AMD FirePro™ W5000

Be Limitless, When Every Detail Counts.

The most powerful mid-range workstation graphics card ever created.

AMD FirePro™ W5000 is the most powerful mid-range workstation graphics card in the market. It delivers significantly higher performance than the competing cards measured against a wide set of parameters and in real world workflows.[3]

This powerful product, designed for delivering superior performance for CAD/CAE and Media workflows, can process up to 1.65 billion triangles per second. This means during the design process you can easily interact and render your 3D models, while the competition can only process up to 0.41 billion triangles per second (up to four times less performance).[3] It also offers double the memory of competing products (2GB vs. 1GB) and 2.5x the memory bandwidth.[3] It's the ideal solution for professionals working with a broad range of applications, moderately complex models and datasets, and advanced visual effects.

Key Features:

→ **Utilizes Graphics Core Next (GCN)** to efficiently balance compute tasks with 3D workloads, enabling multi-tasking that is designed to optimize utilization and maximize performance.

→ **Unmatched application responsiveness in your workflow,** whether in advanced visualization, complex models, large data sets or video editing.

→ **AMD ZeroCore Power Technology** enables your GPU to power down when your monitor is off.

→ **GeometryBoost**—the GPU processes geometry data at a rate of twice per clock cycle, doubling the rate of primitive and vertex processing.

→ **AMD Eyefinity Technology**— Industry-leading multi-display technology enabling highly immersive and unrivaled multi-tasking experience across up to 4 displays, powered by a single AMD FirePro™ W5000 card and up to six utilizing DisplayPort 1.2.[1,2]

→ **DisplayPort 1.2 compliant,** allowing for display of content at resolutions beyond standard HD.[4]

→ **Energy Efficient Design—** AMD PowerTune technology dynamically optimizes GPU power usage and AMD ZeroCore Power technology significantly reduces power consumption at idle.

→ **Video Codec Engine (VCE) —** A multi-stream hardware H.264 HD encoder, for power-efficient and quick video encoding.

Product features:

→ Optimized and certified for major CAD and M&E applications delivering 1 TFLOP of single precision and 80 GFLOPs of double precision performance with outstanding reliability for the most demanding professional tasks.

→ The use of GeometryBoost allows the GPU to process geometry data at a rate of twice per clock cycle resulting in a doubling in the rate of primitive and vertex processing. Triangle rates increase two-fold relative to a GPU that is not enabled with GeometryBoost.

→ Full support of DisplayPort 1.2 allows simultaneous output of multiple, independent audio streams and display content at resolutions beyond standard HD (maximum resolution of 4096x2160).[2,4]
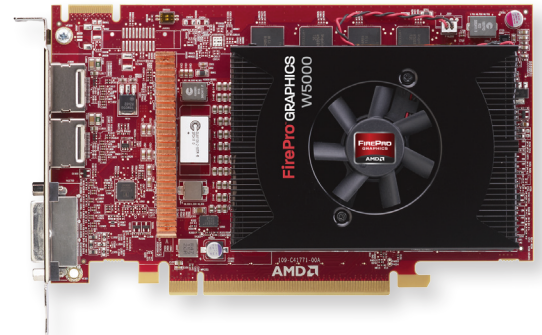
→ An energy-efficient design uses AMD PowerTune technology to dynamically optimize GPU power usage while AMD ZeroCore Power technology significantly reduces power consumption at idle.

→ The Industry-leading multi-display technology, AMD Eyefinity, enables highly immersive and unrivaled multi-tasking experience across up to four displays, powered by a single AMD FirePro™ W5000 graphics card.[1]

→ AMD ZeroCore Power technology leverages AMD's leadership in notebook power efficiency to enable our desktop GPUs to power down when your monitor is off, also known as the "long idle state."

→ AMD PowerTune is an intelligent system that performs real-time analysis of applications that utilize a GPU. In the event that an application is not making the most of the power available to the GPU, AMD PowerTune can improve that application's performance by raising the GPU's clockspeed by up to 30% automatically.

→ Video Codec Engine (VCE)—A multi-stream hardware H.264 HD encoder in the AMD FirePro™ W5000 results in power-efficient and quick video encoding.

AMD FirePro™ W5000

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

AMD FirePro™ W5000 Graphics Display Port

FEATURES	BENEFITS
AMD Eyefinity Technology	Advanced multi-display technology delivering the most immersive graphics/computing experience with innovative display capabilities supporting massive desktop workspaces.[1]
AMD PowerTune Technology	A state-of-the-art power management technology that provides direct control over GPU power usage. AMD PowerTune dynamically optimizes the GPU clock, while keeping the workstation energy-conscious, conserving electricity when it isn't needed. Applications enjoy ultimate performance while intelligently conserving electricity.
Graphics Core Next (GCN) Architecture	Balancing compute with 3D workloads efficiently
AMD ZeroCore Power Technology	Exceptional idle power reduction by shutting down GPU
Discrete Digital Multi-Point Audio (DDMA)	Simultaneously output multiple, independent audio streams using DisplayPort 1.2.
Video Codec Engine (VCE)	Multi-stream hardware H.264 HD Encoder. Power efficient & faster than real-time 1080p @60fps.
GeometryBoost	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. Allows users to unleash their creativity by ensuring ultra-high geometry performance and smooth handling of complex models.
D.O.P.P.	By enabling application access to the framebuffer before content reaches the display engine, we empower ISVs to create new, exciting and innovative solutions.
AutoDetect Technology	As a user moves between applications, or opens new ones, the graphics driver settings are automatically configured for maximum performance
Full 30-bit Display Pipeline	Enables four times more color values than 24-bit products for more accurate color reproduction and superior visual fidelity
HydraVision	Use HydraVision to manage desktop displays and workspaces in multi-display environments: > Explicitly set the behavior of pop-up windows and dialogs in different applications though Desktop Manager. > Provide multiple layers of the desktop workspace through Multi Desktop. > Restrict application window placement across multiple desktops through HydraGrid.

PRODUCT DETAILS

Features
→ GPU with Graphics Core Next (GCN) technology
→ 2GB GDDR5 graphics memory
→ AMD Eyefinity technology[1]
→ Full 30-bit precision display pipeline
→ Advanced support for 8-bit, 10-bit, and 16-bit per RGB color component
→ PCI Express® 3.0 compliant

System Requirements
→ 1x PCI® Express x16 (singleslot)
→ Windows® 7 / XP / Windows Vista® or Linux® (32-bit or 64-bit)
→ 512MB of system memory
→ Internet connection for driver installation

Display Capabilities
→ 2x DisplayPort 1.2 outputs
→ 1x Dual-link DVI-I output
→ Additional DVI (single link and dual link) display support via DisplayPort to DVI adaptor[5]
→ Independent multi-monitor resolution and refresh rate selection
→ VGA analog support[5]

AMD Warranty and Support
→ Three year limited product repair / replacement warranty
→ Direct toll free phone and email access to dedicated workstation technical support team[6]
→ Advanced parts replacement option

API and OS Support
→ OpenGL® 4.2 with OpenGL Shading Language
→ OpenCL 1.1
→ Microsoft® DirectX® 11.1
→ Windows® 7, Windows XP, Windows XP64, Windows Vista and Windows Vista64
→ Linux® 32 and Linux 64[1]

For more information, visit
www.amd.com/firepro

OpenGL

OpenCL™

Microsoft® DIRECTX

Windows®7

CERTIFIED FOR Windows Vista™

Designed for Microsoft® Windows®XP, Windows®XP x64 Edition

Linux

AMD Eyefinity MULTI-DISPLAY TECHNOLOGY

AMD