

# **Unleash your Creativity**

Real-time video production in hd, 4k and beyond with Adobe Premiere<sup>®</sup> Pro cc - now powered by AMD FirePro<sup>™</sup> and OpenCL<sup>™</sup> technology.

With Adobe Premiere® Pro CC supporting OpenCL<sup>™</sup> for Microsoft Windows® OS-based workstations, there's no need to buy hardware based on proprietary technology any more. Harness the power of AMD GPU acceleration to help speed up more than 40 effects in Premiere Pro CC. That means less time sitting around waiting and watching the rendering progress bar. Apply color corrections and effects to multiple layers of DV, HD or 4K video and gain feedback on the fly.

#### Creative Collaboration between AMD and Adobe®

AMD FirePro<sup>™</sup> professional graphics solutions are now fully optimised for Adobe Creative Cloud<sup>™</sup> and AMD, giving you more choice and providing cutting-edge application performance and reliability when using the next-generation of the Adobe Professional Tools including Adobe Premiere<sup>®</sup> Pro CC. You can now unleash your creativity by tapping into the immense power of the latest AMD GPUs and Accelerated Processors using open standards technology and get lighting fast results when working with your content, in HD, 4K and beyond.

#### Work in harmony with all your other Adobe Software

Premiere Pro CC isn't the only Adobe application to support heterogeneous system architectures to speed up your workflow. After Effects, SpeedGrade as well as Photoshop's Mercury Graphics Engine also take advantage of your AMD GPU for blazingly fast performance on even the largest of images when using the new Blur Gallery or demanding tools like Liquify or Puppet Warp. And since it's based on open standards like OpenCL and OpenGL, there's no need for graphics hardware using proprietary programming languages anymore.



#### Breakthrough video editing performance with open standards

As 4K footage captured on devices like RED'S EPIC and SCARLET cameras quickly becomes standard for professional jobs - and even consumer-grade DSLRs like Canon's EOS Rebel T3 can shoot good-quality HD footage - editors need powerful software to cope with all of that data.

Adobe Premiere Pro's Mercury Playback Engine is designed for just such demanding modern editing jobs. By harnessing the power of the GPU alongside that of the latest multi-core CPUs, you can edit footage seamlessly at full resolution, or apply effects on the fly and see the results in real time.



### Industry:

Media & Entertainment

#### Application:

Adobe Premiere Pro and Creative Suite CC

#### **Challenges:**

- Increasingly demanding effects with ultra-high-resolution footage
- ▲ Competitive pressure
- ▲ Combine multiple applications to create ideal workflow

#### Solution:

▲ AMD FirePro<sup>™</sup> professional graphics is fully optimised, thoroughly tested for Adobe Premiere Pro and Creative Suite CC enabling real-time video Editing in HD, 4K and beyond

#### **Value Propositions:**

- Optimised for Adobe Premiere Pro and Creative Suite CC
- ▲ More Performance with AMD GCN GPU Architecture and Open Standards
- Designed to Meeting the Needs of Real Productions
- ▲ Accelerate your Workflow with AMD Eyefinity Multi-Display Technology

#### The AMD FirePro Advantage:

- Three-year warranty and extended availability Compared to consumer graphics, AMD FirePro cards have an extended lifecycle
- Highest level of customer support Customers have the ability to contact the AMD technical team directly
- Energy efficiency AMD FirePro graphics cards are based on a highly efficient GPU design and feature power saving technologies like AMD PowerTune and AMD ZeroCore technologies
- ▲ AMD Eyefinity technology A single card can power up to 3, 4 and even 6 displays with up to 4K resolution with each output (4096 x 2180 pixels using DisplayPort 1.2)\*

#### Always work in real time, at full resolution

Thanks to the power of the latest generation of AMD GPUs, you can now work on high-definition footage in real time, even on a mobile system. You can play back DSLR or AVCHD video clips at full resolution on the timeline, scrub through footage in the Project bin, or use real-time dynamic trimming – all without stuttering, or having to drop to half resolution.





