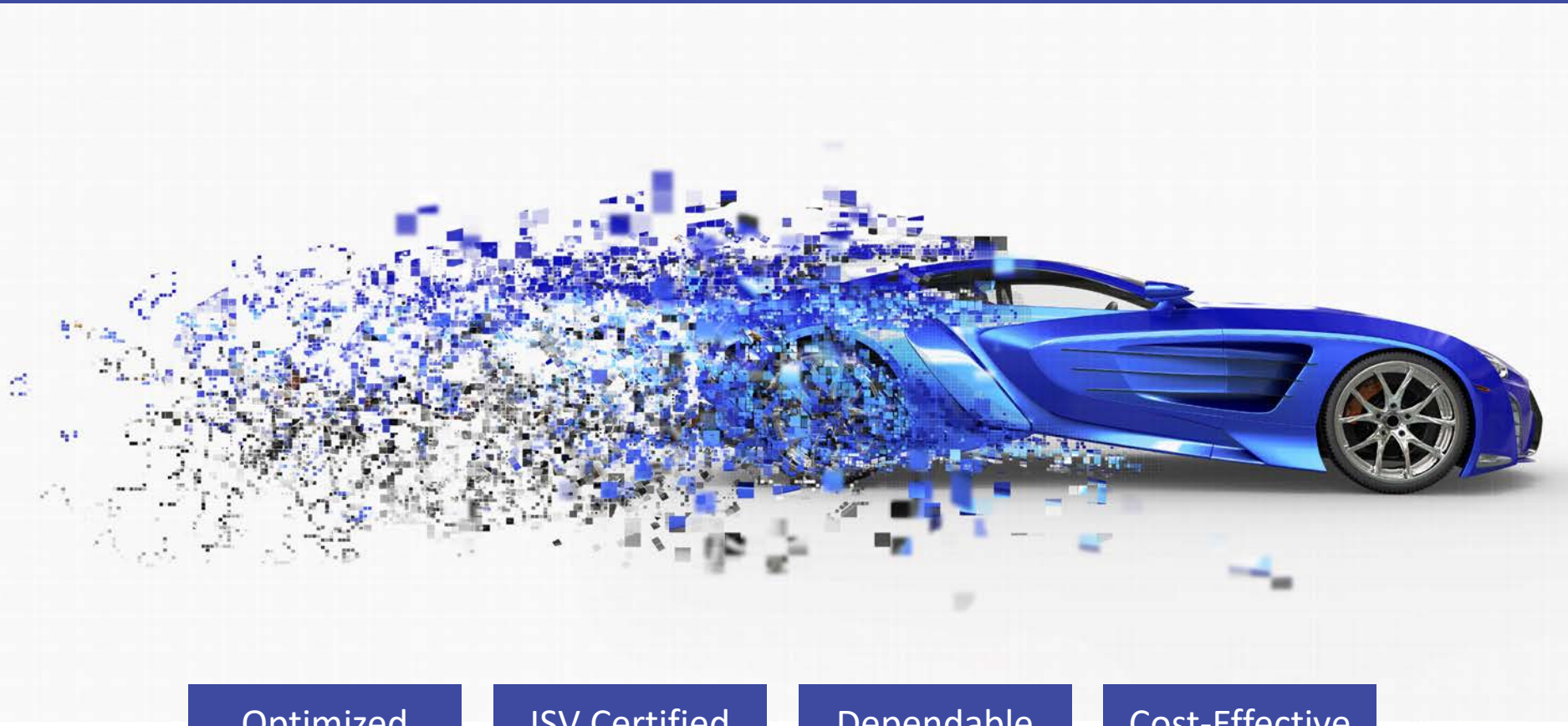


Optimized | ISV Certified | Dependable | Cost-Effective

Workstation Graphics Sales Guide

What is a professional GPU?

AMD Radeon™ Pro GPUs have been designed, manufactured and optimized specifically for professional end users. The graphics hardware and software are strenuously optimized to deliver outstanding graphics performance in a wide range of 2D and 3D professional applications. Radeon™ Pro graphic cards also offer robust display output capabilities to drive multiple ultra high-resolution displays in a variety of configurations.

Reliability

Reliability is paramount for professionals, particularly when project margins remain tight and design efficiency is key. Having a key component of the workstation fail, such as the graphics card, simply isn't an option. Radeon™ Pro graphics cards are designed exclusively by AMD for workstation environments, built with top quality components, and stress tested to exceptional standards for demanding workloads.

Application Certifications and Optimizations

Professional users rely on their workstations and their GPUs to get critical projects done. Their workstations need to behave like appliances that simply work. To this end, Radeon™ Pro hardware and software is certified by the leading professional application vendors. This means users have the peace of mind that their choice of design application will be capable of meeting the needs of their demanding workflows.

Read more about AMD Radeon™ Pro Software Certified ISV Applications (LINK)

Enterprise-Quality Software

All driver releases are rigorously tested for optimal stability with professional applications as the top priority, while delivering performance optimizations and value-added features. With leading driver stability* and ease of IT management, Radeon™ Pro Software provides the optimal work environment for design professionals, whether in a small office or large enterprise.

* See full stability audit report "Graphics Driver Quality - Determination of Stability from Leading Market Vendors" at www.qaconsultants.com/stabilityaudit

Where are professional GPUs needed?

Manufacturing

Computer-aided design (CAD), manufacturing (CAM), and engineering simulation (CAE) applications rely on professional GPUs for optimal performance and stability to deliver robust products to market effectively.

Architecture

Modern Building Information Modeling (BIM) workflows allow for collaboration throughout the entire design process., Our GPUs offer exceptional value throughout this process, starting with CAD design to high end visualization and VR/Real-time rendering.

Media & Entertainment

Modern, high resolution digital content creation and broadcast workflows involve many compute-heavy tasks and have high memory requirements, areas that high-end professional GPUs excel in.

Finance

Comprehensive support for high resolution multi-displays and operating stability are required for the financial sector.

Energy

Energy exploration datasets, such as those used in seismic imaging, can be massive in size and complexity.

