

## GENERAL RECOMMENDATIONS

1. CPU is the most important, followed by RAM and then graphics card.
2. Balance the machine, and understand video cards are for interactive graphics only. They don't help file loading, rebuild time, or handling large models outside of speed for zooming and rotating.
3. **SOLIDWORKS itself is largely single-threaded, so single-core performance is the most important thing when considering a CPU.** Six cores is plenty for a typical machine; more cores may be useful for some advanced Simulation, but not for core Windows and CAD functions.
4. Video memory is mapped into working RAM, so it can be harmful to add a graphics card with a large amount of VRAM without accomodating the increase with a corresponding amount of system RAM.
5. Use SSD for workstation storage, and go with M.2 PCIe interface.
6. Turn off real-time scanning for antivirus, or at least add \*.sld\* files to real-time scanning.
7. Work locally whenever possible, and move your files to the server to share as needed. Admittedly, this is not easy using plain Microsoft Windows; SOLIDWORKS PDM (traditional servers) or Collaborative Designer For SOLIDWORKS (cloud-based) are the best solutions for this as they automatically work in that fashion.

## DESKTOP RECOMMENDATIONS

- Core i7-13700K or better (see 3. above)
- 64GB RAM (32GB minimum)
- nVidia RTX A4000 (RTX A2000 minimum)
- 512GB SSD M.2 PCIe or better



**Dell T3660  
version**



## LAPTOP RECOMMENDATIONS

- Core i9-12900H or better (see 3. above)
- 64GB RAM (32GB minimum)
- nVidia RTX A2000 or better
- 512GB SSD M.2 PCIe or better



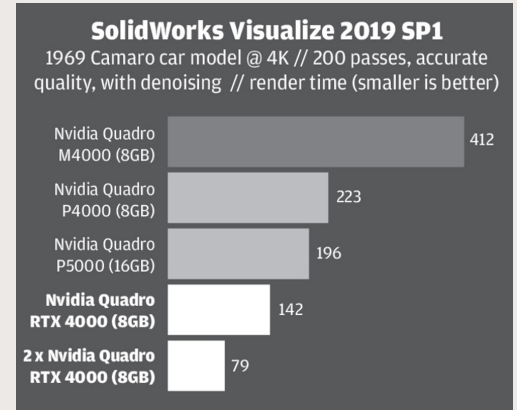
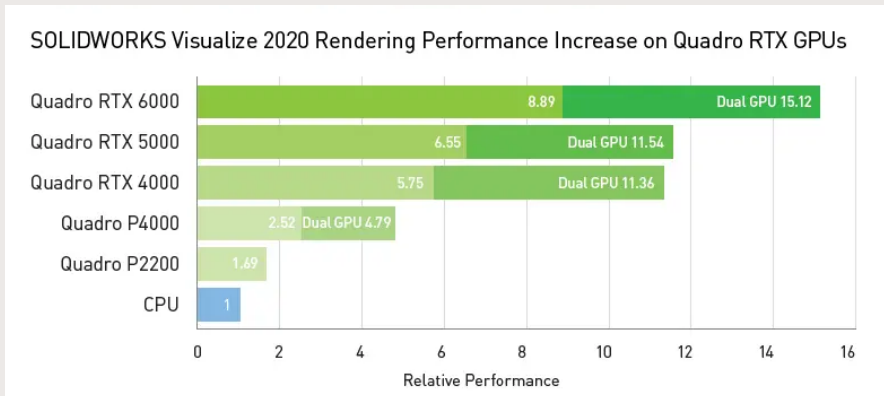
**Dell Precision  
5770 version**

For more information, contact your Dell Representative or call 1-877-BUY-DELL.

## SOLIDWORKS VISUALIZE IS DIFFERENT!

SOLIDWORKS Visualize has different hardware considerations than SOLIDWORKS CAD, because the Visualize product takes direct advantage of graphical processing units (GPUs).

As of this writing, the relative comparison between common NVIDIA graphics cards and SOLIDWORKS Visualize is roughly as shown in the graphics below (test results gleaned from NVIDIA's website):



Note that it is sometimes more cost-effective to have two less expensive graphics cards than a single more expensive card; for example, two Quadro P4000 cards cost less than a single Quadro P6000 card and actually yield faster performance, but a single RTX 4000 would cost nearly the same and beat them both.

In addition to NVIDIA Quadro support, as of SOLIDWORKS Visualize 2020, hardware acceleration is also supported with AMD Radeon Pro cards.

For more information regarding SOLIDWORKS, engineering systems, or SOLIDWORKS Visualize (including training and consulting options), contact us at GSC.

## ABOUT THE AUTHOR



**Jeff Setzer**  
Technology Evangelist

Jeff is known as our resident SOLIDWORKS “evangelist.” He loves showing customers new ways to use the software and complimentary tools to make their jobs easier.

Jeff has been working with SOLIDWORKS since its first release in 1995 and he has been with GSC from the beginning! He is a Certified SOLIDWORKS Professional, a Certified SOLIDWORKS Support Technician, a Certified SOLIDWORKS Instructor, a Certified Simulation Support Technician, and a Microsoft Certified Professional.

Jeff’s background is in Cognitive Science and Artificial Intelligence from the University of Rochester, NY.