



**CREATE WITHOUT BOUNDARIES.**  
NVIDIA GPUs POWER  
ADOBE® CREATIVE TOOLS.

ADOBE CC  
SOLUTION OVERVIEW

**NVIDIA GPU acceleration throughout the Adobe Creative Cloud and the new Adobe Anywhere platform gives creative artists and video editors fast, smooth interactivity, when and where it's needed.**

From small agencies to large broadcasters, creative professionals need faster, more intuitive workflows that help them deliver high-quality productions using the broadest set of Adobe's software solutions. Adobe support for leading-edge NVIDIA® Quadro® and Tesla® GPUs provides a superior creative environment for even the most sophisticated, high-resolution digital video workflows. Visual effects in Adobe Premiere® Pro that used to render a few frames per second now

run in real-time on a GPU-accelerated workstation or Adobe Anywhere platform. Photo-realistic 3D motion graphics that would take hours to create can now be done in minutes with After Effects®. Professional layer-based color grading is quick and easy with the Lumetri Deep Color Engine in both SpeedGrade® and Adobe Premiere Pro. And Photoshop® continues to leverage the GPU for intuitive, fluid image creativity.



# ADOBE PREMIERE PRO CC

**ENABLE REAL-TIME VIDEO EDITING AND UP TO 21X<sup>1</sup> FASTER PERFORMANCE.**

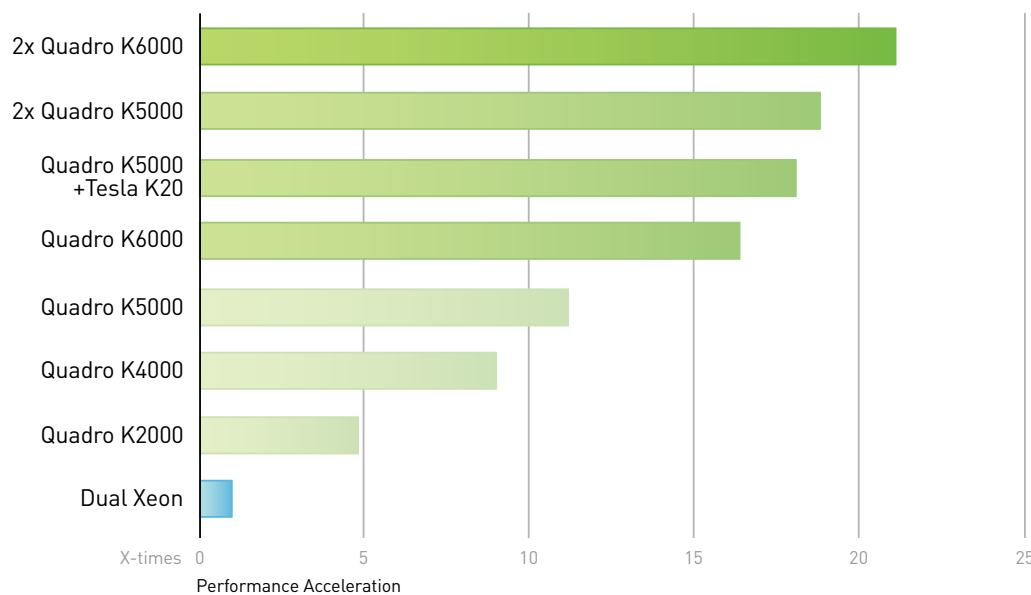
At the heart of Adobe Premiere Pro CC is the GPU-accelerated Adobe Mercury Playback Engine. This technology—co-developed by Adobe and NVIDIA—leverages NVIDIA GPUs and NVIDIA CUDA® to deliver interactive, real-time editing. And now, with new support for dual GPUs, final rendered exports perform up to 21x<sup>1</sup> faster than with dual high-end CPUs alone. This makes it ideal for powering fluid playback of today’s most challenging video formats, such as DSLR, RED 4, and 5K native footage.

NVIDIA GPUs deliver incredible responsiveness and a simplified workflow for the newly integrated Lumetri Deep Color Engine. This allows SpeedGrade color correction, and even your own SpeedGrade “Looks,” to be easily accessed directly within Premiere Pro.

Premiere Pro also integrates with Adobe Anywhere for video, a powerful video workflow collaboration platform powered by NVIDIA Tesla GPUs.

