

Industry's First 2 GB Ultra High-End Workstation Graphics Solution



ULTRA HIGH END 2 GB

- Powered by next generation ATI FireGL graphics processing unit (GPU) from AMD
- Scalable ultra parallel processing architecture with 320 unified shaders
- High performance stream computing leverages GPU for compute intensive tasks
- AutoDetect instinctively optimizes performance for multi-application workflow
- Two Dual Link DVI outputs for driving multiple 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 & OpenGL 2.1 advanced features
- Optimized and certified for CAD and DCC applications

ATI FireGL V8650

Introducing the ATI FireGL™ V8650 workstations graphics accelerator from AMD. This ultra high end workstation solution with 2 GB of frame buffer memory is designed to boost 3D application performance and user productivity.

Based on a new generation GPU with 320 unified shader units, the ATI FireGL V8650 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 rates when animating.

All next generation ATI FireGL solutions feature two Dual Link enabled DVI outputs, capable of generating a multi-monitor desktop of over 5000 pixels wide from a single accelerator. In addition, with native multi-card support, users can see more and do more using four displays being driven by two ATI FireGL products 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 a unique AutoDetect technology. 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 user's workflow demands.

To further leverage your graphics investment, stream computing applications can take advantage of the massive parallel processing capability of the GPU for compute-intensive tasks such as physics, structural analysis and fluid dynamics.



ATI FireGL V8650

More Power, Memory, Stability, and Flexibility

ATI FireGL™ V8600 workstation graphics accelerators feature 2 GB of dedicated on-board memory to enable maximum productivity and unprecedented performance. To provide added flexibility, multi-card support is now available enabling two ATI FireGL workstation graphics products to drive four accelerated 3D displays.



Feature	Benefit
Ultra Parallel Processing Architecture Unified Shaders	Enables real-time realistic rendering of more complex datasets
High Performance Stream Computing	Leverages the GPU parallel processing capability for compute intensive tasks such as physics, structural analysis and fluid dynamics
AutoDetect Technology	Instinctively optimizes graphics performance by automatically loading driver settings as new applications are launched or when multiple applications are used simultaneously
Multi-Card Support	Enables the use of two graphics cards in a single workstation to drive four 3D accelerated displays with independent settings for resolution, refresh rate, rotation and color depth
Two Dual Link DVI outputs	Capable of driving ultra high resolution widescreen monitors generating a multi-monitor desktop of over 5000 pixels width
High Dynamic Range (HDR)	Renders up to 16Bit per RGB color component to enable a wider spectrum of color when creating natural lighting and shading effects
Hardware API Acceleration	Support for DirectX 10 and OpenGL 2.1 advanced graphics features delivers superior performance and 3D capabilities
Application Certification	Optimized and certified for superior performance and reliability

ATI FireGL V8600 Product Overview

Features

- Powered by next generation ATI FireGL GPU from AMD
- Scalable ultra parallel processing architecture with 120 unified shaders
- High performance stream computing
- AutoDetect Technology
- Full Shader Model 4.0, DirectX® 10 & OpenGL® 2.1 advanced features support
- Full 128-bit floating point precision
- Optimized and certified for CAD and DCC applications

Display Capabilities

- Two Dual Link DVI outputs capable of driving multiple displays with independent resolutions and refresh rate
- Up to ultra-high 9 Megapixels (3840 x 2400) display
- Up to 16-bit per RGB color component High Dynamic Range output (HDR)

API and OS Support

- Full OpenGL® 2.1 support
- DirectX® 10 support
- Windows XP, XP64, Vista Premium
- Linux® 32 and Linux 64¹

AMD Warranty and Support

- Enterprise class support
- Three year limited product repair/replacement warranty
- Toll free phone and email access to dedicated technical support²

System Requirements

- PCI Express® based workstation with available x16 lane graphics slot
- 650 Watt power supply or greater (assumes fully loaded system)
- Available connection to power supply
- 256 MB of system memory
- CD-ROM drive for software installation

For more information, visit ati.amd.com/firegl

ATI FireGL Product Comparison

	V3600	V5600	V7600	V8600	V8650
Graphic Processing Unit					
Shader Processing Units	120	120	320	320	320
Full 10-bit Display Pipeline	●	●	●	●	●
Stream Computing	●	●	●	●	●
Memory					
Configuration	256 MB	512 MB	512 MB	1 GB	2 GB
Ring Bus Controller Interface Bandwidth (GB/sec)	128-bit 16 GB	128-bit 35 GB	256-bit 51 GB	512-bit 128 GB	512-bit 128 GB
Display Capabilities					
Color Depth	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	2	2	2
Dual Digital / Analog Output	●	●	●	●	●
HD Component Output			●	●	●
Stereoscopic 3D Output			●	●	●

1. Linux drivers available for download at ati.amd.com/firegl

2. Toll free hotline available in North America & Europe