AMD RADEON PRO for Desktop Workstations

AMD RADEON PRO WX 2100

- **1.25** TFLOPS
- **2** GB Memory
- **3** Displays

AMD RADEON PRO WX 3100

- **1.25** TFLOPS
- **4** GB Memory
- **3** Displays

AMD RADEON PRO WX 3200

- **1.66** TFLOPS
- **4** GB Memory
- **4** Displays

AMD RADEON PRO WX 4100

- **2.46** TFLOPS
- **4** GB Memory
- **4** Displays

AMD RADEON PRO WX 5100

- **3.89** TFLOPS
- **8** GB Memory
- **4** Displays

AMD RADEON PRO WX 7100

- **5.73** TFLOPS
- **8** GB Memory
- 4 Displays

AMD RADEON PRO WX 8200

- **10.7** TFLOPS
- **8** GB Memory
- 4 Displays

AMD RADEON PRO WX 9100

- **12.3** TFLOPS
- **16** GB Memory
- **6** Displays

AMD Radeon™ Pro W Series for Desktop Workstations

RADEON VR READY CREATOR

AMD RADEON PRO W5700

- **8.89** TFLOPS
- **8** GB Memory
- **6** Displays

RADEON VR READY CREATOR

AMD RADEON PRO W5500

- **5.35** TFLOPS
- **8** GB Memory
- **4** Displays

POWERED BY THE GROUNDBREAKING 7NM **RDNA** ARCHITECTURE

EQUIPPED BY THE LATEST **GDDR6** HIGH-SPEED MEMORY, AND THE NEXT GENERATION **PCI® EXPRESS 4.0**.

AMD RADEON PRO

Desktop Product Specifications

		Radeon™ Pro WX 2100	Radeon™ Pro WX 3100	Radeon™ Pro WX 3200	Radeon™ Pro WX 4100	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 7100	Radeon™ Pro W5700	Radeon™ Pro WX 8200	Radeon™ Pro WX 9100
Display	Max Resolution per Display Output	7680x4320	7680x4320	7680x4320	7680x4320	7680x4320	7680x4320	7680x4320	7680x4320	7680x4320	7680x4320
	Display Connectors[1]	(2x) Mini-DP (1x) DP	(2x) Mini-DP (1x) DP	(4x) Mini-DP	(4x) Mini-DP	(4x) DP	(4x) DP	(4x) DP	(5x) Mini-DP (1x) USB-C®	(4x) Mini-DP	(6x) Mini-DP
Performance	Graphics Memory	2 GB GDDR5	4 GB GDDR5	4 GB GDDR5	4 GB GDDR5	8 GB GDDR5	8 GB GDDR6	8 GB GDDR5	8 GB GDDR6	8 GB HBM2	16 GB HBM2
	Memory Bandwidth	48 GB/s	96 GB/s	96 GB/s	96 GB/s	160 GB/s	224 GB/s	224 GB/s	448 GB/s	512 GB/s	484 GB/s
	Stream Processors	512	512	640	1024	1792	1408	2304	2304	3584	4096
	Peak Half Precision (FP16 TFLOPS)	1.25	1.25	1.66	2.46	3.89	5.38	5.73	8.89	21.5	24.6
	Peak Single Precision[2] (FP32 TFLOPS)	1.25	1.25	1.66	2.46	3.89	5.38	5.73	8.89	10.7	12.3
	Peak Double Precision (FP64 TFLOPS)	0.08	0.08	0.10	0.15	0.24	0.33	0.36	0.55	0.67	0.77
Software API Support	DirectX® 12 Version	12_0	12_0	12_0	12_1	12_0	12_1	12_0	12_1	12_1	12_1
	OpenGL Version	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	OpenCL™ Version	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Vulkan® Version	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Features	AMD VR Ready Creator[4]						VR Ready	VR Ready	VR Ready	VR Ready	VR Ready
	ECC Memory									•	•
	HBC Controller								•	•	•
	HEVC Encode/Decode[5]	•	•	•	•	•	•	•	•	•	•
	10-Bit Display Pipeline Support	•	•	•	•	•	•	•	•	•	•
	AMD DirectGMA Technology			•	•	•	•	•	•	•	•
	3D Stereo Sync					•	•	•	•	•	•
	Genlock/Frame Lock Support							•	•	•	•
	AMD Remote Workstation[6]				•	•	•	•	•	•	•
System Requirements	Graphics Card Form Factor	Low Profile Single Slot	Low Profile Single Slot	Low Profile Single Slot	Low Profile Single Slot	Full Height Single Slot	Full Height Single Slot	Full Height Single Slot	Full Height Double Slot	Full Height Double Slot	Full Height Double Slot
	Max Power Consumption	35 W	50 W	50 W	50 W	75 W	125 W	130W	205 W	230 W	230 W
	PCIe Power Connectors	--	--	--	--	--	6-pin	6-pin	6-pin & 8-pin	6-pin & 8-pin	6-pin & 8-pin
		Datasheet	Datasheet	Datasheet	Datasheet	Datasheet	Datasheet	Datasheet	Datasheet	Datasheet	Datasheet

Retail Package Contents

The table below shows the accessories included with the retail versions of Radeon™ Pro graphics cards.
The information below is not applicable to accessory bundles included with OEM systems.