## ADOBE PREMIERE PRO CC PERFORMANCE

Adobe Mercury Playback Engine



# SPEEDGRADE CC

**ENHANCE EVERY PRODUCTION WITH REAL-TIME PROFESSIONAL COLOR-GRADING.**

NVIDIA Quadro GPUs take Adobe SpeedGrade CC performance to a whole new level for real-time professional color grading in the Lumetri Deep Color Engine. Trust Quadro performance to quickly and intuitively create the perfect lighting and color to add character and mood to any production, whether with RAW, HDR, or stereo 3D content.

The new Look Manager is integrated with Adobe Premier Pro, letting you easily organize and access grading presets. Pre-defined Looks can even be applied directly within the video editing workflow. And the GPU-accelerated Shot Matcher gives you the ability to easily match content from different cameras or shots in multiple lighting conditions, then quickly apply global adjustments to new clips.



# PHOTOSHOP CC

**ENJOY FAST AND FLUID PERFORMANCE.**

The innovative NVIDIA GPU-accelerated Adobe Mercury Graphics Engine makes the design experience smooth and intuitive with ultra-quick performance for fluid editing, compositing, and image transformation. This GPU acceleration significantly boosts performance in commonly used

Photoshop CC tools like the Blur Gallery with simple, on-canvas controls for immediate results; the newly accelerated Smart Sharpen tool for better responsiveness in precisely controlled shadows, highlights, and noise reduction; and more than 30 other popular features.



# AFTER EFFECTS CC

## TAKE MOTION GRAPHICS TO NEW LEVELS WITH A SIMPLIFIED 3D WORKFLOW.

Adobe After Effects CC simplifies and accelerates the motion graphics workflow like never before with a powerful 3D ray-traced rendering engine based on NVIDIA OptiX™ technology. You can now simply and quickly design realistic geometric text and shapes in 3D space, eliminating the traditional time-consuming back and forth with external 3D tools. Only NVIDIA GPUs enable this innovative

feature to be truly interactive, performing up to 39x<sup>1</sup> faster than with a high-end CPU. NVIDIA GPUs let you create more physically accurate scenes with beautiful results such as reflections, transparency, soft shadows, and depth-of-field blur. In addition, 3D ray tracing will interact smoothly with the new Live 3D pipeline for Cinema 4D.

### SIMPLIFYING THE MOTION GRAPHICS WORKFLOW

Traditional 3D Motion Graphics Workflow

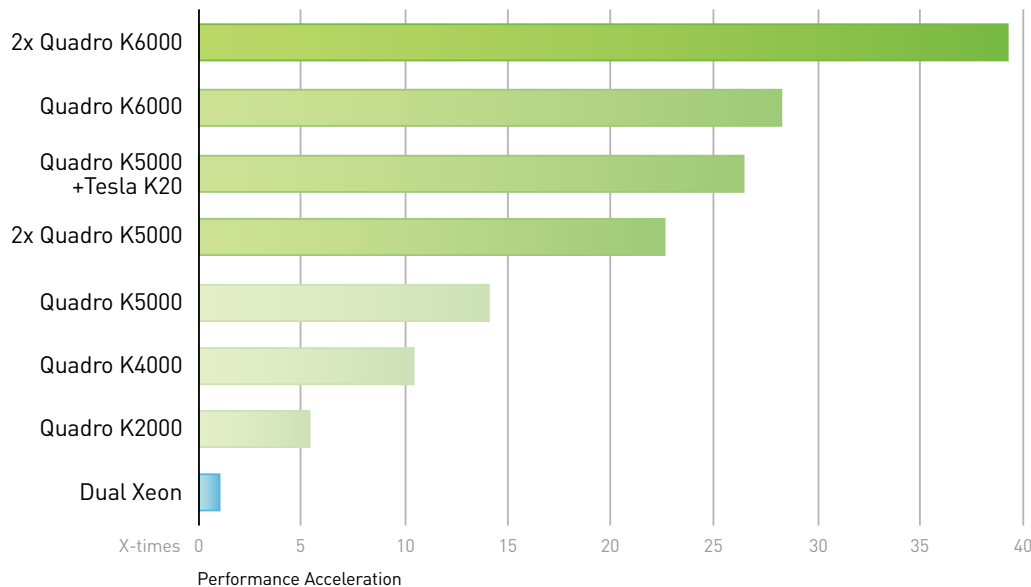


New 3D Motion Graphics Workflow with After Effects and NVIDIA GPUs



### ADOBE AFTER EFFECTS CC PERFORMANCE

3D Ray Tracing



System Configuration: Adobe After Effects CC, Windows 7 – 64-bit, Dual Intel Xeon E5 2687W 3.10GHz CPUs [16 total cores]. Test consists of live After Effects CC scenes with 3D layer, comparing time to render ray traced 3D scene on noted GPU vs. CPU



