

**FIREPRO**  
GRAPHICS

AMD



## AMD FirePro™ V7900

PROFESSIONAL GRAPHICS



### Key Features:

- > Unmatched workstation-quality performance in the high-end segment
- > Supports four independent displays with AMD Eyefinity technology<sup>1</sup>
- > 2GB high-speed GDDR5 memory
- > Parallel processing architecture featuring 1280 stream processors
- > Support for Framelock/Genlock<sup>3</sup>
- > Stereoscopic 3-pin mini-DIN (with included expansion bracket)
- > 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

Introducing the AMD FirePro™ V7900 professional graphics – a stunning new high-end professional graphics solution using AMD's newest generation of graphics architecture. The AMD FirePro V7900 delivers incredible performance, superb visual quality, and outstanding multi-display capabilities in a single-slot solution.

Professionals who work with advanced visualization, complex models and large data sets need a graphics solution that is fast, powerful, and reliable. The AMD FirePro V7900 meets these needs, making it ideally suited for professionals who work with visual effects, broadcast graphics, digital signage, and more.

The AMD FirePro V7900 is powered by many exciting new features and technologies. At its core is AMD's new, 3<sup>rd</sup> generation 40nm GPU (formerly codenamed "Cayman"), backed by 1280 stream processors and 2GB of blazingly-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 four independent and simultaneous displays from one graphics card<sup>1</sup>, the AMD FirePro V7900 will boost your productivity without the need for confusing and expensive multi-GPU setups. The AMD FirePro V7900 features four DisplayPort outputs built in, and with the use of the included four active adapters, supports single link DVI displays out of the box. AMD Eyefinity technology does not limit you to one display manufacturer, and is flexibly configured regardless of the brand of monitor you're using, allowing you to mix and match your display setup with ease. With four monitors to spread your work across, you can be amazingly productive.

Four monitors is not the limit. The AMD FirePro V7900 has native multi-card support, meaning that with

additional AMD FirePro V7900 professional graphics cards installed in the same workstation and connected via AMD Crossfire™ Pro, the number of supported monitors increases massively. In a workstation with four AMD FirePro V7900 cards installed, a total of sixteen simultaneous and independent displays could be used from one workstation.<sup>4,5</sup> The AMD FirePro V7900 offers an unprecedented digital signage solution at a significantly lower cost than other multi-monitor setups.<sup>7</sup>

### Innovation and Reliability from a Technology Leader

AMD FirePro professional graphics 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 AMD's 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.

Also new for this generation of AMD FirePro products is GeometryBoost technology. GeometryBoost is a unique hardware capability that processes two primitives per clock cycle. What this means is incredibly fast geometry performance, ensuring smooth handling of complex models.

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FEATURES	BENEFITS
AMD Eyefinity Technology	With the revolutionary multi-display technology, the AMD FirePro V7900 supports four independent displays, delivering an immersive graphics/computing experience with innovative display capabilities supporting massive desktop workspaces <sup>1</sup>
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
Framelock/Genlock <sup>2</sup>	Ensures accurate and consistent video synchronization to external sources or multiple GPUs in different systems.
GeometryBoost Technology	Unleash your creativity with the new hardware architecture that provides ultra-high geometry performance and ensures smooth handling of complex models.
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 <sup>2</sup>
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](http://www.amd.com/firepro) for details.

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

3 Requires ATI FirePro™ S400 synchronization module.

4 Each AMD FirePro V7900 supports up to four independent displays, using the four DisplayPort connectors.

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 Linux® drivers can be downloaded from [support.amd.com](http://support.amd.com).

7 Output to four independent monitors requires one AMD FirePro V7900 card at \$999 or two nVIDIA Quadro

4000 cards in SLI 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.



**AMD Eyefinity**  
MULTI-DISPLAY TECHNOLOGY



**For more information,  
visit [www.amd.com/firepro](http://www.amd.com/firepro)**

PRODUCT SPECIFICATIONS	
GPU	
Stream Processors	1280
Memory Interface	256-bit
Memory	
Size/Type	2GB GDDR5
Bandwidth (GB/s)	160
Display Outputs	
DisplayPort	4 standard
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
ATI FirePro™ S400 Synchronization Module Support (For Framelock/Genlock)	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	<150 W
Slots	1
Form Factor	Full Height / Full Length
Bus Interface	PCI Express® 2.1 x16
Additional Details	
System Requirements	> 512MB of system memory > 1 x PCIe AUX connector (6-pin) > 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™ V7900 Professional Graphics > Installation CD with drivers and documentation > Quick Start Reference Guide > 4 x DP to DVI (single link active) adapter > 1 x Stereoscopic bracket > 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 <sup>8</sup> Advanced parts replacement option
Regulatory Compliance	FCC, CE, C-Tick, BSMI, MIC, UL, VCCI, RoHS and WEEE