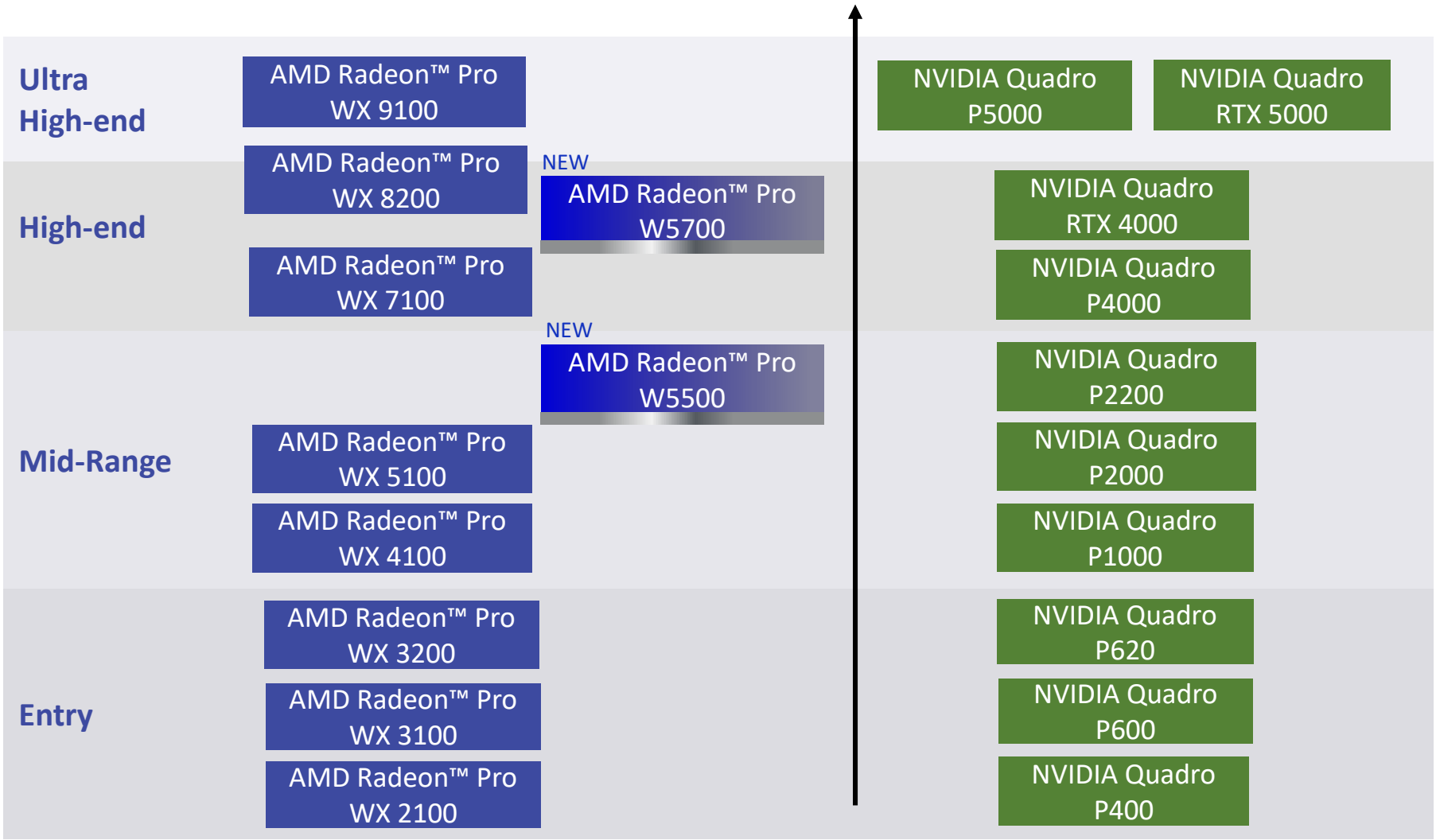
Radeon™ Pro WX 9100 (PN: 100-505957)	▪ (4x) Mini-DisplayPort to DisplayPort adapter ▪ (1x) Mini-DisplayPort to HDMI 1.4 passive adapter ▪ (1x) Mini-DisplayPort to DVI passive adapter ▪ (1x) “Flat” board retention bracket for OEM chassis ▪ (1x) “Bent” board retention bracket for OEM chassis ▪ (1x) 3D stereo sync cable
Radeon™ Pro WX 8200 (PN: 100-505956)	▪ (2x) Mini-DisplayPort to DisplayPort adapter ▪ (1x) Mini-DisplayPort to HDMI 1.4 passive adapter ▪ (1x) “Flat” board retention bracket for OEM chassis ▪ (1x) “Bent” board retention bracket for OEM chassis ▪ (1x) 3D stereo sync cable
Radeon™ Pro WX 7100 (PN: 100-505826)	▪ (2x) DisplayPort to DVI passive adapter ▪ (1x) DisplayPort to HDMI 1.4 passive adapter ▪ (1x) 3D stereo sync cable
Radeon™ Pro WX 5100 (PN: 100-505940)	▪ (2x) DisplayPort to DVI passive adapter
Radeon™ Pro WX 4100 (PN: 100-506008)	▪ (4x) Mini-DisplayPort to DisplayPort adapter ▪ (1x) Full-height chassis bracket
Radeon™ Pro WX 3200 (PN: 100-506115)	▪ (2x) Mini-DisplayPort to DisplayPort adapter ▪ (1x) Low Profile bracket
Radeon™ Pro WX 3100 (PN: 100-505999)	▪ (1x) Mini-DisplayPort to DisplayPort adapter ▪ (1x) Mini-DisplayPort to DVI passive adapter ▪ (1x) Full-height chassis bracket
Radeon™ Pro WX 2100 (PN: 100-506001)	▪ (1x) Mini-DisplayPort to DVI passive adapter ▪ (1x) Full-height chassis bracket
Radeon™ Pro W5700 (PN: 100-506085)	▪ (2x) Mini-DisplayPort to DisplayPort adapters ▪ (1x) Mini-DisplayPort to Single-Link DVI adapter ▪ (1x) “Flat” board extension bracket for OEM chassis ▪ (1x) “Bent” board extension bracket for OEM chassis
Radeon™ Pro W5500 (PN: 100-506095)	▪ (1x) DisplayPort to Single-Link DVI adapter

Power to the Innovators

The Radeon™ Pro family of professional graphics solutions was crafted, from the ground up, for the most demanding of professional users. It provides the performance, features and reliability needed to tackle professional workflows in a multitude of industries such as manufacturing and architecture. With stringent product qualification, comprehensive application certifications, performance optimizations and regular enterprise driver updates, professional users can be assured a high-quality visual experience and peace of mind when working on mission critical projects.

