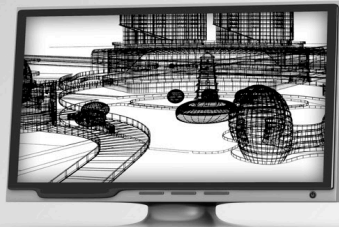# AMD FirePro™ V3900

PROFESSIONAL GRAPHICS

Unbeaten Workstation-class Experiences at the Entry Level

Step up to the new AMD FirePro™ V3900 professional graphics card – a powerful yet very low-cost solution for professional visual computing. AMD FirePro™ professional graphics offerings are designed to power the world's best user experiences for technical and creative design professionals. And the new AMD FirePro™ V3900 is no exception.

AMD FirePro™ V3900 professional graphics cards enable certified performance, reliability and flexibility for users across a vast range of professional design and engineering applications and offer unbeaten workstation-class graphics performance and value[1] for users developing simple to moderately complex designs.

Advanced Features - Powering the AMD FirePro™ Professional Graphics User Experience

Loaded with new features, AMD FirePro™ V3900 professional graphics replaces the ATI FirePro™ V3800 and adds many exciting new technologies and optimizations designed to help boost productivity and enable outstanding design experiences. Under the hood of the AMD FirePro™ V3900 is a new GPU architecture packing 480 stream processors – easily capable of powering today's advanced design applications. The first sub-$120 workstation graphics card to support 1GB of fast DDR3 memory (double the RAM of other "entry-level" workstation GPUs on the market[2]), the new AMD FirePro™ V3900 allows users to work with much larger datasets and scenes while helping to maintain a fully interactive experience.

The AMD FirePro™ V3900 features native support for the latest display device standards and offers one DisplayPort™ 1.2 compliant and one dual-link DVI output. With the use of the included passive adapter, two standard DVI-compatible displays are supported out of the box. Furthermore, AMD Eyefinity multi-display technology is not limited by the display manufacturer. AMD Eyefinity technology supports all major brands and types of displays, allowing you to mix and match your display setup in the simplest of ways. With support for up to five independent, simultaneous displays through AMD Eyefinity multi-display technology and DisplayPort 1.2 multi-streaming technology[3], the AMD FirePro™ V3900 professional graphics card helps boost productivity by delivering up to 9600x1080 pixel desktop resolution for maximum flexibility and unimpeded multi-tasking efficiency.

Features such as the AMD Catalyst™ Pro unified driver, which supports all AMD FirePro™ professional graphics products, helps reduce the total cost of ownership by simplifying installation, deployment and maintenance. As users open new applications, or move between them, AMD Catalyst™ Pro driver settings are automatically configured for maximum performance with each application, no matter what the user's workflow demands. And the AMD FirePro™ V3900's low-profile "half-height" (and full-height adapter bracket) PCI design allows for maximum compatibility with virtually all desktop and desk-side form factors – including low-profile workstation chassis that reduce workspace noise and clutter.
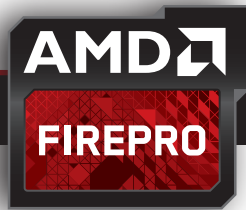
Rock Solid Reliability: The foundation of the AMD FirePro™ Professional Graphics User Experience

AMD FirePro™ professional graphics are thoroughly tested and certified with major Computer Aided Design (CAD) and Digital Content Creation (DCC) toolsets from software vendors including Autodesk®, Dassault Systèmes, PTC®, Adobe®, and others - providing a level of workstation-class reliability not found in consumer graphics cards. Moving beyond reliability, AMD works very closely with our software partners to ensure that the device driver for the AMD FirePro™ V3900 (and all other AMD FirePro cards) is specifically tuned and optimized for each application. This helps ensure that designers running AMD FirePro™ V3900 will enjoy the best possible experience and productivity when working in their chosen application(s)[8].

Key Features:

> Winning performance for the 3D entry segment[1]

> Supports DL-DVI and DisplayPort 1.2 connectivity

> Drive up to 5 HD displays using DisplayPort 1.2 multi-streaming and AMD Eyefinity technology[3]

> Drive up to 2 independent 30" displays at a full 2560x1600 resolution

> Half-height design supports both standard and low-profile workstation form factors