#### Make adjustments on the fly and see results in real time

Premiere Pro CC's support for OpenCL harnesses the power of your AMD FirePro graphics resource, enabling you to change the brightness or contrast of footage in real time. Just drag a Brightness & Contrast, Luma Corrector or Luma Curve effect onto a clip in the timeline and see the results of your adjustments on the fly, without shake or dropped frames – or worse, having to drop to a lower resolution and render to check the results of your work.

#### Lightning-fast colour correction without proxies

When you need to match footage shot on different cameras, it only takes a single click to set the White Balance, and the software takes care of the rest. With Premiere Pro CC's support for OpenCL, you can now rely on the massively parallel compute performance of AMD GPUs to accelerate the Fast Color Corrector, giving you instant feedback during playback, even on full-resolution clips: no more wasting time creating proxies to work on – and no need to render to check the results.





#### Work in real time on full-resolution 4K footage and beyond

Thanks to its support for OpenCL, Premiere Pro CC makes it possible to harness the power of your AMD GPU to play back clips on the timeline in real time – even in 4K and beyond. The latest AMD FirePro W-series professional graphics cards are ideal for such demanding production jobs. With up to 6 GB of dedicated graphics memory, industry-leading memory bandwidth and PCI Express 3.0, the top-of-the-range AMD FirePro cards help you to scrub through RED or ARRIRAW footage without stuttering or needing to drop to lower resolution.



#### Colour, Depth, and Detail with AMD and Adobe SpeedGrade

The entirely GPU-accelerated Adobe SpeedGrade and AMD graphics hardware provide artists the power to push the envelope—with confidence, precision, and unprecedented speed. With AMD and Adobe SpeedGrade, artists can open the full dynamic range of their source footage and retain details often lost in shadows and highlights. Craft picture-perfect output for virtually any format—from smartphones to the big screen—faster with AMD GPU acceleration.

#### AMD GPU- and APU-accelerated features in Adobe SpeedGrade include:

**Primary and Secondary Colour Correction** - Apply primary color corrections to the full frame, in combination with secondary grades for selected color ranges within images.

**Powerful Layer-based Grading** - Adjust footage to compensate for gamma irregularities and colour shifts, including automatic colour calibration for QuickTime output.



#### Faster Graphics Pipeline with AMD and Adobe After Effects

Pair AMD professional and consumer graphics cards with Adobe After Effects to create, manipulate, and polish motion graphics and cinematic visual effects (VFX) quickly, efficiently and effectively. AMD graphics hardware and Adobe After Effects software combine to deliver a robust and reliable creative workflow and an unparalleled user experience.

#### AMD boosts a variety of Adobe After Effects GPU-accelerated features:

Final Draft Mode - Fast Draft preview mode makes working with the ray-traced 3D renderer much, much faster. It speeds the process of setting up 3D scenes, which can be slow in Final Quality mode.

Cartoon Effect - Adjust footage to compensate for gamma irregularities and colour shifts, including automatic colour calibration for QuickTime output.

#### Make adjustments on the fly and see results in real time

The AMD FirePro W-Series graphics cards accelerate your high-end video workflow more efficiently than ever before, even when working with the most demanding algorithms. With the new Graphics Core Next (GCN) GPU architecture, the AMD FirePro W7000, W8000 and W9000 graphics cards make it possible to apply processor-intensive effects such as the Three-Way Color Corrector or the Ultra Key chroma keyer on the fly.

Thanks to the power of AMD GPUs and OpenCL, it even becomes possible to apply multiple effects, Adjustment Layers and vignette masks to footage and see the results in real time.





#### Apply 3D effects without having to re-render

When running on the CPU, Premiere Pro uses lower-quality algorithms for scaling footage, only switching to its highest-quality algorithms at render time. With GPU acceleration enabled, those advanced algorithms are already on.

With AMD's FirePro W-series graphics cards, you can apply overlays, titles or lower thirds seamlessly: all without having to work with lower-resolution proxies, or re-render to check the results.

#### Seamless workflows with AMD Eyefinity multi-display technology

AMD Eyefinity multi-display technology enables an AMD FirePro graphics card to drive three, four and even six monitors via DisplayPort 1.2 from a single graphics card, at up to 4K x 2K resolution for each output\*. Speed up your workflow by using your extra screens to view additional Audio Mixer or Metadata panels, run After Effects, Photoshop sessions simultaneously or simply refer to your storyboards and project brief.



