# EXPERIENCE SOLIDWORKS WITHOUT LIMITS USING NVIDIA GPUs



## Accelerate the features that matter in SOLIDWORKS.

NVIDIA® Quadro® GPUs give you exceptional performance in all SOLIDWORKS design modes. Recent changes were made in SOLIDWORKS to better leverage the GPU for large assemblies. So, you can now get significantly faster performance with assemblies larger than 500 components compared to previous releases of SOLIDWORKS.

#### Count on Industry-Leading NVIDIA Performance and Reliability

NVIDIA has a history of the industry's best performance on leading design and manufacturing applications.

This includes:

- Driver quality and stability By working closely with the leading software companies, NVIDIA develops mission-critical drivers certified on 100+ applications.
- Preferred, trusted brand The majority of today's design work is done using Quadro professional graphics.
- > Bringing all the benefits of graphics virtualization With NVIDIA GRID<sup>™</sup> technology, designers and engineers can leave behind unacceptable levels of lag and display degradation and take advantage of all the benefits of accelerated accelerated 3D graphics virtualization.
- Compute leadership Leading solutions for GPU Rendering and Simulation rely on NVIDIA CUDA<sup>®</sup> parallel computing technology.

 Workspace and IT management NVIDIA tools designed for professional display management and infrastructure include Mosaic, nView<sup>®</sup>, and NVIDIA Enterprise Management Toolkit (NVWMI).

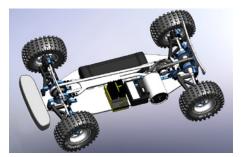
#### Order Independent Transparency (OIT) Faster Performance

In the past, applying transparency to components or faces in an assembly could cut SOLIDWORKS display performance in half when using RealView. With recent improvements in SOLIDWORKS to leverage the GPU during OIT, transparency performance no longer slows you down.

#### Gear up for 4K Resolution

The HD-to-4K transition presents a great opportunity for designers and engineers to enhance their CAD experience. 4K display costs are falling and the significantly higher screen resolution (4x HD) enables superior image quality, larger visual workspace, and greater productivity. SOLIDWORKS users can rely on the performance of Quadro discrete graphics to maintain the smooth design workflow to which they've become accustomed—even at 4K resolution.

And with the emergence of Virtual Reality in product design workflows, the need for powerful, reliable Quadro professional GPUs has never been more evident.



Standard 3D Mode (RealView, FSAA turned off) Image is void of real-world reflections and textures. Jagged edges are visible.



Enhanced 3D Mode (RealView, FSAA turned on) A more realistic and detailed model. Shadows, reflections, and textures appear as they would in real life, edges are smoother.

#### Discover Superior Real-Time Photorealistic Rendering

SOLIDWORKS® Visualize (formerly known as Bunkspeed) provides a suite of standalone software tools with NVIDIA Iray® technology natively integrated, which helps designers and engineers see their products in photo-real quality as early in the development pipeline as possible. By leveraging NVIDIA Iray technology and Quadro GPUs, users can interactively visualize design changes during their workflow, with the confidence that they're seeing a lifelike, photorealistic virtual product.

This also means SOLIDWORKS Visualize users can take full advantage of NVIDIA Iray Server distributed rendering software to reduce further the time needed to create photo-real images by scaling Iray rendering across all network-connected workstations.

#### Use eDrawings® in Stereoscopic 3D

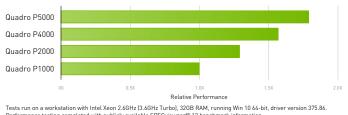
You already know how valuable eDrawings can be for sharing native SOLIDWORKS files for design or marketing reviews. However, you may not know that this popular SOLIDWORKS add-in also works in 3D. This provides tremendous opportunities for displaying extreme detail in stereoscopic 3D to really give your customers and managers the truest representation of your design.



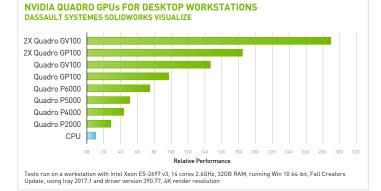
Fast and easy photorealistic visualization with SOLIDWORKS Visualize powered by the NVIDIA Iray rendering engine.

#### **NVIDIA QUADRO GPUs FOR DESKTOP WORKSTATIONS** DASSAULT SYSTEMES SOLIDWORKS

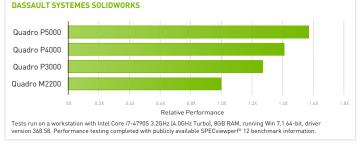
**NVIDIA QUADRO GPUs FOR MOBILE WORKSTATIONS** 



Performance testing completed with publicly available SPECviewperf® 12 benchmark inform



### RECOMMENDED GRAPHICS SOLUTIONS FOR SOLIDWORKS



USAGE	Small to medium assemblies with simple parts	Large assemblies with simple parts or small assemblies with complex parts	Large assemblies with complex parts. GPU-accelerated rendering
For Desktop Workstations	Quadro P2000*	Quadro P4000*	Quadro P5000*
GPU MEMORY	5 GB GDDR5	8 GB GDDR5	16 GB GDDR5X
REPLACES	Quadro M2000	Quadro M4000	Quadro M5000
For Mobile Workstations	Quadro M2200*	Quadro P4000*	Quadro P5000*
GPU MEMORY	4 GB GDDR5	8 GB GDDR5	16 GB GDDR5
REPLACES	Quadro M2000M	Quadro M4000M	Quadro M5000M

\* Please contact your software provider for the latest information on application certifications and support. To learn more, visit www.nvidia.com/solidworks



NVIDIA® professional graphics solutions are certified and recommended by Dassault Systèmes. For the latest updates on software certifications and support, please visit the Dassault Systèmes platform support website. The close collaboration during product development guarantees stability and reliability of the platform just the way you expect from day one.

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