Dassault Systèmes SOLIDWORKS®

Accelerate Your Product Development Process.

AMD | **DS DASSAULT SYSTEMES**

New to SOLIDWORKS?

SOLIDWORKS and the 3DEXPERIENCE® platform provides the designer with a set of tools for 3D design, 2D drafting, Visualization, Simulation and Manufacturing. These tools help designers and engineers to decrease the time to market, and produce better products.

AMD works closely with Dassault Systèmes on certifications for each Radeon™ Pro Graphics Card (GPU) and compatible driver.

What to Look for in a GPU

The entire range of AMD Radeon Pro GPUs are rigorously certified and optimized for SOLIDWORKS, which means they are tested, supported and can enable advanced features like RealView and OIT. These GPUs are purpose built to deliver outstanding performance, support, and reliability, at a reasonable price. Ultimately your GPU choice should be driven by your typical SOLIDWORKS workload, with faster TFLOPS offering faster viewports, more RAM offering larger project support, and higher bandwidth speeds allowing for quicker memory intensive tasks.

Radeon Pro GPUs are available as separate components, from OEM partners, and in professional laptop systems. A single unified driver is available for all desktop and mobile Radeon Pro GPUs, simplifying system administration and maintenance.

How to accelerate SOLIDWORKS

SOLIDWORKS is generally CPU intensive for most tasks, with exception of the graphics viewport and RealView which relies on a single, modern graphics card. Some advanced SOLIDWORKS viewport features are only available with certified professional GPUs. A high CPU clock speed is recommended for design, whereas other functions like simulation and CAM/NC machining benefit from high core counts. This is where a balanced system is recommended. A good NVMe™ drive can also improve open/save tasks if using PCIe® 4.0. The GPU should match the typical workload, consequently an expensive GPU may not be the right option for your projects.

> " AMD continues to be a strategic partner of ours for the development of SOLIDWORKS viewports, focused on realism and responsiveness. "
>
> **Nick Iwaskow,** *Director, Alliances & Partnerships,*

Visualization

SOLIDWORKS offers a choice of visualisation paths. From within the viewports, RealView can quickly create design review imagery, offering high quality interactive shading. However, a certified GPU is required to enable this function. With RealView, the GPU is doing all the heavy lifting to create the reflections and shadows.

For final renders, engineers can use SOLIDWORKS Visualize within the Professional and Premium versions. Render times can be decreased with one or more powerful GPUs. This allows for a greater range of traditional physically based rendering workflows.
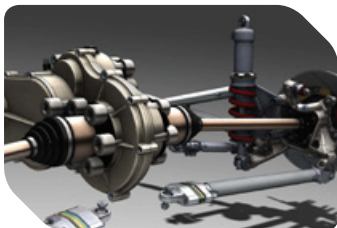
RealView ON
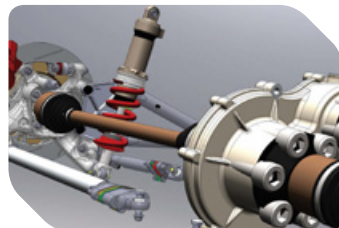
RealView OFF

REALVIEW IS ONLY SUPPORTED ON PROFESSIONAL GRAPHIC CARDS SUCH AS THE AMD RADEON PRO GPU RANGE.

TIP: To take advantage of a powerful AMD Radeon Pro GPU use Visualize 2020 or greater.

AMD RADEON PRO | **AMD THREADRIPPER PRO**

Supported and Optimized Hardware

For SOLIDWORKS a typical recommendation is a 3.3GHz or higher processor with 16GB of RAM. As parts and assemblies increase in complexity, more RAM is required with an NVMe drive suggested for optimal load/unload performance. For the GPU, OpenGL® support is required for stable viewports. AMD Radeon Pro graphics cards are built for demanding 24/7 environments; constructed with quality components and tested to exceptional standards. The Radeon™ Pro GPU range has undergone an extensive SOLIDWORKS certification process to help ensure reliability.

3S SOLIDWORKS

Virtual Environments

With more engineers needing to be productive anywhere they choose to work, the rise of virtualized environments and remote working continues. Dassault Systèmes offer a number of solutions for a virtualized environment. Importantly SOLIDWORKS and eDrawings® require a GPU for optimal performance in a virtualized environment. Additionally AMD also provides access to a GPU-accelerated remote workstation environment[1] allowing you to access your physical workstation virtually anywhere.

Learn more at
https://www.amd.com/en/technologies/vr-ready-creator

RADEON PRO **WX 3200** GRAPHICS

RADEON PRO **W5500** GRAPHICS

RADEON PRO **W5700** GRAPHICS

RADEON PRO **VII** GRAPHICS

SMALL PRODUCTS & ASSEMBLIES

THE POWERFUL GPU FOR DIFFERENT SYSTEM FORM FACTORS.

MEDIUM PARTS & ASSEMBLIES

THE NEW GPU STANDARD FOR MEDIUM COMPONENTS.

LARGE ASSEMBLIES & VISUALIZATION

THE VR-READY GPU FOR COMPLEX PROJECTS.

EXTREME WORKLOADS

THE GPU FOR SIMULATION, VISUALIZATION, VR, AND VERY LARGE ASSEMBLIES.

Don't Overpay for Performance

When considering a GPU, you should first look at your typical assemblies, parts and design tasks. Investing in the right GPU for your workload allows you to reinvest that saving into more RAM, a NVMe drive or a better CPU. A well balanced system is more important for performance. With Radeon Pro GPUs, the entire range supports ultra-high definition (UHD) resolutions, multiple monitors and carry extensive software certifications as standard, giving you peace of mind.

What about the CPU?

Powerful multi-core CPUs boost performance and productivity throughout every phase of the design & manufacturing workflow, from drafting/design, to CAE/simulation, to rendering/visualization, to CAM/NC machining and general multitasking. AMD Ryzen™ Threadripper™ PRO processors deliver high clock frequencies, high core counts and world-class IPC, along with leading expandability, security features and manageability.

[1] Learn more at https://www.amd.com/en/technologies/remote-workstation.
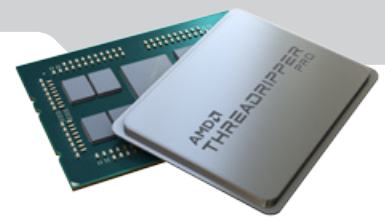
To learn more about AMD professional graphics visit: **amd.com/RadeonPro**

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