A FOUNDATION FOR HIGH PERFORMING GRAPHICS

AMD RDNA™ 2 Explained.

AMD

Built on Experience

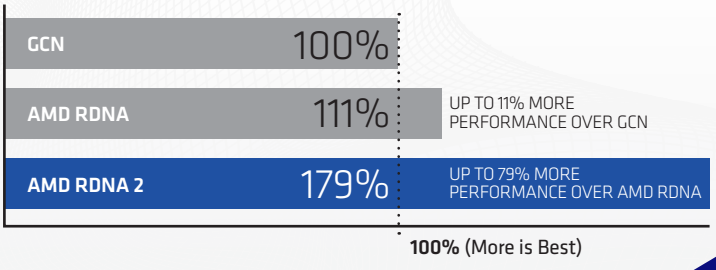
The AMD RDNA™ 2 graphics foundation is built on years of dedicated graphics experience and research. The advanced AMD RDNA GPU architecture was first introduced in 2019, and since then has evolved into AMD RDNA 2. This established architecture is the basis for the graphics that power leading, visually rich gaming consoles and PCs. Now, this AMD RDNA 2 graphics architecture is available in the professional range of Radeon PRO™ W6000 graphics cards.

What's All the Fuss About?

At AMD we often get excited about new technology and can sometimes get a bit carried away with the technical terms, but in this document we take a moment to explore the resultant positive impact these new graphics advancements may bring to your common workflows.

The AMD RDNA 2 graphics architecture gives you the freedom to work with bigger datasets, faster.

Graphics Architecture Generations[1]



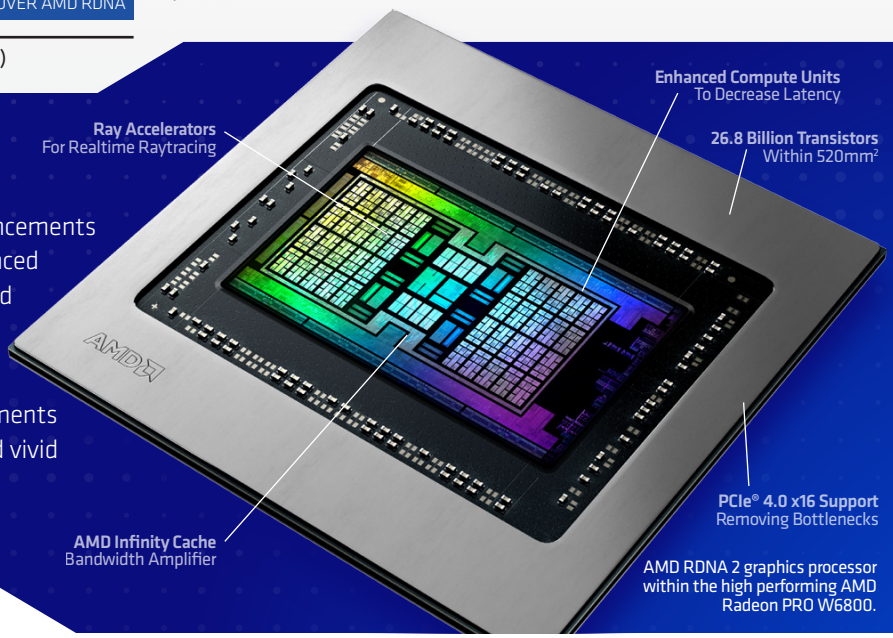
Increased Professional Performance

Engineered from the ground up with superior performance and power efficiency, AMD RDNA 2 architecture delivers up to 194% faster performance[1] over previous generation GCN architecture, with added support for Variable Rate Shading (VRS), for intelligent frame rendering performance, and Vulkan™ 1.2 and DirectX® 12 Ultimate, for next-generation graphics performance in compatible professional software.

Importance to Professional Software

AMD RDNA 2 architecture introduces significant advancements in the form of an all new AMD Infinity Cache, an enhanced Compute Unit, Hardware Raytracing support, combined with a new visual pipeline for added efficiencies.

On the next page we explore what these individual terms mean, and when combined how these advancements help enable high resolution performance and increased vivid visuals within your professional software of choice.



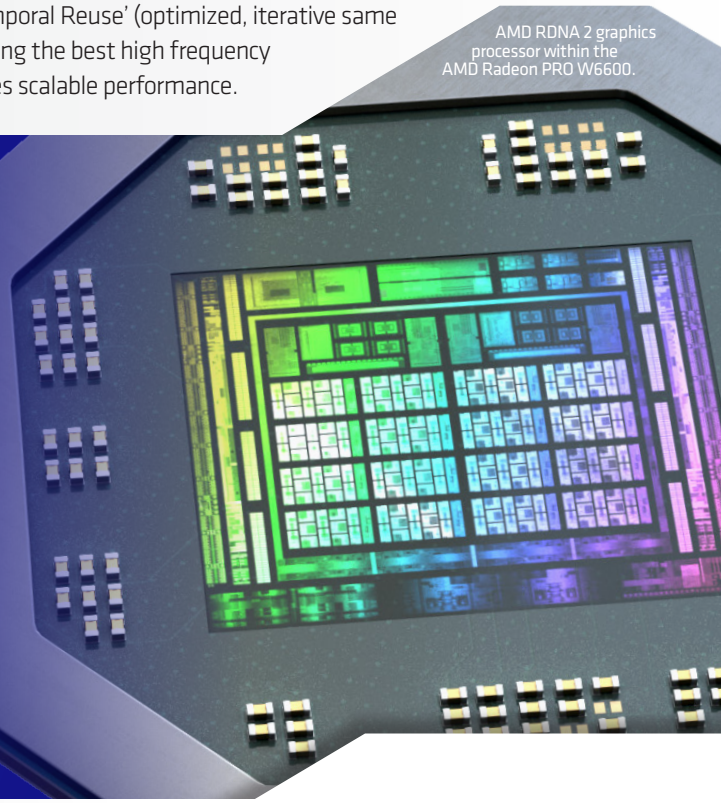
AMD RDNA 2 graphics processor within the high performing AMD Radeon PRO W6800.