	AMD RADEON PRO	**Consumer GPU** (e.g. AMD Radeon™ RX, NVIDIA® GeForce®)
ISV certifications for professional applications	Certified by leading ISVs for the most popular professional software applications to ensure flawless operation with the latest application features and real-world datasets	None
Graphics driver optimization	Tuned for optimal performance and compatibility with professional applications	Tuned for gaming and basic PC applications
Product qualification criteria	Rigorous screening in environments that exceed OEM requirements	Standard testing for consumer environments
Shock and vibration	Mechanically robust to comply with shock and vibration requirements for transportation	Minimum shock and vibration considerations
Maximum supported displays	Up to 6 natively via DisplayPort 1.4	Up to 6 with third-party display hubs
Product support	Standard 3-year warranty and 24/7 support	Typically 1-2 years warranty
Product life cycle	3-year supported lifecycle with extended support for long-term projects	Not guaranteed

Desktop Competitive Lookup



This chart illustrates competitive product positioning, is not necessarily an indication of relative performance and may not be to scale for any performance metric. GD-75

AMD RADEON PRO

Superior Value at Every Level for Workstations

AMD RADEON PRO **WX 2100**

	Versus	Quadro P400
1.25 TFLOPS	Peak FP32 Performance	0.64 TFLOPS
48 GB/s	Memory Bandwidth	32 GB/s
2 GB	Memory Size	2 GB
2x Mini-DP, 1x DP	Display Outputs	3x Mini-DP

AMD RADEON PRO **WX 3100**

	Versus	Quadro P600
1.25 TFLOPS	Peak FP32 Performance	1.195 TFLOPS
96 GB/s	Memory Bandwidth	64 GB/s
4 GB	Memory Size	2 GB
2x Mini-DP, 1x DP	Display Outputs	4x Mini-DP

AMD RADEON PRO **WX 3200**

	Versus	Quadro P620
1.66 TFLOPS	Peak FP32 Performance	1.386 TFLOPS
96 GB/s	Memory Bandwidth	80 GB/s
4 GB	Memory Size	2 GB
4x Mini-DP	Display Outputs	4x Mini-DP

AMD RADEON PRO **WX 4100**

	Versus	Quadro P1000
2.46 TFLOPS	Peak FP32 Performance	1.89 TFLOPS
96 GB/s	Memory Bandwidth	80 GB/s
4 GB	Memory Size	4 GB
4x Mini-DP	Display Outputs	4x Mini-DP

AMD RADEON PRO **WX 5100**

	Versus	Quadro P2000
3.89 TFLOPS	Peak FP32 Performance	3.00 TFLOPS
160 GB/s	Memory Bandwidth	140 GB/s
8 GB	Memory Size	5 GB
4x DP	Display Outputs	4x DP

AMD RADEON PRO **WX 7100**

	Versus	Quadro P4000
5.73 TFLOPS	Peak FP32 Performance	5.30 TFLOPS
224 GB/s	Memory Bandwidth	243 GB/s
8 GB	Memory Size	8 GB
4x DP	Display Outputs	4x DP

AMD RADEON PRO **WX 8200**

	Versus	Quadro P4000
5.73 TFLOPS	Peak FP32 Performance	5.30 TFLOPS
512 GB/s	Memory Bandwidth	243 GB/s
8 GB	Memory Size	8 GB
4x Mini-DP	Display Outputs	4x DP

AMD RADEON PRO **WX 9100**

	Versus	Quadro P5000
12.3 TFLOPS	Peak FP32 Performance	8.9 TFLOPS
484 GB/s	Memory Bandwidth	288 GB/s
16 GB	Memory Size	16 GB
6x Mini-DP	Display Outputs	4x DP, 1x DVI

