

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



ATI FireGL V8650 2GB memory

- Powered by next generation ATI FireGL graphics processor 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 application workflow
- Two Dual Link DVI outputs for driving ultra high resolution widescreen multi-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



Next Generation Graphics

Introducing the ATI FireGL™ V8650 workstations graphics accelerator from AMD. This ultra high end workstation solution with 2 GB 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 rate performance when animating.

All ATI FireGL accelerators feature two Dual Link enabled DVI outputs, capable of 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.

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™ workstation graphics accelerators range from 256 MB all the way up to 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 cards 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
Two Dual Link DVI outputs	Capable of driving ultra high resolution widescreen monitors generating a multi-monitor desktop of over 5000 pixels width
Multi-Accelerator Support	Enables full 3D acceleration on four widescreen displays with independent settings for resolution, refresh rate, rotation, and color depth
High Dynamic Range (HDR)	Renders up to 16-Bit 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 V8650 Product Overview

Features

- Powered by next generation ATI FireGL graphics processor unit (GPU) from AMD
- Scalable ultra parallel processing architecture with 320 unified shaders
- High performance stream computing
- AutoDetect Technology
- Full Shader Model 4.0, DirectX® 10 & OpenGL® 2.1 advanced features support
- Optimized and certified for CAD and DCC applications

Display Capabilities

- Two Dual Link DVI outputs
- Multi-accelerator configuration support
- Independent multi-monitor resolution and refresh rate
- Full 10-bit display pipeline
- Up to 16-bit per RGB color component High Dynamic Range output

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)
- 256MB of system memory
- CD-ROM drive for software installation

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

² Toll free hotline available in North America

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	265MB	512MB	512MB	1GB	2GB
Ring Bus Controller Interface	128-bit	128-bit	256-bit	512-bit	512-bit
Bandwidth (GB/sec)	16GB	35GB	51GB	108GB	108GB
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			•	•	•



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