

AMD Announces Availability of Radeon Pro WX Series Graphics Cards

Polaris architecture-based workstation graphics cards deliver new features and astounding performance to meet the evolving needs of professionals

SUNNYVALE, CA -- (Marketwired) -- 11/07/16 -- AMD (NASDAQ: AMD) today announced the availability of the Radeon™ Pro WX Series of graphics cards, the company's powerful, new workstation graphics solutions designed to meet the evolving needs of creative professionals. The Radeon™ Pro WX Series professional graphics cards are designed around a number of transformational inflection points that are dramatically changing the way content is created, including the rise of real-time game engines in professional settings, the emergence of virtual reality, the popularity of new low-overhead APIs (such as DirectX® 12 and Vulkan™), and the rise of open-source tools and applications. The Radeon Pro WX Series represents a revolutionary approach for professionals rooted in a commitment to open, non-proprietary software and high performing, feature-rich hardware that empowers people to truly create "the art of the impossible."

The Radeon Pro WX Series professional graphics cards harness acclaimed Polaris architecture-based GPUs featuring 4th generation Graphics Core Next (GCN) technology and engineered on the 14nm FinFET process. The cards have future-proof ¹ monitor support, able to run a 5K HDR display via DisplayPort 1.4, ² include state-of-the-art multimedia IP with support for HEVC encoding and decoding ³ and TrueAudio Next for VR, and boast cool and quiet operation with an emphasis on energy efficiency. The Radeon Pro WX cards are designed and built by AMD with a consistent bill of materials and quality components. As a testament to AMD's commitment to high quality products, each retail Radeon™ Pro WX graphics card comes with 24/7, VIP customer support, a 3-year limited warranty ⁴ and now features a free optional 7-year extended limited warranty upon product and customer registration. ⁵

"Radeon™ Pro represents a powerful shift towards a holistic approach to design and content creation, giving our customers full creative autonomy, the opportunity to realize gains across the entire ecosystem, and the ability to create free of constraint from proprietary tools," said Ogi Brkic, general manager, professional graphics, Radeon Technologies Group, AMD. "Our line of professional workstation graphics hardware, the Radeon™ Pro WX Series, is designed to empower the next-generation of exceptional content, intersecting new industry inflection points and enabling creators of all kinds to deliver the art of the impossible."

Radeon™ Pro WX 4100 graphics card - The world's fastest low-profile workstation graphics GPU⁶

Available November 10 at US\$399 MSRP, the Radeon™ Pro WX 4100 graphics cards delivers the exceptional performance CAD professionals are looking for in a sleek and quiet small form factor. The Radeon™ Pro WX 4100 graphics card is the first low-profile workstation graphics card to break the 2 TFLOPS single precision compute performance barrier, over 2.4X the performance of competing cards in its class while consuming nearly identical amounts of power. With 4GB of GDDR5 memory and 16 compute units (1024 stream processors), users can drive four 4K monitors or a single 5K monitor at 60 Hz, a feature which competing low-profile CAD focused cards in its class can't touch.

Radeon™ Pro WX 5100 graphics card - The fastest 75W TDP workstation GPU, ready for the game engine revolution⁸

Available November 18th at US\$499 MSRP, the Radeon™ Pro WX 5100 graphics card is the fastest workstation card in its class, delivering up to a groundbreaking 3.9 TFLOPS of single precision compute

performance while using just 75 watts of power. As game engines have become more commonplace in today's immersive computing era, integrating themselves alongside traditional design applications and proprietary renderers, professionals are demanding more powerful solutions. The Radeon™ Pro WX 5100 graphics card delivers the necessary performance in spades, with 8GB of GDDR5 memory and 28 compute units (1792 stream processors) for 41 percent faster performance in Siemens PLM Software NX™ than competing cards in its class ⁹, and exceptional high-fidelity, high-resolution real-time visualization for key industries such as automotive and architecture.