Next Generation Technology for Professional Workstations

NEW

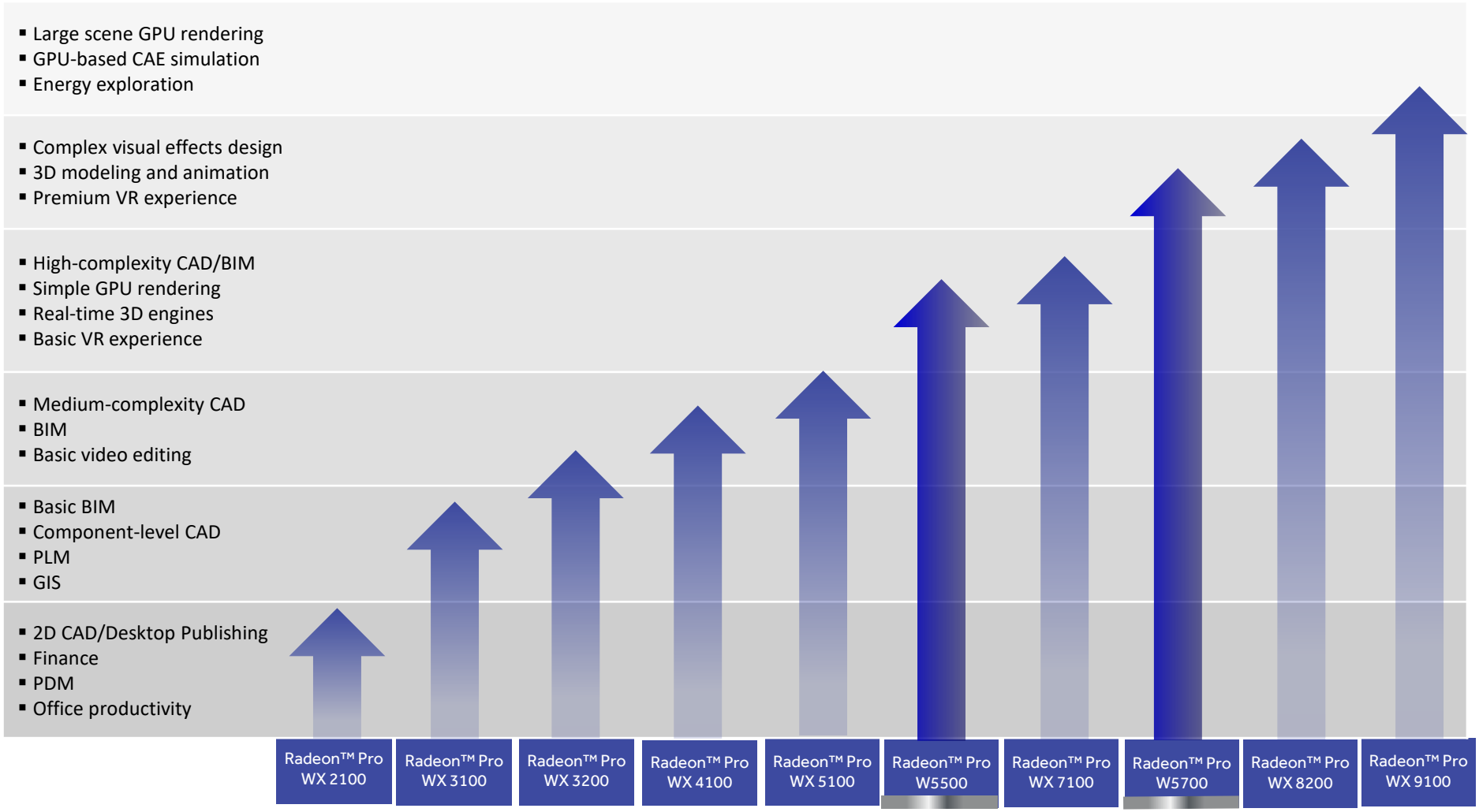
AMD RADEON PRO W5700

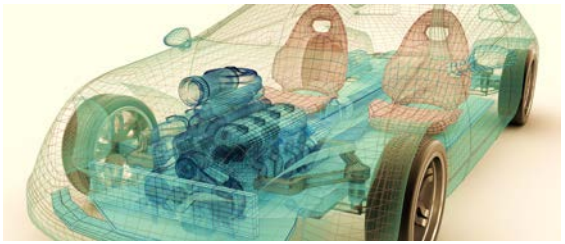
	Versus	Quadro RTX 4000
8.89 TFLOPS	Peak FP32 Performance	7.1 TFLOPS
448 GB/s	Memory Bandwidth	416 GB/s
8 GB	Memory Size	8 GB
5x Mini DP 1x USB Type-C	Display Outputs	3x DP 1x VirtualLink
PCIe® 4.0 x16	System Interface	PCIe® 3.0 x16

AMD RADEON PRO W5500

	Versus	Quadro P2200
5.35 TFLOPS	Peak FP32 Performance	3.8 TFLOPS
224 GB/s	Memory Bandwidth	200 GB/s
8 GB GDDR6	Memory Size	5 GB GDDR5
4x DP	Display Outputs	4x DP
PCIe® 4.0 x8	System Interface	PCIe® 3.0 x16

Typical Product Use Cases





Key Features

- Optimized performance for major OpenGL®-based CAD applications such as SOLIDWORKS®, CATIA®, NX®, and Creo®
- Large video memory to handle increasingly complex datasets
- Radeon™ Pro's Graphics Core Next (GCN) and the groundbreaking RDNA architectures are optimized for GPU compute workloads such as CAE simulation and photorealistic renderings created with AMD's Radeon™ ProRender
- Error-correcting code (ECC) memory on select graphics card models help ensure accuracy in high-precision compute operations

The AMD Radeon™ Pro family of professional graphics cards are designed to accelerate manufacturing workflows. Our workstation graphics solutions are designed to provide the necessary performance required to drive increasingly large and complex models through the entire design visualization pipeline. From evaluating designs with simulation tools to creating stunning renders before the product reaches manufacturing processes, The AMD Radeon™ Pro is designed to provide the power you need to get the job done.

Common Industry Workflows	Radeon™ Pro WX 2100	Radeon™ Pro WX 3100	Radeon™ Pro WX 3200	Radeon™ Pro WX 4100	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 7100	Radeon™ Pro W5700	Radeon™ Pro WX 8200	Radeon™ Pro WX 9100
CAD / CAM		←	—	—	—	—	→			
CAE Pre-/Post-Processing				←	—	—	→			
Visualization							←	—	—	→
Product Data Management (PDM)		←	—	→						



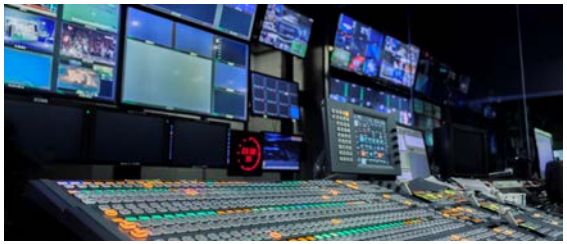
Key Features

- Robust display capabilities to support multiple, simultaneous, high-resolution views in CAD and BIM applications
- AMD Radeon™ Pro's Graphics Core Next (GCN) and the groundbreaking RDNA architectures are optimized for GPU compute workloads such as photorealistic renderings created with AMD's Radeon™ ProRender
- Exceptional performance for mainstream CAD with entry level GPUs, up to Realtime Rendering with end high GPUs
- Make better decisions, sooner, with design walkthroughs using AMD ReLive Wireless VR

As an architect, you know that the brain of the computer is a fast, multi-threaded CPU, but the heart is reserved for a graphics card. Today's professional graphics cards allow you to walk around your concept, while exploring form and space, textures, design details and even performing lighting studies, all from within your favorite CAD package. The AMD Radeon™ Pro series of graphics cards are optimized and certified for all the typical, complex tools within your multifaceted toolchain.