FIREPRO GCN VS. OUADRO

#### Adobe Premier Pro Benchmark Results





Software: Adobe Premiere CC build 294 / Windows 7 64-bit, Effects: ProcAmp, Sharpen, Color Balance (RGB), RGB Color Corrector, Lumetri (multiple Deep Color effects) System: Intel Xeon E5530 @ 2.40 GHZ, 12GB memory, 160GB Velociraptor, Drivers: AMD 12.102 / NVIDIA 311.35, Content: 4K TIFF 24-bit sequence



#### Image Editing Accelerated with AMD

Create eye-catching and awe-inspiring designs faster. AMD graphics hardware powers creativity and productivity, boosting the performance of more than 30 features, filters and functions in the latest edition of Adobe Photoshop.

Get lightning-fast results: leverage the immense power of AMD GPU and APU hardware with the Adobe Mercury Graphics Engine, OpenCL support and dozens of GPU-accelerated features in Adobe Photoshop.

#### Key AMD GPU- and APU-accelerated features in Adobe Photoshop include:

**Adobe Mercury Graphics Engine** - The Adobe Mercury Graphics Engine harnesses the power of AMD GPUs and APUs to deliver unprecedented responsiveness for a fluid feel as artists work. The Adobe Mercury Graphics Engine supports OpenCL<sup>™</sup> and OpenGL to accelerate new and enhanced Adobe Photoshop features.

**Oil Painting** - filter is a graphics-intensive filter that quickly gives artwork the look of a fine painting. Artists can control the style of the paintbrush, as well as the direction and shine of the lighting, to achieve a polished look.

#### Conclusion

Thanks to Adobe's support for OpenCL, Premiere Pro CC users have more options than ever before when selecting their graphics hardware. From entry-level desktop or mobile graphics to high-end desktop cards, AMD FirePro professional graphics solutions provide lightning-fast GPU-accelerated editing using open standard technologies that are tailored to your needs - even when working with ultra-high-resolution video and beyond.

#### **Certified AMD Firepro Hardware**

#### AMD FirePro Desktop Graphics Cards

The new AMD FirePro W-Series graphics cards are based on the Graphics Core Next (GCN) GPU architecture, designed to efficiently balance compute and 3D workloads.

#### AMD FirePro Mobile Graphics

AMD works with leading OEMs to deliver mobile workstation solutions that offer the same AMD FirePro<sup>™</sup> graphics performance, software optimisation and reliability found in desktop workstations.





#### **Recommended for Adobe**

	AMD FirePro W5100	AMD FirePro W7100	AMD FirePro W8100
GPU Memory	4GB GDDR5	8GB GDDR5	8GB GDDR5
AMD GCN Stream Processors	768	1792	2560
Compute Performance (Single Precision)	1.43 TFLOPS	3.3 TFLOPS	4.2 TFLOPS
GeometryBoost	Yes	Yes	Yes
Memory Bandwidth	96 GB/	160 GB/s	320 GB/s
Physical Display Outputs	Four Mini-DisplayPort 1.2a	Four DisplayPort 1.2a	Four DisplayPort 1.2
Total Display Outputs with AMD Eyefinity and DisplayPort 1.2a $\!\!\!\!\!\!^*$	6	6	6
Genlock/Framelock	No/No	Yes/ Yes	Yes/Yes
3rd-party SDI Support	Yes	Yes	Yes
Ready for 4K (UHD)	Yes	Yes	Yes
System Interface	PCIe 3.0, Single-slot	PCIe 3.0, Single-slot	PCIe 3.0, Dual-slot
OpenGL	4.4	4.4	4.4

#### For more information, visit www.fireprographics.com/adobe

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\*AMD Eyefinity technology supports up to six DisplayPort monitors on an enabled graphics card. Supported display quantity, type and resolution vary by model and board design. Mixed monitors of different resolutions are supported by select AMD FirePro\* professional graphics cards. Confirm specifications with manufacturer before purchase. To enable more than two displays, or multiple displays from a single output, additional hardware such as DisplayPort\*\*-ready monitors or DisplayPort 1.2 MST-enabled hubs may be required. A maximum of two active adapters is recommended for consumer systems. See www.amd.com/eyefinityfag for full details.

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