AMD RADEON PRO

Professional Graphics for Exceptional Performance with Reliability, Stability and Software Certifications at its Core.

AMD Infinity Cache

AMD RDNA 2 architecture is more efficient with the introduction of AMD Infinity Cache, an all-new additional cache level that enables high bandwidth performance at low power and low latency, helping to remove data bottlenecks. This global cache is seen by the entire graphics core, capturing 'Temporal Reuse' (optimized, iterative same data reuse) and enabling data to be accessed virtually instantaneously. Leveraging the best high frequency data processing approaches from "Zen" architecture, AMD Infinity Cache enables scalable performance.



AMD RDNA 2 graphics processor within the AMD Radeon PRO W6600.

Enhanced Compute Units

Each Compute Unit (CU) within the chip houses several stream processors and cores. The higher the graphic cards core count, the more powerful it typically is. Each efficient core is essentially duplicated, to work on parallel jobs sent from the users software, such as displaying images on screen, or scientific number crunching. They form the central brains within the graphics processor.

Hardware Accelerating Raytracing

New to the AMD RDNA 2 Compute Unit is the implementation of a high-performance raytracing acceleration architecture known as Ray Accelerators, offering increased visual realism in your compatible software. The Ray Accelerator is specialized hardware that efficiently handles the complex intersection of ray calculations designed to accelerate this process, compared to software alone.

New AMD RDNA 2 Powers These Professional GPUs

RADEON PRO **W6600** GRAPHICS

THE VR-READY GPU FOR COMPLEX PROJECTS
8 GB of Fast GDDR6 Memory.
Four Display Outputs. 8K Support.
Remote Environment[2] Ready.
Available for Mobile Systems.

amd.com/RadeonPROW6600

RADEON PRO **W6800** GRAPHICS

THE GPU TO CRUSH VISUALIZATION, VR AND INTENSE PROJECTS
Gigantic 32 GB of GDDR6 Memory.
Error Correction Code (ECC) Support.
Six Display Outputs. 8K, HDR Support.
Remote Environment[2] Ready.

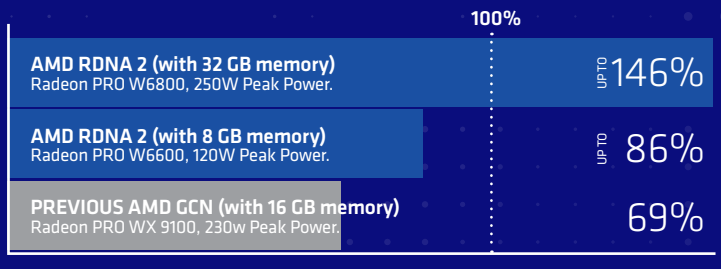
amd.com/RadeonPROW6800

Learn more about VR capabilities of Radeon PRO Graphics at **amd.com/PRO-VR**

Created for the Professional User

As you've seen, a graphics architecture is a complex beast and needs to be for the daily tasks thrown at it, but with the experience and knowledge that AMD has built, you can put your trust in the combined progress the award winning AMD RDNA 2 architecture brings to your professional software. These advanced AMD technologies help remove common GPU and system bottlenecks, enabling better performance. While this sounds great, ultimately what matters is the impact on your software, and opposite we can see just one of the many examples of enhanced, but affordable, performance increases from AMD RDNA 2 while using less comparative peak power.

Relative GPU Performance in Dassault Systèmes' SOLIDWORKS® Visualize[3]



To learn more about AMD professional graphics visit: **amd.com/RadeonPRO**

[1] Testing as of March 23, 2021 by AMD Performance Labs on a test system comprised of an AMD Ryzen™ 5950X with AMD Radeon™ PRO W5700, AMD Radeon™ PRO W6800 pre-production sample, AMD Radeon™ PRO WX 9100. Benchmark Applications: Lumion v.11 (Museum, Valley Winery, Downtown Development, Glass House, Villa Cabrera, Farnsworth, Residential Home, Beach House), Topaz Video Enhance AI 2.0.0 (Artemis-HQ, Gaia-HQ, Theia-Detail), Dassault Systèmes SOLIDWORKS® Visualize 2021 SP3 (Camaro default angle, Yellow motorcycle, Snowmobile). Performance may vary based on factors such as tasks performed, driver version and hardware configuration. RPW-363

[2] Learn more at www.amd.com/en/technologies/remote-workstation

[3] Testing as of March 23, 2021 by AMD Performance Labs on a test system comprised of an AMD Ryzen™ 9 5950X with AMD Radeon™ PRO W5700 / AMD Radeon™ PRO WX 9100 / AMD Radeon™ PRO W6600 (pre-production sample) / AMD Radeon™ PRO W6800 (pre-production sample), at 3840x2160 display resolution. Benchmark Application: Dassault Systèmes SOLIDWORKS® Visualize 2021 SP3 (ProRender low sample) test. Performance may vary based on factors such as driver version and hardware configuration. RPW-382

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