> PCI Express® 2.1 compliant

FEATURES	BENEFITS
1GB DDR3 Memory/ Frame Buffer	Increased memory capacity extends GPU performance when working with larger datasets and extended desktop resolutions.[2]
AMD Eyefinity multi-display technology and support for DisplayPort 1.2 multi-streaming technology	Enhances multitasking efficiency by enabling immersive desktop computing experience across up to 5 simultaneous display devices through an easy-to-use setup utility.[3]
Software Partner-Certified Drivers	AMD FirePro™ professional graphics cards are tested and certified by our software partners to ensure reliability and performance for professional applications. Running certified AMD FirePro™ professional graphics cards and drivers is a great way to ensure an optimal user experience no matter what professional application is being used.
World-Class AMD Technical Support	Whether supported through our OEM partners (HP, Dell, etc.) or directly by AMD, AMD FirePro™ professional graphics cards users can rely on timely access to technical support when needed. This helps ensure a great user experience and maximized productivity.
Full support for OpenCL™, OpenGL and DirectX® APIs[7]	Ensures compatibility with emerging GPU acceleration capabilities in today's (and tomorrow's) professional design applications, helping contribute to a stellar user experience.
AMD AutoDetect Technology	As a user moves between applications, or opens new ones, the AMD Catalyst™ Pro graphics driver settings are automatically reconfigured on-the-fly for optimal performance and productivity for advanced and mixed workflows.
Full 30-bit Display Pipeline[5]	Enables four times more color values than 24-bit products for more accurate color reproduction and superior visual fidelity. This enables better decision-making and more accurate designs.

PRODUCT SPECIFICATIONS

GPU	
Stream Processors	480
Memory Interface	128-bit
Raw Floating Point Performance	624Gflops

Memory	
Size/Type	1GB DDR3
Bandwidth (GB/s)	28.8GB/s

Display Outputs	
DisplayPort 1.2	1 standard
Dual-link DVI	1
Max Resolution per output	2560x1600

API/Feature/OS Support	
DirectX®	Yes, DirectX 11
OpenGL®	v4.2[7]
OpenCL™	v1.1[7]
Shader Model	5.0
AMD Eyefinity multi-monitor technology support	Yes
OS Support	Microsoft® Windows® 7, Microsoft® Windows® XP, Microsoft Windows Vista® and Linux® (32-bit or 64-bit)[6]

Thermal/Power/Form Factor	
Max Power (TDP)	<75 W
Max Power (Measured)	<50 W
# Slots required	1
Form Factor	Half Length (includes full-height bracket)
Bus Interface	PCI Express® 2.1 x16

Additional Details	
System Requirements	> 512MB of system memory > Available PCIe® lane > Microsoft® Windows® 7, Microsoft® Windows® XP, Microsoft® Windows Vista® or Linux® (32-bit or 64-bit)[6]
Retail Package Contents	> AMD FirePro™ V3900 Professional Graphics > Quick Installation Guide > One DisplayPort to DVI (single link passive) adapter
Warranty and Support	> Three year limited product repair / replacement warranty > Direct toll free phone and email access to dedicated workstation technical support team[4] > Advanced parts replacement option
Regulatory Compliance	FCC, CE, C-Tick, BSMI, KCC, UL, VCCI, RoHS and WEEE

1 Based on internal AMD benchmarks showing AMD FirePro V3900 at USD $119 (retail) is an average of 74% faster than Nvidia Quadro 400 at $169 (retail)
2 Compared to the Nvidia Quadro 400 with only 512 MB memory.
  NVIDIA memory specs: http://www.nvidia.com/object/product-quadro-400-us.html
3 AMD Eyefinity technology works with applications that support non-standard aspect ratios, which is required for panning across multiple displays. To enable more than two displays, additional panels with native DisplayPort connectors, and/or DisplayPort compliant active adapters to convert your monitor's native input to your cards DisplayPort or Mini-DisplayPort connector(s), are required. AMD Eyefinity technology can support up to 6 displays using a single enabled AMD FirePro™ graphics card with Windows Vista or Windows 7 operating systems – the number of displays may vary by board design and you should confirm exact specifications with the applicable manufacturer before purchase. SLS ("Single Large Surface") functionality requires an identical display resolution on all configured displays. The AMD FirePro™ V3900 can support 5 HD (1920x1080) displays using AMD Eyefinity and DisplayPort 1.2 multi-streaming technologies (4 x 1920x1080p DisplayPort displays + 1 x DVI) and requires DisplayPort 1.2 multi-streaming-enabled monitors and/or hubs.
4 Toll-free phone service available in U.S. and Canada only, email access is global
5 30-bit monitor required for full 30-bit display
6 Linux® drivers can be downloaded from support.amd.com
7 For up to date details on API support visit: http://www.amd.com/api
8 Certain applications are still pending official ISV certifications are not officially supported at the time of launch. Please check http://support.amd.com/us/gpudownload/fire/certified/Pages/certified-applications.aspx for official up to date ISV certifications.

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