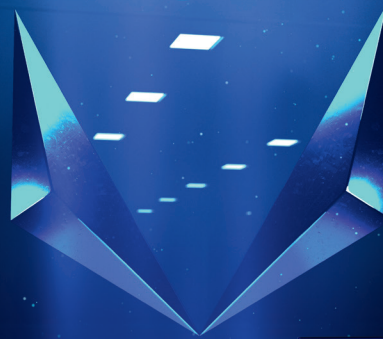# RADEON

PRO WX 9100

AMD

Limitless Creation at Your Fingertips

ACCELERATE YOUR IMAGINATION

The Radeon™ Pro WX 9100 workstation graphics card is the ultimate, cutting edge graphics solution for all professional workloads from design and rendering to virtual reality. Based on the "Vega" GPU architecture, this card ushers in a wealth of bleeding-edge technologies like the High Bandwidth Cache Controller (HBCC), a radically new GPU memory hierarchy allowing previously untapped flexibility, and new frontiers in real-time visualization with hyper-realistic rendering techniques.

The Radeon™ Pro WX 9100 will help drive GPU-accelerated OpenCL™ performance to new heights allowing animators and designers to achieve extraordinary levels of photorealistic rendering using technology like Radeon ProRender. Effortlessly make real-time material and complex lighting changes of rendered objects and scenes and generate near real-time photorealistic walkthroughs of rendered visualizations.

With the "Vega" architecture's incredible throughput and optimized load-balancing, filmmakers will be able to integrate game engines into the workflow to create high-fidelity real-time VFX pre-visualizations to help inform on-set decisions on-the-fly. And when it is time for post-production, the Radeon™ Pro WX 9100 workstation graphics card can handle 8K resolutions with ease.

Key Features

Stream Processors:	4096
Peak Engine Clock:	1500 MHz
Memory Clock:	945 MHz
Peak Single Precision Computer:	Up to 12.3 TFLOPS
Peak Triangles/s:	6 BT/s
Memory Size:	16GB HBC with Error Correcting Code (ECC) Memory[1]
Memory Interface:	2048 bit
Max. Memory Bandwidth:	483.84 GB/s
Native Display Outputs:	6 DisplayPort™ 1.4 HDR Ready[2]

10-bit Color Support

High Bandwidth Cache Controller (HBCC)

8K Display Support (Single monitor, single or dual-cable)

Framelock/Genlock Support

OS Support: Windows® 7, Windows® 10, Linux® (64-bit)

API Support: OpenCL™ 2.0, OpenGL® 4.5, DirectX® 12.1, Vulkan® 1.0

Typical Board Power: <230W

Power Requirements: 1x 6pin, 1x 8pin power connection

For more information, visit: pro.radeon.com/wx/9100

▶ # FEATURES AND BENEFITS
HIGH BANDWIDTH CACHE CONTROLLER (HBCC)

The state of the art memory system found on the "Vega" GPU architecture removes the capacity limitations of traditional GPU memory. Thanks to automatic, fine-grained memory movement controlled by the high bandwidth cache controller, "Vega" GPUs equipped with HBCC enables creators and designers to work with much larger, more detailed models and assets in real time.

HOW HBCC WORKS
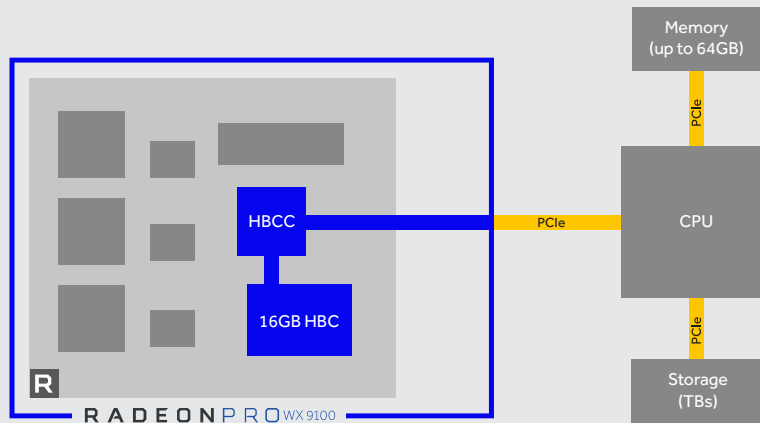
AMD SECURE PROCESSOR

The AMD Secure Processor is designed to facilitate all-day security. As soon as you power on your computer, the onboard AMD Secure Processor performs boot and firmware validation. During use, the AMD Secure Processor works in tandem with Microsoft's Device Guard to thwart malicious attacks. During shutdown, the AMD Secure Processor continues securing graphics bound IP until device termination.

EFFICIENT GEOMETRY ENGINE

The new geometry pipe in the "Vega" GPU architecture processes millions of polygons due to its efficient load balancing. The Radeon™ Pro WX 9100 offers up to 2.6x peak geometry throughput per clock[4] to significantly speed up modelling and design workflows in various rendering engines. Modelling applications will be able to render in real-time heavy 3D models and large scenes.

ENHANCED PIXEL ENGINE

Updated rasterizer technology to improve cache locality and overdraw, enhancing rendering efficiency and leaving more headroom to crank up quality settings while maintaining smooth 3D rendering.

RADEON™ VR READY CREATOR[5]

Enable extraordinary performance and world-class innovation with Radeon™ VR Ready Creator products like the Radeon™ Pro WX 9100. Empower VR content creators and experience designers with amazingly powerful and capable development tools in the AMD LiquidVR™ SDK[3].

RADEON
PRO WX 9100

AMD

▶ # FOOTNOTES

1. ECC support is limited to the HBM2 memory and ECC protection is not provided for internal GPU structures.

2. As of June 2017. Product is based on the DisplayPort 1.4 Specification published February 23, 2016, and has passed VESA's compliance testing process (excluding HDR) in June 2017. GD-123

3. For more information, visit www.amd.com/en/technologies

4. Data based on AMD Engineering design of "Vega" GPU architecture. Radeon R9 Fury X has 4 geometry engines and a peak of 4 polygons per clock. Vega is designed to handle up to 11 polygons per clock with 4 geometry engines. This represents an increase of up to 2.6x. VG-3

5. Radeon VR Ready Creator Products are select Radeon Pro and AMD FirePro™ GPUs that meet or exceed the Oculus Rift or HTC Vive recommended specifications for video cards/GPUs. Other hardware (including CPU) and system requirements recommended by Oculus Rift or HTC Vive should also be met in order to operate the applicable HMDs as intended. As VR technology, HMDs and other VR hardware and software evolve and/or become available, these criteria may change without notice.