

AMD FirePro™ V5900

PROFESSIONAL GRAPHICS



The perfect balance of performance and power in a single-slot solution.

Introducing the new AMD FirePro V5900 professional graphics card – a mid-range professional graphics solution using AMD's newest generation of graphics architecture. Finding the perfect balance of performance and power in the mid-range segment, the AMD FirePro V5900 offers the reliability, compatibility, and speed that professionals have come to expect without breaking the budget.

The AMD FirePro V5900 graphics card is powered by many exciting new features and technologies. Under the hood is a new generation GPU, backed by 512 Stream Processors and 2GB of blazing-fast GDDR5 memory. AMD's ultra-parallel processing architecture helps maximize throughput by dynamically directing graphics horsepower where it's needed, allowing you to create at the speed of thought.

With AMD Eyefinity technology support of up to three independent and simultaneous displays from one graphics card¹, the AMD FirePro V5900 graphics card will boost your productivity without the need for confusing and expensive multi-GPU setups. The AMD FirePro V5900 has two DisplayPort outputs and one dual-link DVI output built in, and with the use of the included active adapter, multiple DVI-powered displays are also supported out of the box. Furthermore, AMD Eyefinity technology is not limited by the display manufacturer. It is flexibly configured regardless of the brand of monitor you're using, allowing you to mix and match your display setup with ease. With three monitors to spread your work across, you can be more productive than ever.

Why stop at three monitors? With the included AMD CrossFire™ Pro connector and a second AMD FirePro V5900 card in one system, a total of

six simultaneous and independent displays could be used from one workstation^{4,5}. The output functionalities of the AMD FirePro V5900 offer an unprecedented digital signage solution at a third of the cost of other multi-monitor setups⁶.

AMD FirePro professional graphics cards are thoroughly tested and certified with major Computer Aided Design (CAD) and Digital Content Creation (DCC) applications, ensuring a level of reliability not found in consumer graphics products.

Innovation and Reliability from a Technology Leader

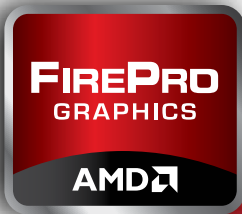
AMD FirePro accelerators have been engineered to deliver innovation and reliability for a wide range of professional operating environments, including Windows® 7, Windows XP, Windows Vista and Linux. The unified driver, which supports all AMD FirePro workstation products, helps reduce the total cost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

New for this generation of AMD FirePro products is AMD PowerTune technology. This state-of-the-art power management technology provides direct control over GPU power usage. Applications enjoy ultimate performance with dynamic clock optimization, while keeping your workstation energy-conscious and helping to conserve electricity when it isn't needed.

In addition, AMD FirePro products incorporate a unique AutoDetect technology. As users open new 3D applications, or move between them, optimized AMD FirePro graphics driver settings are automatically configured for maximum performance, no matter what the user's workflow demands.

Key Features:

- > Outstanding performance for the 3D mid-range market
- > Supports three independent displays with AMD Eyefinity technology¹
- > 2GB of high speed GDDR5 memory
- > Parallel processing architecture featuring 512 stream processors
- > GeometryBoost technology provides ultra-high geometry performance
- > AMD PowerTune technology dynamically optimizes GPU power use
- > AutoDetect Technology dynamically optimizes performance for multi-application workflow
- > Optimized and certified for many CAD and DCC applications
- > Full DirectX® 11 and OpenGL® 4.1 support
- > PCI Express® 2.1 compliant



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FEATURES	BENEFITS
AMD Eyefinity Technology	With the revolutionary multi-display technology, the AMD FirePro V5900 supports three independent displays, delivering the most immersive graphics/computing experience with innovative display capabilities supporting massive desktop workspaces ¹
Unified Shader Architecture	Intelligent management of computation resources enables real-time rendering of complex and realistic images
AutoDetect Technology	As a user moves between applications, or opens new ones, the graphics driver settings are automatically configured for maximum performance
GeometryBoost	Unleash your creativity with the new hardware architecture that provides ultra-high geometry performance and ensures smooth handling of complex models
DisplayPort 1.2	Support for the newest DisplayPort standard adds exciting new features such as high bit-rate audio, higher data bandwidth, and multi-streaming capabilities
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 as compared to 24-bit products ²
Full Shader Model 5.0 Support	Helps create more complex geometry and scenes without taxing the CPU
Certification	Ensures compatibility, reliability and the highest level of performance when used with many professional 3D software packages
DirectX® 11 and OpenGL® 4.1 Advanced Features	Enables optimal performance in leading applications
OpenCL™ 1.1	Industry standard API - Open, multiplatform development platform for enabling broad adoption of heterogeneous computing

1 AMD Eyefinity technology can support multiple displays using a single enabled AMD FirePro™ professional graphics card; the number of supported displays varies by card model. Microsoft® Windows® 7, Windows Vista®, or Linux® is required in order to support more than 2 displays. Depending on the card model, native DisplayPort™ connectors and/or certified DisplayPort™ active or passive adapters to convert your monitor's native input to your card's DisplayPort™ or Mini-DisplayPort™ connector(s) may be required. See www.amd.com/firepro for details.

2 30-bit monitor required for full 30-bit display.

3 Linux® drivers can be downloaded from support.amd.com.

4 Each AMD FirePro V5900 supports up to three independent displays.

5 AMD CrossFireX™ technology requires an AMD CrossFireX Ready motherboard, an AMD CrossFireX™ Bridge Interconnect (for each additional graphics card) and may require a specialized power supply.

6 Output to three independent monitors requires one AMD FirePro V5900 card at \$699 or two nVIDIA Quadro 4000 cards in SLI

7 Mosaic Mode at the suggested retail price of \$1199 each. Pricing as of 4/18/2011.

8 Toll-free phone service available in U.S. and Canada only, email access is global.

PRODUCT SPECIFICATIONS	
GPU	
Stream Processors	512
Memory Interface	256-bit
Memory	
Size/Type	2GB GDDR5
Bandwidth (GB/s)	64
Display Outputs	
DisplayPort	2 standard
Dual-link DVI	1
Max Resolution	2560x1600
API/Feature/OS Support	
DirectX®	11.0
OpenGL®	4.1
Shader Model	5.0
AMD Eyefinity Support	Yes
AMD CrossFire™ Pro Support	Yes
Stream Computing	Yes (OpenCL™ 1.1)
OS Support	Microsoft® Windows®7, Microsoft® Windows® XP, Microsoft® Windows® Vista and Linux® (32-bit or 64-bit)
Thermal/Power/Form Factor	
Max Power	<75 W
Slots	1
Form Factor	Full Height / Full Length
Bus Interface	PCI Express® 2.1 x16
Additional Details	
System Requirements	> 512MB of system memory > CD-ROM drive (or Internet access) for software installation > Available PCIe® lane > Microsoft® Windows® 7, Microsoft® Windows® XP, Microsoft® Windows® Vista or Linux® (32-bit or 64-bit)
Retail Package Contents	> AMD FirePro V5900 professional graphics card > Installation CD with drivers and documentation > Quick Start Reference Guide > One DP to DVI (single link active) adapter > AMD CrossFire™ Pro connector
Warranty and Support	> Three year limited product repair / replacement warranty > Direct toll free phone and email access to dedicated workstation technical support team > Advanced parts replacement option > Toll-free phone service available in U.S. and Canada only, email access is global. ⁸
Regulatory Compliance	FCC, CE, C-Tick, BSMI, MIC, UL, VCCI, RoHS and WEEE



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