Common Industry Workflows	Radeon™ Pro WX 2100	Radeon™ Pro WX 3100	Radeon™ Pro WX 3200	Radeon™ Pro WX 4100	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 7100	Radeon™ Pro W5700	Radeon™ Pro WX 8200	Radeon™ Pro WX 9100
3D CAD / BIM (Large Scale Projects)					◄	►	►			
3D CAD / BIM (Medium Scale Projects)		◄	►	►	►					
3D CAD / BIM (Small Scale Projects)		◄	►	►						
2D CAD / BIM		◄	►	►						
Real-time Visualization						◄	►	►	►	►
Virtual Reality						◄	►	►	►	►
Real-time Rendering										◄ ►





Key Features

- Asynchronous Compute Engine enables smooth multitasking for simultaneous 3D design and GPU rendering
- Large video memory to handle massively complex 3D scenes
- Genlock/Frame Lock capabilities are essential for multi-monitor synchronization in studio environments
- AMD DirectGMA technology offers low latency, peer-to-peer data transfers between Radeon™ Pro GPUs and other system devices, such as AV capture cards

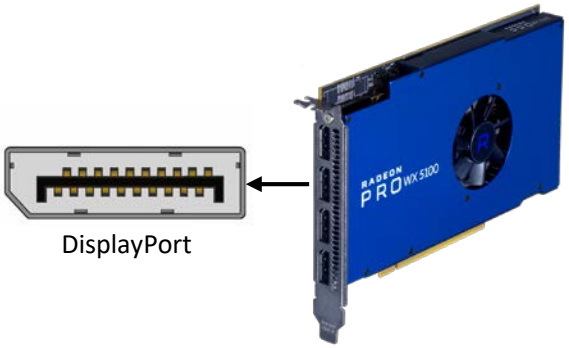
Working with the latest 8K displays? Using VR to create content or animations? Need to preview effects and color correction in real time during video editing? The AMD Radeon™ Pro workstation graphics cards provide excellent GPU acceleration for the top design applications to help artists and media professionals to deliver the utmost visual fidelity in all variants of digital content.

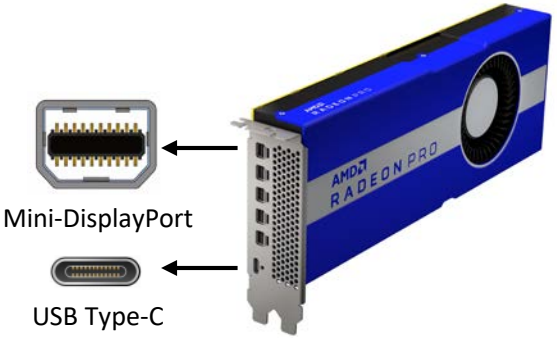
Common Industry Workflows	Radeon™ Pro WX 2100	Radeon™ Pro WX 3100	Radeon™ Pro WX 3200	Radeon™ Pro WX 4100	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 7100	Radeon™ Pro W5700	Radeon™ Pro WX 8200	Radeon™ Pro WX 9100
3D Modeling			◄	─	►					
Animation and Visual Effects						◄	─	─	─	►
Video Editing					◄	─	─	►		
Finishing									◄	►
Broadcast (w/ external synchronization)							◄	─	─	►

Display Output Capabilities

DisplayPort Monitors

All Radeon™ Pro graphics cards support **DisplayPort 1.4** which supports the latest ultra-high monitor resolutions, such as 8K UHD (7680x4320). Depending on the product model, a Radeon™ Pro graphics card can be equipped with standard DisplayPort receptacles, Mini-DisplayPort, or a combination of both. Both connector types are functionally equivalent. Mini-DisplayPort enables higher connector density, but it may require an adapter or a Mini-DisplayPort-to-DisplayPort cable if the monitor only uses standard DisplayPort.





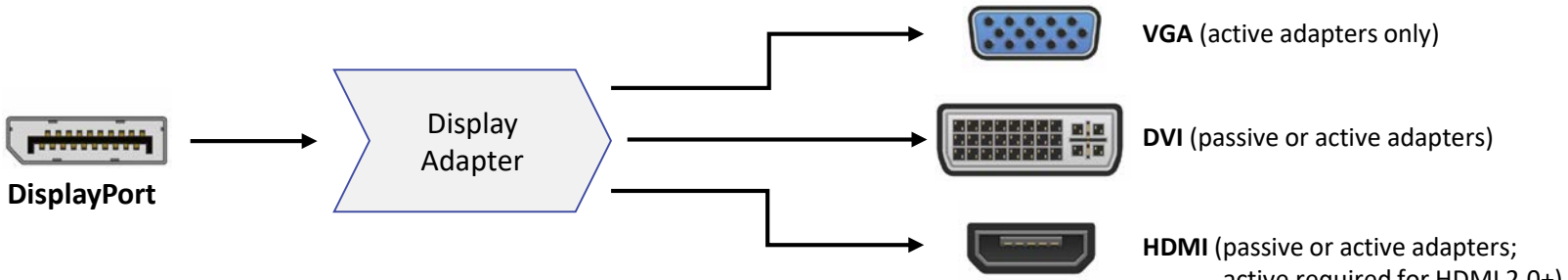
Mini-DisplayPort to DisplayPort adapter cables can be used if the monitor requires a standard DisplayPort cable connection

Compatibility with non-DisplayPort Monitors

While Radeon™ Pro graphics cards are only equipped with DisplayPort connectors, other types of connections (e.g. HDMI) are also supported via adapters. There are two types of display adapters: passive and active.

- **Passive adapter**: only changes the connector form factor while relying on the GPU for signal conversion
- **Active adapter**: contains an integrated circuit for signal conversion, while the GPU continues to output a standard DisplayPort signal

There are advantages to both types of adapters, so the choice depends on the user's needs. Passive adapters are generally less expensive, while active adapters sometimes offer more robust conversion capabilities and are required when using a large number of displays.



Display Resolution Support

All Radeon™ Pro graphics cards support the latest **DisplayPort 1.4** specification, which enables ultra-high monitor resolutions, such as 8K UHD (7680x4320), as well as technologies to enhance photorealism such as High Dynamic Range (HDR).