Radeon[™] Pro WX 7100 graphics card - The world's fastest single-slot workstation GPU¹⁰, ready for VR

Available November 10th at US\$799 MSRP, the Radeon™ Pro WX 7100 graphics card delivers 5.7 TFLOPS of single precision floating point performance in a single slot, and is designed to meet the needs of professional VR content creators. Equipped with 8GB GDDR5 memory and 36 compute units (2304 Stream Processors) the Radeon Pro WX 7100 is a powerful graphics solution for high-quality visualization workloads, boasting up to 45 percent more performance than competing cards in its class in Dassault Systèmes SOLIDWORKS™ 2015. 11 As VR usage continues to grow in design, manufacturing, media and entertainment workflows, the Radeon Pro WX 7100 delivers the performance needed to drive user experiences to new levels of immersion.

Radeon Pro Software Enterprise Driver and Open Source Software Support

To ensure the best possible experience with the Radeon™ Pro WX Series graphics cards, AMD recently introduced Radeon Pro Software Enterprise Drivers, specifically designed to combine the power of AMD's next-generation graphics with the highly tailored needs of professional enterprise users. Building on AMD's rapid iteration in the software space since last year's release of Radeon Software Crimson Edition for consumer products, professional users will benefit from rock-solid stability, exceptional performance and enhanced productivity features. Radeon Pro Software Enterprise drivers deliver predictable software release dates, with updates issued on the fourth Thursday of each calendar quarter, and feature prioritized support with AMD working with customers, ISVs, and OEMs to provide top-of-the-queue engineering work. The drivers are certified in numerous workstation applications covering the leading professional use cases.

AMD is also committed to furthering open source software for professional content creators. Following news that later this year AMD plans to open source its powerful physically-based rendering engine, Radeon ProRender, the company recently announced that a future release of Maxon's Cinema 4D application for 3D modeling, animation and rendering will support Radeon ProRender. Radeon ProRender plugins are available today for many popular 3D content creation applications, including Autodesk® 3ds Max® and Maya®, and as beta plugins for Dassault Systèmes SolidWorks and Rhino®. Radeon ProRender works across Windows®, macOS and Linux®, and supports AMD GPUs, CPUs and APUs as well as those of other vendors.

Supporting Resources

- Learn more about the philosophy behind Radeon Pro
- Read about Radeon Pro WX Series workstation graphics cards
- For detailed product info, go to <u>AMD.com/RadeonProWX</u>
- See more details about the Radeon Pro Software Enterprise Driver
- Learn more about Radeon ProRender
- Learn more about GPUOpen
- Become a fan of AMD on Facebook
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About AMD

For more than 45 years AMD has driven innovation in high-performance computing, graphics, and visualization technologies -- the building blocks for gaming, immersive platforms, and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses, and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work, and play. AMD

employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) website, blog, Facebook and Twitter pages.

