



ATI FireGL™ Graphics: Accelerating Autodesk® Maya®



ATI FireGL™ Graphics Accelerators

- Optimized and certified for Autodesk Maya
- Up to 236% performance improvement over previous product generation*
- Real-time rendering and intelligent resource management from the ATI FireGL Unified Shader Architecture and Maya Shaders
- AutoDetect instinctively optimizes performance for multi-application workflows
- Up to 2 GB of onboard memory makes photo-realistic previews more interactive
- Natural lighting and shading effects with High Dynamic Range (HDR) rendering and up to 16Bit per RGB color component support
- Maximum output flexibility with support for multiple 3D accelerators in a single system for quad display output
- Unified driver for ATI FireGL products simplifies system administration and maintenance
- Expert support from AMD's workstation technical team

* Results using ATI FireGL V8600 versus ATI FireGL 7350 running the Viewperf 9.0.3 Autodesk Maya (maya-02) benchmark.



Magic happens when the leaders of workstation graphics accelerators and 3D modeling, animation and rendering software work together to create synergistic innovation. Used together, ATI FireGL™ workstation graphics accelerators and Autodesk® Maya design software break through past constraints to give film, television, game development, and design artists the graphics horsepower, tools, and resources they need for maximum productivity.

The all new series of ATI FireGL products from AMD offers up to a 236 percent performance increase over previous generations of ATI FireGL cards*. The raw horsepower is now used more intelligently, with optimized and streamlined workflow innovations in both ATI FireGL hardware and Maya software. Now, photo-realistic previews are much more interactive, with real-time rendering a reality for less-complex models. Maya artists can achieve these benefits thanks to mutual improvements to Unified Shader technology in both ATI FireGL and Maya products. A new Unified Shader Architecture for intelligent resource management, plus up to 320 Unified Shader units and a 10-bit display pipeline on the ATI FireGL side—coupled with native support of DirectX HLSL Shaders and a new hardware shader API on the Maya side—make for incredible performance improvements. And that makes for a dramatic productivity improvement for artists working against the clock to meet tight deadlines.

Visual fidelity of complex models and increased animation frame rates are also dramatically improved thanks to the introduction of two industry firsts: up to 2 GB of on-board memory

and AutoDetect, which instinctively focuses power where it's needed most and increases productivity by automatically configuring graphics driver settings.

"The ATI FireGL Unified Shader Architecture—combined with Maya 2008 support for DirectX HLSL Shaders and other performance and workflow improvements—take the next step in bringing photo-realistic rendering closer to real time. These advancements, taken together, significantly streamline and speed up workflow, editing, and rendering for high-resolution characters, environments, and performances."

Rob Hoffmann, Senior 3D Product Marketing Manager, Autodesk, Media & Entertainment

ATI FireGL workstation graphics accelerators are thoroughly tested and certified with Autodesk Maya to ensure optimized performance and compatibility. Used with workstations powered by AMD Opteron™ processors with Direct Connect Architecture, ATI FireGL works even faster for rapid creation and rendering. A single unified driver is available for all desktop and mobile ATI FireGL products, simplifying system administration and maintenance. AMD offers direct customer access to a dedicated workstation technical support team. For more information on how to accelerate your next Maya production, please visit ati.amd.com/FireGL.

ATI FireGL Workstation Graphics Accelerators

More Power, Memory, Stability and Flexibility

ATI FireGL workstation graphics accelerators feature 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 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 |
| 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 Product Overview

Features

- Powered by next generation ATI FireGL graphics processor unit (GPU) from AMD
- Scalable ultra parallel processing architecture with up to 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
- 350 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 | 128GB | 128GB |
| 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

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