	Outputs	Full HD (1920x1080)	4K (3840x2160)	5K (5120x2880)	8K (7680x4320)
Radeon™ Pro WX 9100	(6x) Mini-DisplayPort	6 @ 120 Hz	6 @ 60 Hz 2 @ 120 Hz	3 @ 60 Hz (dual cable) 3 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro WX 8200	(4x) Mini-DisplayPort	4 @ 120 Hz	4 @ 60 Hz 2 @ 120 Hz	2 @ 60 Hz (dual cable) 3 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro W5700	(5x) Mini-DisplayPort (1x) USB Type-C	6 @ 240 Hz	6 @ 60 Hz 3 @ 120 Hz	3 @ 60 Hz (single cable)	3 @ 30 Hz (single cable)
Radeon™ Pro WX 7100	(4x) DisplayPort	4 @ 120 Hz	4 @ 60 Hz 1 @ 120 Hz	2 @ 60 Hz (dual cable) 1 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro W5500	(4x) DisplayPort	4 @ 240 Hz	4 @ 60 Hz 2 @ 120 Hz	2 @ 60 Hz (single cable)	2 @ 30 Hz (single cable)
Radeon™ Pro WX 5100	(4x) DisplayPort	4 @ 120 Hz	4 @ 60 Hz 1 @ 120 Hz	2 @ 60 Hz (dual cable) 1 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro WX 4100	(4x) Mini-DisplayPort	4 @ 120 Hz	4 @ 60 Hz 1 @ 120 Hz	2 @ 60 Hz (dual cable) 1 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro WX 3200	(4x) Mini-DisplayPort	4 @ 120 Hz	4 @ 60 Hz 1 @ 120 Hz	2 @ 60 Hz (dual cable) 1 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro WX 3100	(2x) Mini-DisplayPort (1x) DisplayPort	3 @ 120 Hz	3 @ 60 Hz 1 @ 120 Hz	1 @ 60 Hz (dual cable) 1 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)
Radeon™ Pro WX 2100	(2x) Mini-DisplayPort (1x) DisplayPort	3 @ 120 Hz	3 @ 60 Hz 1 @ 120 Hz	1 @ 60 Hz (dual cable) 1 @ 60 Hz (single cable)	1 @ 60 Hz (dual cable) 1 @ 30 Hz (single cable)

The table above shows the monitor resolution support for Radeon™ Pro desktop graphics cards based on the physical display connectors offered by each card assuming direct connections from the graphics card to the monitor. It does not take into account the usage of intermediary devices such as display adapters, DisplayPort Multi-Stream Transport (MST) hubs, or DisplayPort monitor daisy chaining.

All display resolution modes are based on standard 24-bit color depth used by common computer monitors. For high-end monitors that require greater color bit depths (e.g. 30-bit), please contact the monitor vendor for compatibility information.

Product Recommendations for Applications

Understand your customer's use case

Product requirements in professional environments vary greatly from application to application, and user to user. Contrary to typical consumer use cases where nearly all aspects of a given 3D application is fully GPU accelerated (e.g. gaming), and thus benefit from having a powerful GPU, many professional applications are not entirely bound by GPU performance. Different applications utilize the GPU to varying degrees, and each application's GPU performance requirements can range from very low to very high depending on the complexity of the dataset.

The table below shows a list of common applications used in manufacturing, architecture, and media and entertainment with accompanying GPU recommendations based on AMD's analysis of GPU accelerated features for the respective applications. This information is intended to be a guideline only. For the most up-to-date product recommendations, **please visit AMD's online GPU selector tool (LINK).**

Software Vendor	Application	Entry-level (~10% of users)	Standard (~80% of users)	High-end (~10% of users)
Abvent	Twinmotion	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Adobe	After Effects	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 9100
	Photoshop	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	Premiere Pro	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 9100
Altair	HyperWorks	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
ANSYS	ANSYS Mechanical	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
	FLUENT	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
	CEI EnSight	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
	SpaceClaim	Radeon™ Pro WX 4100	Radeon™ Pro WX 5100	Radeon™ Pro W5700
	Workbench	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
Assimilate	Scratch	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 9100
Autodesk	3ds Max	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
	AutoCAD	Radeon™ Pro WX 2100	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100
	Inventor	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
	Maya	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
	Moldflow	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 9100
	Revit	Radeon™ Pro WX 2100	Radeon™ Pro WX 3200	Radeon™ Pro W5500
	Vred	Radeon™ Pro WX 5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100

Product Recommendations for Applications

Software Vendor	Application	Entry-level (~10% of users)	Standard (~80% of users)	High-end (~10% of users)
Bentley Systems	LumenRT	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
	MicroStation CONNECT	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
Beta CAE Systems	ANSA	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Blackmagic Design	DaVinci Resolve	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
	Fusion	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Blender Foundation	Blender	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
CGTech	Vericut	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
COMSOL	COMSOL Multiphysics	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Dassault Systèmes	3DEXPERIENCE	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro W5700
	CATIA	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	DELMIA	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	ENOVIA	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	SIMULIA Abaqus	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 9100
	SOLIDWORKS	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
Enscape	Enscape	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Epic Games	Unreal Studio	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Esri	ArcGIS	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
Graphisoft	ArchiCAD	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
Missler Software	TopSolid	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
Maxon	Cinema 4D	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
MSC Software	Adams	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	Apex	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	MSC Nastran	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	Patran	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	SimXpert	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500

Product Recommendations for Applications

Software Vendor	Application	Entry-level (~10% of users)	Standard (~80% of users)	High-end (~10% of users)
Nemetschek	Allplan	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	Vectorworks	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
PTC	Creo	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
Robert McNeel & Associates	Rhinoceros	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5500
Side Effects	Houdini	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Siemens PLM Software	Femap	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
	NX	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
	NX Nastran	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
	Solid Edge	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
	Teamcenter	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
	Technomatix	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100	Radeon™ Pro W5500
Foundry	Mari	Radeon™ Pro WX 5100	Radeon™ Pro W5500	Radeon™ Pro WX 9100
	Modo	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
	Nuke	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Trimble	SketchUp	Radeon™ Pro WX 3200	Radeon™ Pro W5500	Radeon™ Pro W5700
Unity Technologies	PiXYZ	Radeon™ Pro WX 5100	Radeon™ Pro W5700	Radeon™ Pro WX 9100
	Unity Pro	Radeon™ Pro W5500	Radeon™ Pro W5700	Radeon™ Pro WX 9100
Vero Software	Edgecam	Radeon™ Pro WX 2100	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100
	VISI	Radeon™ Pro WX 2100	Radeon™ Pro WX 3200	Radeon™ Pro WX 5100

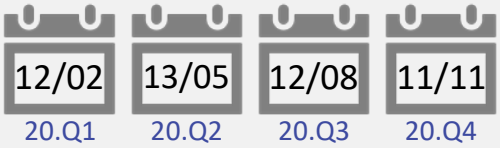
Radeon Pro Software for Enterprise

Great software to pair with great hardware

It is only with a combination of purpose-built hardware and software that AMD is able to offer a product that is designed to provide a dependable graphics solution for professional visualization needs. **Radeon™ Pro Software for Enterprise** is a quarterly release of updated graphics drivers with stability fixes, performance enhancements, and new or updated features. It is AMD's commitment to continuously improve the user experience of Radeon™ Pro graphics users.

