



ATI FireGL™ Workstation Graphics Accelerating HP Workstations



Dominate Your Design™

Whether you're an engineer designing mechanical subassemblies or an animator creating eye-popping visual effects, the HP Workstations along with the ATI FireGL™ graphics accelerators offer comprehensive solutions with industry leading performance, ground-breaking features, and unprecedented visual fidelity for even the most demanding workstation users.

The unique ultra parallel processing architecture of ATI FireGL maximizes throughput by automatically directing graphics horsepower where it's needed. Intelligent management of computational resources enables enhanced utilization of the graphics accelerator to enable real-time rendering of complex models and scenes while helping to increase frame rate performance when animating.

For outstanding high-end graphics performance, HP workstations with ATI FireGL graphics feature full 30-bit display pipeline producing more than one billion colors (10-bit per RGB component) and support for High Dynamic Range output, producing over one billion colors for the most vibrant visual fidelity¹. With Dual Link enabled DVI outputs, ATI FireGL cards are capable of generating a multi monitor desktop of over 5000 pixels wide.

In addition, ATI FireGL products incorporate unique AutoDetect technology. As users open 3D applications, or move between them, optimized ATI FireGL graphics driver settings are automatically configured for maximum performance under a multitude of workflow demands.

ATI FireGL™ Workstation Graphics featured in HP workstations



ATI FireGL™ V5600

- Powered by next generation ATI FireGL graphics processor unit (GPU) from AMD
- Scalable ultra parallel processing architecture with 120 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



ATI FireGL™ V7700

- Full 30-bit display pipeline producing more than one billion colors. (10-bit per RGB component) for more accurate color reproduction and superior visual fidelity¹
- Scalable ultra parallel processing architecture with unified shaders
- AutoDetect which dynamically optimizes performance for multi-application workflow
- Dual Link DVI and DisplayPort output options for driving ultra high resolution widescreen monitors³
- 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 many CAD and DCC applications





ATI FireGL™ Workstation Graphics

Accelerating HP Workstations

| FEATURE | BENEFIT |
|---|--|
| Unified Shader Architecture | Intelligent management of computation resources enables real-time rendering of complex and realistic images |
| AutoDetect Technology | With many popular applications, as a user moves between applications, or opens new ones, the graphics driver settings are automatically configured for maximum performance |
| Full 30-bit Display Pipeline | Full 30-bit display pipeline producing more than one billion colors. (10-bit per RGB component) for more accurate color reproduction and superior visual fidelity ¹ |
| 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 multiple outputs on a single accelerator, Multi-View enables two 3D displays with independent display resolution, refresh rate, and display rotation settings |
| Full Shader Model 4.1 Support ⁷ | Allows the user to create complex geometry and scenes without taxing the CPU |
| Certification | Thoroughly tested and certified with many major Computer Aided Design (CAD) and Digital Content Creation (DCC) applications, ensuring a level of reliability on a wide range of professional operating environments ² |
| DirectX 10.1 (V7700) and OpenGL 2.1 (V5600) Advanced Features | Great performance, scalability and reliability |

Features

- Powered by advanced ATI FireGL™ Graphics Processor Unit (GPU) with Unified Shaders
- 120 to 320 unified shader units³
- Full Shader Model 4.1 support⁷
- 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 30-bit precision display pipeline
- PCI Express® 2.0 compliant⁸

Display Capabilities

- DisplayPort output and Dual Link DVI-I output³ or two Dual Link DVI-I output supports digital or analog display³
- Independent multi-monitor resolution and refresh rate selection
- VGA analog support⁴

System Requirements

- PCI Express -based workstation with available x16 lane graphics slot
- 450-Watt power supply³ or greater (assumes fully loaded system)
- 512MB of system memory
- Connection (6 pin) to computer power supply³
- Installation software requires CD/DVD-ROM drive

ATI Warranty and Support⁵

- Three year limited product repair / replacement warranty
- Direct toll free phone and email access to dedicated workstation technical support team
- Advanced parts replacement option

API and OS Support

- OpenGL® 2.1 with OpenGL
- Shading Language
- Microsoft® DirectX® 10.1 (V7700) and DirectX® 10 (V5600)
- Windows® XP, Windows XP64, Windows Vista and Windows Vista64
- Linux® 32 and Linux 64⁶

Workstation ISV Certification²

- CAD Certification
- ANSYS Workbench™, FLUENT®
- Autodesk® AutoCAD®, Inventor®, Architectural Desktop, Map 3D, Land Desktop
- Bentley MicroStation®, Navigator
- Dassault Systemes SolidWorks®
- MSC.Software® MSC.Patran® and SimXpert™
- Siemens I-deas, SolidWorks and Teamcenter Visualization

DCC Certification

- Autodesk® 3ds Max®
- Autodesk Maya®
- Avid SOFTIMAGE® | XSI®

ATI FireGL Product Comparison

| | MID-RANGE | HIGH-END |
|-----------------------------------|--------------------------------------|----------------------------|
| MARKET | CAD, DCC | CAD, DCC |
| MODEL SIZE | Simple to average datasets & models | Large datasets & textures |
| ATI FireGL™ Models | V5600 | V7700 |
| HP Workstation Models | xw4550 xw4600 xw6600 xw8600 | xw4600 xw6600 xw8600 |
| Shader Processing Units | 120 | 320 |
| Memory Framebuffer Size | 512MB | 512MB |
| Memory Bandwidth | 35GB/sec | 7.2GB/sec |
| 10-bit Display Capability | Yes | Yes |
| Dual Link DVI-I Output | 2 | 1 |
| DisplayPort Outputs | - | 1 |
| HD Component Video Output | - | 1 |
| Stereo 3D Output | - | 1 |
| Maximum Dual Link DVI Resolution | 2560x1600 | 2560x1600 |
| Maximum Dual Connector Resolution | 5120x1600 | 5120x1600 |
| DirectX® 10.1 Support | - | Yes |
| OpenGL® 2.1 | Yes | - |



1. Thirty-bit monitor required for full 30-bit display
 2. For a complete list of qualified applications, go to <http://ati.amd.com/products/workstation/certified.html>
 3. For individual product specification and configuration details, go to <http://ati.amd.com/firegl>
 4. VGA output supported through DVI-I to VGA adapter included with product
 5. Some conditions apply. See <http://support.ati.com/cs/support/default.asp?deptID=894> for details
 6. Linux drivers can be downloaded from ati.amd.com/firegl
 7. V7700 only; V5600 supports Full Shader Model 4.0
 8. V7700 only; V5600 is PCI Express 2.0 compatible

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

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