



AMD FirePro™ W7000

**Be Limitless,
When Every Detail Counts.**

The workstation card for those with higher standards.

Key Features:

- Optimized performance for workstation graphics applications
- AMD Graphics Core Next Architecture
- AMD Eye ∞ nity technology
- 4GB GDDR5 memory
- 256-bit memory interface
- 154 GB/s memory bandwidth
- Four DisplayPort outputs
- Maximum resolution 4096x2160
- DisplayPort 1.2 support
- Support for DirectGMA
- PCIe® 3.0 compliant
- Designed and thoroughly tested by AMD
- Planned four year minimum lifecycle
- Limited three year warranty
- DirectX® 11.1, OpenCL™ 1.2 and OpenGL 4.2 support

Great for CAD/CAE and Media & Entertainment Workflows:

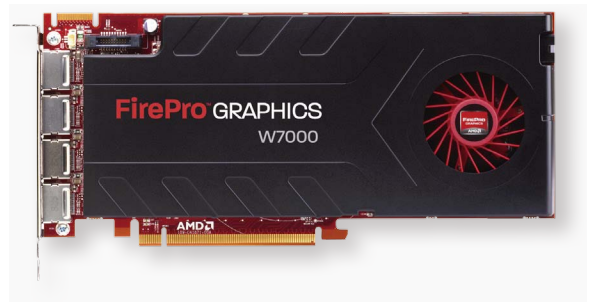
- Advanced 3D Modeling
- Advanced 3D Animation
- Advanced Visual Effects Design
- General Purpose GPU-based Design Visualization

AMD FirePro™ W7000 workstation graphics delivers incredible performance, superb visual quality and outstanding multi-display design experiences to engineering, design and digital media professionals — all from a single-slot solution. Its 3D primitive graphics performance is up to 2.1 times as fast as the competing solutions, giving designers smoother interactivity when working with complex 3D models allowing them to quickly visualize and render designs.¹

AMD FirePro™ W7000 offers up to 1.7 times more memory bandwidth than competing solutions², bringing unmatched application responsiveness that professionals working with advanced visualization, complex models, large data sets and video footage need. Using AMD Eyefinity multi-display technology, AMD FirePro™ W7000 can drive up to four native displays and up to six displays using DisplayPort 1.2, allowing designers and unparalleled productivity and flexibility.³

This very powerful product is:

- Optimized and certified for major CAD and M&E applications delivering 2.4 TFLOPs of single precision and 152 GFLOPs of double precision performance with outstanding reliability for the most demanding professional tasks. In fact, AMD FirePro™ W7000 is more than five times as fast as the competing solutions in single precision compute performance due to its innovative Graphics Core Next (GCN) architecture.⁴
- Built on the 28nm architecture, AMD Graphics Core Next (GCN), AMD FirePro™ W7000 efficiently balances compute tasks with 3D workloads, enabling multi-tasking that is designed to optimize utilization and maximize performance.



- AMD PowerTune and AMD ZeroCore Power technologies that allow for dynamic power management and higher engine clock speeds delivering improved performance and efficient power management.⁵
- GeometryBoost delivers real-time rendering of complex, realistic images at high tessellation speeds, while a full 30-bit display pipeline enables a palette of more than 1.07 billion color values for more accurate color reproduction and superior visual fidelity; requires 30-bit display.
- Improved Anisotropic Filtering (AF) enables both streaming of ultra-high resolution data sets and razor sharp image quality, even at a distance from the display.
- Support for industry standards, including DirectX® 11.1, OpenCL™ 1.2 and OpenGL 4.2, enables advanced features and optimal performance in leading applications using hardware acceleration.
- Framelock/Genlock support ensures accurate and consistent video synchronization to external sources (Genlock) or synchronizes 3D rendering across multiple GPUs in different systems (Framelock).⁶
- Video Codec Engine (VCE) technology, a multi-stream hardware H.264 HD encoder for power efficient and quick video encoding.

¹ AMD Eyefinity technology supports up to six DisplayPort™ monitors on an enabled graphics card. Supported display quantity, type and resolution vary by model and board design; confirm specifications with manufacturer before purchase. To enable more than two displays, or multiple displays from a single output, additional hardware such as DisplayPort-ready monitors or DisplayPort 1.2 MST-enabled hubs may be required. Maximum two active adapters supported. See www.amd.com/eyefinityfaq for full details.

² As of May 2013, Matrox does not offer a product that features GDDR5 memory or supports DisplayPort 1.2 and multi-stream audio support, and N VIDIA does not offer a single-slot solution capable of driving six, eight or more displays without using DisplayPort 1.2 MST hubs.



AMD FirePro™ W7000

AMD FirePro™ workstation graphics cards are engineered to deliver innovation and reliability for a wide range of professional operating environments, including Microsoft® Windows 8, Windows® 7, Windows® XP, Windows Vista® and Linux®. The unified driver, that supports all AMD FirePro™ graphics products, helps reduce the total cost of ownership by simplifying installation, deployment and maintenance.



