# RADEON PRO

# Radeon™ Pro WX 5100 Workstation Graphics

## Ready for the Game Engine Revolution in Your Design Workflow

The Radeon™ Pro WX 5100 workstation graphics card is designed to be ready for the game engine revolution in professional design workflows. Game engines (such as Unity and Unreal) have become more commonplace in today's immersive computing era, integrating themselves alongside traditional CAD applications like Autodesk®, Siemens PLM and SOLIDWORKS®. Bring your designs to life with the new Radeon™ Pro WX 5100, the fastest 75W TDP workstation card in the world.¹

#### **Performance Meets Efficiency**

Based on the latest Polaris GPU architecture, the Radeon Pro WX 5100 features 28 compute units (1792 stream processors) and 8GB of GDDR5 GPU memory with a 256-bit memory interface. It delivers the power and features to unleash your creativity on applications like Siemens NX, where the Radeon Pro WX 5100 delivers up to 41% more performance than its nearest competitor, the NVIDIA Quadro M2000.<sup>2</sup>

### **Quality You Can See**

Immerse yourself in the millions of pixels that are being driven from the Radeon<sup>TM</sup> Pro WX 5100 graphics card to your 5K display. See enhanced levels of detail and wider, more precise color ranges with 10-bit color and HDR (High Dynamic Range) support.<sup>3</sup>

### **Quality You Can Trust**

Radeon<sup>TM</sup> Pro WX is the embodiment of innovation and design within the Radeon Technologies Group. Great care is taken into crafting each product to ensure quality and reliability are at the highest of standards. We are proud to stand behind our three

year limited warranty (see details at www.amd.com/Warranty) and optional seven year extended limited warranty also available (see details and requirements at www.amd.com/ExtendedWarranty).



The Radeon™ Pro WX 5100 is Ready for the Game Engine Revolution in Your Design Workflow

#### **Key Features:**

- Application Optimizations 8GB GDDR5 GPU Memory
- 256-Bit Memory Interface
- Direct Graphics Memory Access (DirectGMA)
- Four DisplayPort Outputs (Ready For DisplayPort 1.4 HDR)<sup>5</sup>
- AMD Eyefinity Multidisplay Technology
- 1792 Stream Processors (28 CUs)
- 3.9 TFLOPS Peak Single Precision Compute Performance
- OpenCL<sup>™</sup>, DirectX<sup>®</sup>, OpenGL, and Vulkan<sup>™</sup> support
- 75W TDP Maximum Power Consumption
- Full-Height/Half-Length Single-Slot Form Factor
- 3 Year Limited Warranty (see details at www.amd.com/Warranty)
- Optional 7 Year Extended Limited Warranty (see details and requirements at www.amd.com/ ExtendedWarranty).
- Support for Microsoft Windows® 10, Windows® 7, and Linux® (64-Bit)
- FCC, CE, C-Tick, BSMI, KCC, UL, VCCL, RoHS and WEEE Compliance



Feature	Benefits
4TH GENERATION GRAPHICS CORE NEXT (GCN) GPU ARCHITECTURE	The Radeon™ Pro WX 5100 graphics card is based on the fourth-generation of Graphics Core Next (GCN) GPU architecture and, like its predecessor, can perform graphic and arithmetic instructions in parallel.
5K DISPLAY SUPPORT	Drive up to two, 5K (5120x2880 pixel resolution) dual-cable displays @ 60 Hz, or a one, single-cable 5K display @ 60 Hz.
10-BIT COLOR	Native support for 10-bits per color channel for color-critical tasks. Driving an effective 30-bits per pixel, the Radeon™ Pro WX 5100 is great for any workload requiring that level of detail and color precision.
HDR READY	High dynamic range (HDR) capability enables visuals that closely match what is familiar to the human eye. <sup>3</sup>
MULTI-GPU SUPPORT	Combine up to four Radeon™ Pro WX 5100 workstation graphics cards in a single desktop system and leverage the combined processing power for personal supercomputing or to work with multiple 4K video streams in real-time, layer in effects, make color corrections and edits on the fly.
8GB GDDR5 MEMORY	Allow users to work at extreme levels of speed and responsiveness. With a 256-bit memory interface, users can edit 4K video, layer in multiple effects and color correct on the fly, or load massive assemblies and data sets and manipulate them in real time.
UP TO 3.9 TFLOPS PEAK SINGLE-PRECISION FLOATING POINT PERFORMANCE	Helps speed up time required to complete single precision operations used within Video Effects and Rendering, Signal Processing, Transcoding and Digital Rendering applications where high performance takes precedence.
DIRECTGMA AND SDI SUPPORT	Removes CPU bandwidth and latency bottlenecks, and optimizes communication between GPUs within a system and third party devices like SDI I/O cards. DirectGMA bypasses any need to traverse the host's main memory, reducing CPU utilization, avoiding redundant bus transfers, and resulting in high throughput, low latency data transfers.
4K ACCELERATED ENCODE/DECODE	Multi-stream hardware H.265 HD encode/decode for power-efficient and quick video encoding and playback.
ENERGY EFFICIENT DESIGN	Radeon™ Pro WX 5100 graphics card supports unique power monitoring and management technologies, and has a maximum power consumption of 75 Watt TDP. AMD PowerTune technology dynamically optimizes GPU power usage and AMD ZeroCore Power technology significantly reduces power consumption at idle.⁴

## To learn more about Radeon Pro, please visit: amd.com/radeonproWX

- 1. 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 total board power of 75 watts. See https://www.techpowerup.com/gpudb/2837/quadro-m2000 RPW-8
- 2. 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 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-13
- 3. 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.
- 4. AMD PowerTune and AMD ZeroCore Power are technologies offered by certain FirePro™ and Radeon™ Pro products, which are designed to intelligently manage GPU power consumption in response to certain GPU load conditions. Not all products feature all technologies check with your component or system manufacturer for specific model capabilities. GD-36
- 5. As of September 2016, certified for DisplayPort™ 1.4 HBR3 and ready 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

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