NVIDIA QUADRO RTX

SOLIDWORKS
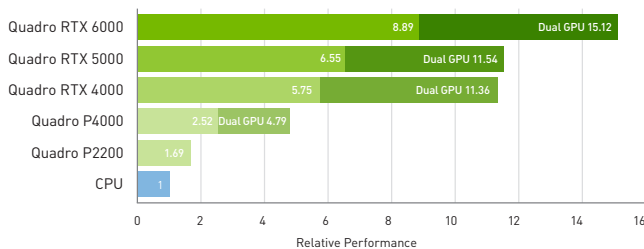
Image by **Daniel Simon LLC**

Quadro RTX Accelerates SOLIDWORKS

SOLIDWORKS taps into the power of **NVIDIA® Quadro RTX™** to speed up product design workflows. With RTX support, SOLIDWORKS delivers a faster, more interactive experience with outstanding performance and capabilities, including:

> GPU-optimized pipeline for a fluid CAD experience and fast manipulation of even the largest assemblies at full model fidelity

> 8k multi-display support for enhanced productivity, viewport size, and precision

> GPU-accelerated high-performance shading, full-scene anti-aliasing (FSAA), order independent transparency, and RealView

> Immersive model interaction in VR with eDrawings Pro and photorealistic VR panoramas in SOLIDWORKS Visualize

> Near real-time ray tracing, NVIDIA PhysX® simulation, and AI denoising in SOLIDWORKS Visualize, with up to 15x[1] faster rendering performance than CPU

Benchmark: SOLIDWORKS Visualize 2020

Rendering Performance Increase on Quadro RTX GPUs

GPU	Single	Dual GPU
Quadro RTX 6000	8.89	Dual GPU 15.12
Quadro RTX 5000	6.55	Dual GPU 11.54
Quadro RTX 4000	5.75	Dual GPU 11.36
Quadro P4000	2.52	Dual GPU 4.79
Quadro P2200	1.69	
CPU	1	

Relative Performance (0, 2, 4, 6, 8, 10, 12, 14, 16)

Tests run on a desktop workstation with Xeon Gold 6154 3 GHz (3.7 GHz Turbo), 64 GB RAM, running Windows 10 64-bit, NVIDIA driver 441.66 and 441.28. Performance testing completed with SOLIDWORKS Visualize 2020. HD1000 Passes. Performance results may vary depending on the scene.

Learn more about Quadro RTX solutions at **www.nvidia.com/quadro**

Learn more at **www.solidworks.com**

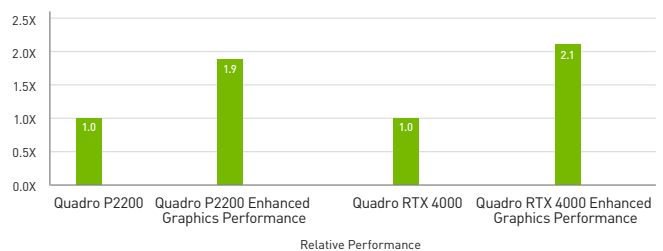[1] Performance results may vary depending on the scene.

[2] Quadro vDWS software is supported with NVIDIA Quadro RTX 6000 and 8000 GPUs.

[3] Two Quadro RTX 8000 GPUs connected with NVIDIA NVLink® provide a combined 96 GB of total GPU memory. NVLink sold separately.

Benchmark: SPECapc for SOLIDWORKS 2019

Graphics Composite

Card	Relative Performance
Quadro P2200	1.0
Quadro P2200 Enhanced Graphics Performance	1.9
Quadro RTX 4000	1.0
Quadro RTX 4000 Enhanced Graphics Performance	2.1

(0.0X, 0.5X, 1.0X, 1.5X, 2.0X, 2.5X)

Relative Performance

Tests run on a workstation with Xeon Gold 6154 (3.7 GHz Turbo), 64 GB RAM, running Windows 10 64-bit, NVIDIA driver 436.30. Performance testing completed with publicly available SPECapc for SOLIDWORKS 2019 benchmark information.

Solutions for SOLIDWORKS

NVIDIA Quadro® provides a wide range of RTX-enabled solutions for desktop, mobile, server-based rendering, and virtual workstations with **NVIDIA Quadro Virtual Data Center Workstation** (Quadro vDWS) software[2]. With up to 96 gigabytes (GB) of GPU memory available[3], Quadro provides the power you need for your largest CAD design and rendering workloads.

"When coupled with Quadro RTX, SOLIDWORKS Visualize provides the industry's fastest and easiest way to achieve photo-quality imagery, animations, immersive content, and more—helping to cut costs and speed time to market."

– Brian Hillner, Senior Product Portfolio Manager, SOLIDWORKS Visualization

NVIDIA Quadro professional graphics solutions are certified and recommended by Dassault Systèmes. Close collaboration during product development guarantees stability and reliability of the platform just the way you expect from day one.

℥S SOLIDWORKS