Features Four DisplayPort Outputs, Supporting DisplayPort 1.2

PRODUCT DETAILS

Additional Features

- 150W maximum power consumption
- AMD HD3D Pro support (via stereoscopic 3-pin mini din)
- AMD CrossFire™ Pro support, includes connector⁷
- 2.4 TFLOPS peak single precision floating point performance
- Two DisplayPort to single-link DVI (active) adapters⁸

System Requirements

- One available PCIe® x16 slot
- Power supply and one AUX power connector (6-pin)
- Microsoft® Windows 8, Windows® 7, Windows® XP, Windows® Vista or Linux®, 32- or 64-bit
- 2GB system memory
- Internet connection for driver installation

Display Capabilities

- Four standard DisplayPort outputs
- Maximum DisplayPort 1.2 resolution 4096x2160
- Maximum DisplayPort 1.1 resolution 2560x1600
- Independent multi-monitor resolution and refresh rate selection

Application Certifications

- Adobe® Premiere Pro, Photoshop and After Effects
- Altair Engineering HyperWorks
- Bentley MicroStation
- ANSYS, Fluent and Workbench
- Autodesk® Building Design Suite, Entertainment Creation Suite, Factory Design Suite, Infrastructure Design Suite, Plant Design Suite
- Chaos Group V-Ray
- Dassault Systemes 3DVIA Composer, CATIA, DELMIA, SIMULIA Abacus and SolidWorks
- Maxon Cinema 4D
- Missler TopSolid
- Optis Theia-RT
- Planit Edgecam and Vero
- PTC® Creo®
- Side Effect Software Houdini
- Siemens PLM FEMAP, Technomatix, NX, Solid Edge and Teamcenter Visualization
- The Foundry modo

AMD Warranty and Support

- Three year limited product repair/replacement warranty
- Direct toll free phone (U.S. and Canada only) and email access to dedicated workstation technical support team

FEATURES	BENEFITS
GeometryBoost	Allows users to unleash their creativity by ensuring ultra-high geometry performance and smooth handling of complex models. Utilizes the unique new hardware architecture that features dual graphics engines, allowing the GPU to process two primitives per clock cycle and provide ultra-high geometry processing performance. Triangle rates increase two-fold relative to a GPU that does not possess Geometry Boost.
DirectGMA Support	Enables low latency peer to peer data transfers between devices on the bus and AMD FirePro graphics cards. Devices supporting DirectGMA can write directly into the local memory of the GPU and vice versa the GPU can directly access the memory of a peer device.
AMD PowerTune Technology ⁵	A state-of-the-art power management technology that provides direct control over GPU power usage. Dynamically optimizes the GPU clock while keeping the workstation energy conscious, conserving electricity when it isn't needed.
AMD ZeroCore Power Technology ⁵	Exceptional idle power reduction by shutting down GPU when it's not in use.
Partially Resident Textures (PRT)	PRT can utilize absolutely enormous texture files, up to 32 terabytes large, with minimal performance impact. PRT accomplishes this by streaming small bits of these massive textures into the GPU as needed, giving compatible applications a virtually endless supply of unique texture data to apply to environments and scenes.
Discrete Digital Multi-Point Audio (DDMA)	Simultaneously output multiple, independent audio streams using DisplayPort 1.2.
AutoDetect Technology	As a user moves between applications, or opens new ones, the graphics driver settings are automatically configured for maximum performance.



1 AMD FirePro™ W7000 has a triangle rate of 1.85 billion triangles per second compared to Nvidia Quadro 4000 which is capable of 0.89 billion triangles per second. As of May, 2013, the triangle rate of the Nvidia Quadro K4000 has not been published; however the higher performing K5000 processes only 1.8 billion triangles per second. See http://la.nvidia.com/content/PDF/product-comparison/Product_Comparison_Oct_2012.pdf. FP-46.

2 AMD FirePro™ W7000 offers 2GB of GDDR5 memory and 153.6 GB/s of memory bandwidth, compared to Nvidia Quadro 4000 with 2GB GDDR5 memory and 89.6 GB/s of memory bandwidth, and Quadro K4000 with 3GB GDDR5 memory and 134 GB/s of memory bandwidth. Visit <http://www.nvidia.com/object/quadro-desktop-gpuspecs.html> for Nvidia product specs. FP-38.

3 AMD Eyefinity technology supports up to six DisplayPort™ monitors on an enabled graphics card. Supported display quantity, type and resolution vary by model and board design; confirm specifications with manufacturer before purchase. To enable more than two displays, or multiple displays from a single output, additional hardware such as DisplayPort-ready monitors or DisplayPort 1.2 MST-enabled hubs may be required. Maximum two active adapters supported. See www.amd.com/eyefinityfaq for full details.

4 AMD FirePro™ W7000 is capable of 2.4 TFLOPs of single precision floating point performance, compared to Nvidia Quadro 4000 with 486.4 GFLOPs of single precision and the Quadro K4000 with 1.24 TFLOPs of single precision. Visit http://www.nvidia.com/content/quadro/pdf/5409_NV_ProGraphicsSolutions_LineCard_FEB13_HR.pdf for Nvidia product specs. FP-39.

5 AMD PowerTune and AMD ZeroCore Power are technologies offered by certain AMD FirePro™ 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.

6 Requires ATI FirePro™ S400 synchronization module.

7 AMD CrossFire™ Pro technology requires an AMD CrossFire Pro-Ready motherboard, an AMD CrossFire Pro cable/connect and may require a specialized power supply. In addition, in order to take advantage of AMD CrossFire Pro technology, both AMD FirePro graphics cards must be of the identical product model (e.g. two AMD FirePro™ W7000 graphics cards).

8 Supports up to six independent displays using DisplayPort connectors (DisplayPort cables not included). DVI support available via the two DisplayPort to single-link DVI (active) adapters included. VGA output supported through DVI to VGA adapters, sold separately.



Sapphire PGS (Professional Graphics Solution) provides various types of professional display solutions for workstation and professional clients. PGS supports full range of 3D professional applications for 3D professional users. For industrial customers, Sapphire PGS integrates all display related graphics application solutions for broadcasting wall, digital signage, medical, surveillance, ATC etc. Sapphire PGS will continuously provide the most appropriate solutions and the best after sales services.

Visit website: www.SapphirePGS.com