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- 1. Statement of "future-proof" refers to support of current and upcoming technology standards including 14nm FinFET process technology, DirectX® 12 and Vulkan™ API support, new display technology, and experiences such as VR. "Future-proof" statement is not meant to serve as a warranty or indicate that users will never have to upgrade their graphics technology again. Support of current and upcoming technology standards described above has the potential to reduce frequency of graphics upgrades for some users. GD-94
- 2. As of September 2016, certified for DisplayPort™ 1.4 HBR3 and ready for DisplayPort™ 1.4 HDR based on independent verification by DisplayPort™ testing authority. HDR content requires that the system be configured with a fully HDR-ready content chain, including: graphics card, monitor/TV, graphics driver and application. Video content must be graded in HDR and viewed with an HDR-ready player. Windowed mode content requires operating system support. GD-100
- 3. HEVC acceleration is subject to inclusion/installation of compatible HEVC players. GD-81
- 4. See www.amd.com/warranty for details.
- 5. See details and requirements at www.amd.com/ExtendedWarranty
- 6. Based on single precision compute performance. As of August 25, 2016, the Radeon™ Pro WX 4100 graphics card delivers up to 2.46 TFLOPS single precision compute performance at maximum clock speed vs. NVIDIA's fastest low-profile offering, the Quadro K1200, which offers up to 1 TFLOPS single precision compute performance. AMD's fastest low-profile card prior to the Radeon Pro WX 4100 was the AMD FirePro™ W4300, delivering 1.43 TFLOPS single precision compute performance. See http://www.nvidia.com/content/pdf/line_card/5409_nv_prographicssolutions_linecard_feb13_hr.pdf RPW-2
- 7. Based on single precision compute performance. As of August 25, 2016, the Radeon™ Pro WX 4100 graphics card delivers up to 2.46 TFLOPS single precision compute performance at maximum clock speed vs. NVIDIA's fastest low-profile offering, the Quadro K1200, which offers up to 1 TFLOPS single precision. AMD's fastest low-profile card prior to the Radeon Pro WX 4100 was the AMD FirePro™ W4300, delivering 1.43 TFLOPS single precision. See http://www.nvidia.com/content/pdf/line_card/5409_nv_prographicssolutions_linecard_feb13_hr.pdf As of August 25, 2016, the Radeon™ Pro WX 4100 graphics card rated TDP board power is 50W and the NVIDIA Quadro K1200 rated TDP is 45W. See http://www.nvidia.com/content/quadro/pdf/quadro-power-quidelines.pdf RPW-4
- 8. Based on single precision compute performance. As of August 25, 2016, the Radeon™ Pro WX 5100 workstation GPU delivers up to 3.89 TFLOPS of single-precision compute performance at maximum clock speed with a TDP of 75 watts, and the NVIDIA Quadro M2000 delivers 1.3 TFLOPS of single-precision compute performance with a TDP of 75 watts. See https://www.techpowerup.com/gpudb/2837/quadro-m2000 RPW-8
- 9. Radeon Pro WX5100 delivers up to 41% more performance than NVidia Quadro M2000 in Siemens NX SPECviewperf® 12.1. Testing conducted by AMD Performance Labs as of September 2016 on test system described below. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers. CPU: Intel E5-1650 v3 3.50GHz, Memory: 16GB RAM, OS: Win7 64-bit SP1, AMD Driver: 16.40 Beta Nvidia Driver: 368.39. Application: SPECviewperf 12.1, official resolution. https://www.spec.org/gwpg/gpc.sta. Subtest:

snx-02. AMD WX5100 Composite snx-02 score: 76.28. Nvidia Quadro M2000 Composite snx-02 score: 54.05. Performance Differential: 76.28/54.05 = ~41.13% faster on AMD. RPW-16

10. Based on single precision floating point performance. As of August 25, 2016, the Radeon™ Pro WX 7100 graphics card is a single-slot board that delivers up to 5.73 TFLOPS of single-precision floating point performance at maximum clock speed, and the fastest NVIDIA single-slot board is the NVIDIA Quadro M4000, with a peak single-precision floating point performance of 2.5 TFLOPS. See

http://www.nvidia.com/content/pdf/line_card/5409_nv_prographicssolutions_linecard_feb13_hr.pdf RPW-6

11. Radeon Pro WX7100 delivers up to 45% more performance than NVidia Quadro M4000 in SPECapc® Solidworks 2015. Testing conducted by AMD Performance Labs as of September 2016 on test system described below. PC manufacturers may vary configurations, yielding different results. Performance may vary based on use of latest drivers. CPU: Intel E5-1650 v3 3.50GHz, Memory: 16GB RAM, OS: Win7 64-bit SP1, AMD Driver: 16.40 Beta Nvidia Driver: 368.39 Application: SPECapc Dassault SolidWorks 2015, no FSAA Subtest: Shaded using RealView and Shadows and Ambient Occlusion Graphics Sub-composite. AMD WX7100 subtest score: 21.00. Nvidia Quadro M4000 subtest score: 14.45. Performance Differential: 21.00/14.45 = ~45.33% faster on AMD. RPW-18

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Source: Advanced Micro Devices