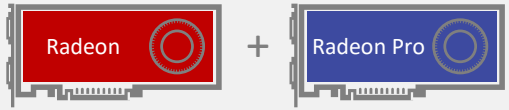
Quarterly releases

AMD announces the *Radeon™ Pro Software for Enterprise* release dates at the end of each calendar year for the following year, enabling ease of planning for IT deployment. Each major release seeks to improve stability and performance, and often introduces new features to enhance productivity. The anticipated release dates for 2019 are set forth below:



"One Driver"

Radeon™ Pro Software for Enterprise is a unified package that supports all AMD Radeon™ graphics products, including Radeon™ for commercial platforms, Radeon™ Pro WX-series for workstations, and Radeon™ Pro V-series for virtualized deployments. A unified software package for all products, greatly simplifying enterprise IT deployment efforts.



AMD RADEON PRO Software FOR ENTERPRISE

Prioritized Issue Resolution

Professional applications can be very complicated and intricate. Being the graphics solution of choice for professional users, quick issue resolution to minimize downtime is of utmost importance for productivity. AMD works closely with application vendors to resolve any field-reported issues.

Day-Zero Certification Program

Each major release of *Radeon™ Pro Software for Enterprise* strives to have a comprehensive set of certifications for all the major professional applications on the day of release. This is achieved through AMD's close collaboration with the application vendors to certify the software release as part of its standard qualification process.

Radeon™ Pro Software Features

Radeon™ Pro Software for Enterprise includes innovation features that simplify professional workflows and enhance your machine's overall performance, from accessing your applications on your workstation from virtually anywhere to accelerating product design decision making, and much more. Please visit AMD's Radeon™ Pro Software page to learn more (LINK).

Remote Workstation[6]

A full GPU-accelerated experience that is easy to deploy, reliable, and cost-effective solution that provides access to your workstation from virtually anywhere via leading remote visualization tools.

Radeon™ Pro ReLive[7]

Enables high-resolution screen capture recordings within professional applications for collaboration, presentation, training, and customer support, and is seamlessly accessed using the AMD Radeon™ Pro Overlay.

AMD RADEON PRO Software FOR ENTERPRISE

Radeon™ Pro Image Boost

Radeon™ Pro Image Boost allows Radeon™ Pro graphics to output at a higher resolution (up to 5K) and then scale down to the lower native resolution of your display, improving sharpness and clarity.

Radeon™ Pro Wireless VR[8,9]

Supports wireless VR with Radeon™ ReLive for VR and the HTC VIVE Focus™ Plus standalone 6DoF VR headset, enabling easy to setup untethered immersive VR product design visualization using professional VR visualization applications.

Workstation Channel Sales Team

Ron Schooler
Director, Worldwide Channel Sales
ron.schooler@amd.com

Josh Saenz
Business Development Manager (NA)
joshue.saenz@amd.com

Christian Seithe
Business Development Manager (EMEA)
christian.seithe@amd.com

Vincent Zhou
Business Development Manager (APAC & Greater China)
vincent.zhou@amd.com

Additional Resources

Sales Resources

- AMD Partner Hub
- Case studies
- Radeon™ Pro for design & manufacturing
- Radeon™ Pro for AEC
- Radeon™ Pro for media & entertainment
- Radeon™ Pro Software
- Radeon™ ProRender

Social Media

- Twitter
- Youtube
- LinkedIn
- Facebook

Endnotes, Disclaimers and Attributions

Footnotes:

1- All Display Outputs are capable of providing display resolution for up to 8K UHD. For more information on supported display configurations, visit https://www.amd.com/en/technologies/eyefinity-professionals
2- FP32 Performance at Peak GPU Clock.
3- The Max Displays capability of each AMD mobile GPU product is inclusive of any built-in displays of the system, such as a laptop display panel.
4-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. PC/System manufacturers may vary configurations, yielding different VR results/performance. Check with your PC or system manufacturer to confirm VR capabilities. GD-101
5-HEVC (H.265), H.264, and VP9 acceleration are subject to and not operable without inclusion/installation of compatible HEVC players. GD-81
6- Compatible with AMD Radeon™ Pro WX 3200, WX 4100, WX 5100, WX 7100, WX 8200, WX 9100, W5700 and W5500 GPUs. Remote Workstation functionality requires AMD Radeon™ Pro Software for Enterprise driver 18.Q4 or newer plus purchase and installation of Citrix Virtual Apps & Desktops™ or Microsoft® Remote Desktop Services. RPS-50
Learn more about AMD's Remote Workstation: https://www.amd.com/en/technologies/radeon-pro-software
7-AMD Radeon™ Pro ReLive functionality depends on graphics card compatibility. Please see www.amd.com/en/technologies/radeon-pro-software-relive
8- A VR-capable GPU is required for VR:
AMD Radeon™ VR Ready Creator Products are select AMD 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. PC/System manufacturers may vary configurations, yielding different VR results/performance. Check with your PC or system manufacturer to confirm VR capabilities. GD-101
9-A VR-capable GPU is required for VR:
AMD Radeon™ VR Ready Premium Products are select AMD Radeon™ 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. PC/System manufacturers may vary configurations, yielding different VR results/performance. Check with your PC or system manufacturer to confirm VR capabilities. GD-102