# ADOBE ANYWHERE

## DISCOVER THE POWERFUL COLLABORATIVE VIDEO PLATFORM FOR CONNECTED WORKGROUPS.

The new Adobe Anywhere collaborative video workflow solution is accelerated by NVIDIA Tesla GPUs, a key element in Adobe-recommended servers. This innovative cloud-centric platform frees video editors, visual effects artists, and other creative pros to leverage Adobe Premiere Pro CC, Prelude CC, and After Effects CC for seamless collaboration using centralized media across

virtually any network. It's hosted on-premise, so enterprise workgroups can create and collaborate on digital video productions from nearly any location with a network connection. Adobe and NVIDIA worked closely together to deliver ultra-fast performance and smooth remote accessibility with advanced NVIDIA technologies.

## NVIDIA GPU RECOMMENDATIONS

### HIGH-END POWER USER

If you create high-end productions using the full suite of Premiere Pro, After Effects, SpeedGrade, and Photoshop, NVIDIA recommends the Quadro K5000 or K6000. To accelerate ultra high-end workflows, such as those based on 4K content, consider a Maximus system featuring dual K6000 GPUs, dual K5000 GPUs, or the addition of a Tesla K20C to your Quadro K5000 for multi-GPU performance. For mobile workstation users, consider high-performance Quadro K5000M or K5100M-based mobile workstations.

### MID-LEVEL CREATIVE PRO

If you spend most of your time in Premiere Pro, but also use other related Adobe Creative Cloud tools, consider the Quadro K4000 or K5000. To get even better performance in After Effects for 3D ray tracing and take advantage of the newly supported dual-GPU capabilities of Premiere Pro, add a second Quadro or Tesla K20 card. Mobile workstation users should choose a Quadro K4000M or K4100M-based mobile workstation.

### PREMIERE PRO EDITOR

If you focus on Premiere Pro and work with two or three layers of video and graphics, choose Quadro K2000 as an entry-level GPU. If you deal with more complex workflows or need faster final output rendering, add a second Quadro or Tesla K20 card. Professionals on-the-go should choose a Quadro K2000M or K2100M-based mobile workstation.

### AFTER EFFECTS ARTIST

If you're a motion graphics professional using the 3D ray tracing engine in After Effects, consider a high-end dual-GPU NVIDIA Maximus configuration featuring dual Quadro K6000 GPUs. If you only occasionally use 3D ray tracing, a Quadro K2000 plus a second Quadro or Tesla K20 is a good choice that still delivers great performance. For mobile workstations, go with a Quadro K5000M or K5100M-based system for the most performance possible.

### MAC EXPERT

The Quadro K5000 for Mac is an excellent choice for Mac users across the entire set Adobe Creative Cloud tools, including GPU acceleration in Premiere Pro, After Effects, SpeedGrade, and Photoshop. The high-performance range of MacBook Pro systems is also accelerated with NVIDIA GPUs. And with the K5000, you can be sure your Mac workstation is ready for the growing number of 4K workflows.

### VIDEO COLLABORATION

If you want to enable multiple video professionals to collaborate remotely using Premiere Pro, Prelude, and After Effects, choose Adobe Anywhere. As a cloud-centric platform accelerated by NVIDIA Tesla GPUs, it frees video editors to use their own client device to work seamlessly across virtually any network. Look for Adobe-recommended servers to enable the complete solution.

*Always use an NVIDIA Quadro performance driver for the best performance.*



NVIDIA Quadro, Tesla, and GRID computing solutions provide creative pros with the fastest GPU acceleration across the broadest range of Adobe offerings, including Adobe Creative Cloud, Adobe Anywhere, and Adobe Creative Suite. Ongoing technical collaboration between Adobe and NVIDIA continue to enable high-impact, innovative technologies that ensure creative artists and video editors get fast, smooth interactivity when and where it's needed.

To learn more, visit [www.nvidia.com/adobe](http://www.nvidia.com/adobe).

<sup>1</sup> Tests based on Adobe Creative Cloud comparing NVIDIA GPU(s) with dual Intel Xeon E5 2687W 3.10GHz CPUs (16 total cores)

