarterly reports on Form 10-Q. Copies of reports filed with the SEC are posted on the company's website and are available from NVIDIA without charge. These forward-looking statements are not guarantees of future performance and speak only as of the date hereof, and, except as required by law, NVIDIA disclaims any obligation to update these forward-looking statements to reflect future events or circumstances.

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