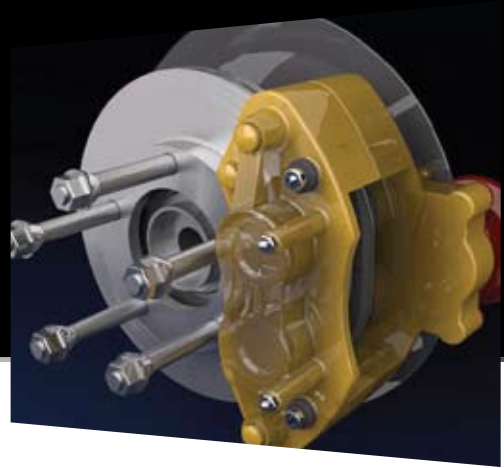# ATI FireGL™ V7700

Workstation Graphics Accelerator

Dominate Your Design™

ATI FireGL™ V7700
Workstation Graphics Accelerator

→ 512MB memory

→ DisplayPort® output for superior 10-bit image quality

→ Scalable ultra parallel processing architecture with 320 unified shaders

→ AutoDetect instinctively optimizes performance for multi-application workflow

→ Dual Link DVI output for driving ultra high resolution widescreen monitors

→ High Dynamic Range (HDR) rendering with 8-bit, 10-bit, and 16-bit per RGB color component support

→ Hardware acceleration of DirectX® 10.1 and OpenGL® 2.1 advanced features

→ Optimized and certified for CAD and DCC applications

→ PCI Express 2.0 compliant

Next Generation Graphics

Introducing the ATI FireGL™ V7700 workstation graphics accelerator from AMD. This high end workstation solution with 512 MB frame buffer memory is the industry's first 3D workstation graphics accelerator to feature a DisplayPort output. With a full 10-bit display pipeline, the ATI FireGL V7700 is ideally suited for applications that benefit from accurate color reproduction and superior visual quality.

Based on a new generation GPU with 320 unified shader units, the ATI FireGL V7700 ultra parallel processing architecture maximizes throughput by automatically directing graphics horsepower where it's needed. Intelligent management of computational resources enables enhanced utilization of the GPU to enable real-time rendering of complex models and scenes while increasing frame rate performance when animating.

The ATI FireGL V7700 features a DisplayPort output and a Dual Link DVI output, together generating a multi-monitor desktop of over 5000 pixels wide. Featuring native multi-accelerator support, users can see more and do more with four displays being driven by two ATI FireGL accelerators in the same workstation.

ATI FireGL workstation graphics accelerators 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

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

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

More Power, Memory, Stability, and Flexibility
ATI FirePro V8700 professional graphics accelerators feature 512MB of dedicated on-board memory to enable maximum productivity and unprecedented performance. To provide added flexibility, multi-card support is available enabling two ATI FirePro cards to drive up to four accelerated 3D displays.

AMD
Smarter Choice

Product Overview

Features
→ Powered by advanced ATI FireGL™ Graphics Processor Unit (GPU) with Unified Shaders
→ 320 unified shader units
→ Full Shader Model 4.1 support
→ 512MB graphics memory
→ 128-bit full floating point precision
→ 16-bit per RGB color component High Dynamic Range (HDR) rendering capable of over one billion colors
→ Full 10-bit precision display pipeline
→ PCI Express® 2.0 compliant

Display Capabilities
→ DisplayPort output
→ Dual Link DVI-I output supports digital or analog display
→ Independent multi-monitor resolution and refresh rate selection
→ HD Component Video Output (adapter included)
→ VGA analog support[1]

System Requirements
→ PCI Express 2.0 or PCI Express-based workstation with available x16 lane graphics slot
→ 450-Watt power supply or greater (assumes fully loaded system)
→ 512MB of system memory
→ Connection (2x3 pin) to computer power supply
→ Installation software requires CD-ROM drive

ATI Warranty and Support
→ Three year limited product repair / replacement warranty
→ Direct toll free phone and email access to dedicated workstation technical support team[2]
→ Advanced parts replacement option
→ API and OS Support
→ OpenGL® 2.1 with OpenGL Shading Language
→ Microsoft® DirectX® 10.1
→ Windows® XP, Windows XP64, Windows Vista and Windows Vista64
→ Linux® 32 and Linux 64[3]

1. VGA output supported through DVI-I to VGA adapter included with product
2. Toll free hotline available in North America
3. Linux drivers can be downloaded from AMD website

**For more information,
visit ati.amd.com/firepro**

CERTIFIED FOR
Windows
Vista™

Designed for
Microsoft®
Windows®XP

Features	Benefits
Unified Shader Architecture	Intelligent management of computation resources enables real-time rendering of more 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
Full 10-bit Display Pipeline	Enables four times more color values that competitive 8-bit products for more accurate color reproduction and superior visual fidelity
High Dynamic Range (HDR) Rendering	Up to 16-Bit per RGB color component enables a wider spectrum of color creating natural lighting and shading effects
Multi-View Display	With a Dual Link DVI output and DisplayPort output, Multi-View enables two 3D displays with independent display resolution, refresh rate, and display rotation settings
Full Shader Model 4.1 Support	Allows the user to create complex geometry and scenes without taxing the CPU
Certification	There is a high level of assurance when purchasing a configuration that is reliable, which provides the performance necessary for professional 2D or 3D graphic needs, and which includes integrated AMD expert support[2].
DirectX10.1 and OpenGL 2.1 Advanced Features	Great performance, scalability and reliability.

Product Comparison

	V3600	V3700	V3750	V5600	V5700	V7600	V7700	V8600	V8650	V8700
Graphic Processing Unit										
Shader Processing Units	120	40	320	120	320	320	320	320	320	800
Full 30-bit Display Pipeline	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Stream Computing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Memory										
Configuration	256MB	256MB	512MB	512MB	512MB	512MB	512MB	1GB	2GB	1GB
Bandwidth (GB/sec)	16	15.2	22.4	35	28.8	51	72	108	108	108.8
Display Capabilities										
Color Depth	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit	8, 10, 16-bit
Dual Link DVI Connectors	2	2	1	2	1	2	1	2	2	1
DisplayPort Output	-	-	2	-	2	-	1	-	-	2
HD Component Video Output	-	-	-	-	-	1	1	1	1	1
Stereo 3D Output	-	-	-	-	-	1	1	1	1	1
Maximum Display Port Resolution	-	-	2560x 1600	-	2560x 1600	-	2560x 1600	-	-	2560x 1600
Maximum Dual Link Resolution	2560x 1600	2560x 1600	2560x 1600	2560x 1600	2560x 1600	2560x 1600	2560x 1600	2560x 1600	2560x 1600	2560x 1600
Maximum Single Link Resolution	1920x 1200	1920x 1200	1920x 1200	1920x 1200	1920x 1200	1920x 1200	1920x 1200	1920x 1200	1920x 1200	1920x 1440