



### ATI FireGL with Avivo

- Optimized and certified for UGS NX
- Powered by ATI's next generation FireGL™ graphics processor unit with Avivo™ Technology
- Scalable ultra-threaded architecture with multiple parallel geometry engines and pixel shader processors
- Full Shader Model 3.0 support for vertex and pixel shaders
- Up to 1GB GDDR3 graphics memory and 512-bit ring bus memory controller
- High Dynamic Range (HDR) rendering with 8-bit, 10-bit, and 16-bit per RGB color component support
- High fidelity display engine capable of producing over one billion colors
- Up to two Dual Link outputs each ideal for driving 30-inch cinema / widescreen displays (2560 x 1600)
- Direct access to ATI's dedicated workstation technical support team



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For product designers, simulation specialists, and manufacturers that want to reduce design time and costly errors, and increase innovation, the combination of UGS NX and ATI FireGL™ desktop and mobile workstation graphics accelerators with Avivo™ Technology deliver ground-breaking features and performance for the most demanding UGS NX user working with challenging design and engineering projects, while boosting productivity throughout the

The combination of UGS NX and ATI FireGL unleashes design creativity, resulting in better, more attractive, more marketable products in a fraction of the time. With full Shader Model 3.0 support accelerated in hardware, a scalable ultra-threaded architecture with true 128-bit floating point precision, parallel geometry engines and pixel shader processors, and ultra efficient ring bus memory controller, ATI FireGL accelerators provide the graphics horsepower for today's professional applications and tomorrow's technology innovations..

ATI has worked with UGS to enable the real-time manipulation of realistic rendered and styled models using FireGL graphics accelerators, giving companies the ability to accurately model and analyze product performance characteristics without physical prototypes. Designed with a 10-bit display pipeline and a High Dynamic Range (HDR) 16-bit per RGB color component output capable of producing over one trillion colors for the most vibrant visual fidelity, it's no wonder that UGS NX professionals rely on ATI FireGL workstation accelerators with Avivo Technology for ultra fast processing of complex datasets, real-time cinematic-quality rendering, and superior value.

ATI FireGL workstation graphics accelerators are thoroughly tested and certified with UGS NX plus all major Computer Aided Design (CAD) and Digital Content Creation (DCC) applications to ensure optimized performance and compatibility. A single unified driver is available for all desktop and mobile FireGL products from the ultra high-end to the entry level, simplifying system administration and maintenance. ATI offers direct customer access to a dedicated workstation technical support team. These proven products are available worldwide from workstation OEMs, system integrators and ATI channel partners. For more information on how to accelerate your next UGS NX project, please visit [www.ati.com/FireGL](http://www.ati.com/FireGL).

## FIREGL WITH AVIVO PRODUCT OVERVIEW

### Overview

- Powered by advanced ATI FireGL™ Graphics Processor Unit (GPU) with Avivo™ Technology
- Scalable ultra-threaded architecture with fast dynamic branching and high performance parallel processing
- Multiple parallel geometry engines and pixel shader processors
- Full Shader Model 3.0 support
- Up to 1GB GDDR3 graphics memory and 512-bit ring-bus memory controller
- 128-bit full floating point precision
- Native high bandwidth PCI Express x16 lane support

### ATI Avivo™ Technology

- 16-bit per RGB color component High Dynamic Range (HDR) output capable of over one trillion colors
- Full 10-bit display pipeline
- Advanced support for 8-bit, 10-bit, and 16-bit per RGB color component

### System Requirements

- PCI Express® based workstation with available x16 lane graphics slot
- Connection to the system power supply (adapter included <sup>1</sup>)
- 450-Watt power supply or greater (assumes fully loaded system <sup>2</sup>)
- 512MB of system memory
- Installation software requires CD-ROM drive

### Display Capabilities

- Dual DVI-I outputs support any combination of digital and analog displays
- Independent multi-monitor resolution and refresh rate selection
- Dual Link outputs ideal for driving 30-inch cinema / widescreen (2560 x 1600) displays <sup>3</sup>
- Individual Dual Link output capable of ultra-high resolutions up to 9 Megapixels (3840 x 2400)
- Stereoscopic 3D output connector with quad buffer support
- Dual VGA analog support <sup>4</sup>
- HD Component Video (YPrPb) output <sup>5</sup>

### ATI Warranty and Support

- Enterprise class support
- Three year limited product repair/replacement warranty
- Direct toll free phone and email access to dedicated workstation technical support team <sup>6</sup>

### API and OS Support

- OpenGL® 2.0 with OpenGL Shading Language
- Microsoft® DirectX® 9.0 with DX9 HLSL
- Windows® XP, Windows XP64 and Windows 2000
- Linux® 32 and Linux 64 <sup>7</sup>
- Windows Vista™ ready

## WORKSTATION MARKETS AND CERTIFICATIONS

### Computer Aided Design

- Computer Aided Design (CAD)
- Architecture / Engineering / Construction (AEC)
- Medical Imaging
- Computational Fluid Dynamics
- Visual Simulation
- GIS / Mapping
- Oil & Gas

### Certifications

- ABAQUS®
- Altair® Engineering Hyperworks®
- ANSYS Workbench™
- Autodesk® AutoCAD®, Inventor®, VIZ and Architectural Desktop
- Autodesk® AliasStudio™
- Bentley MicroStation®
- ColCreate® OneSpace Designer Modeling
- Dassault Systemes CATIA®, ENOVIA® and SolidWorks®
- DELICAM™ PowerSHAPE™
- ESRI ArcGIS™
- ICEM® Surf
- MSC Software® MSC.Patran® and MSC.Nastran™
- Nemetschek Allplan
- PTC® Pro/CONCEPT™ and Pro/ENGINEER® Wildfire™
- Schlumberger Petrel
- UGS I-deas® NX, UGS NX, Solid Edge™ and Teamcenter Visualization

### Digital Content Creation

- Game Development
- Cinematic Visual Effects
- Broadcast and Film Animation
- Virtual Set Design
- Compositing
- Digital Editing and Publishing

### Certifications

- Adobe® After Effects®
- Adobe® Audition®
- Adobe® Encore™ DVD
- Adobe® Premiere® Pro
- Adobe® Photoshop® CS
- Autodesk® Maya®
- Autodesk® MotionBuilder
- Autodesk® 3ds Max®
- Autodesk® Combustion®
- Avid SOFTIMAGE® I XSJ® and Avid Xpress Pro
- Maxon Cinema 4D
- Maxon BodyPaint 3D
- NewTek LightWave 3D®
- SensAble Technologies ClayTools™
- SensAble Technologies FreeForm® Concept™
- SensAble Technologies FreeForm® Modeling Plus™
- Side Effects Software™ Houdini™

## ATI FireGL™ Workstation Graphics Accelerators with Avivo Technology

	MEMORY			GRAPHICS PROCESSING UNIT						AVIVO™ TECHNOLOGY			DISPLAY CAPABILITIES			
	Memory Configuration	Ring Bus Memory Controller Interface	Memory Bandwidth (GB Per Second)	Ultra Threaded Architecture	Parallel Geometry Engines	Vertices Per Second	Pixel Shader Processors	Pixel Operations Per Second	Full Shader Model 3.0 Support	Full 10-bit Display Pipeline	High Dynamic Range Rendering Support	Per Pixel Color Component Output	Display Output Connectors	Dual Link Outputs	HD Component Video Output	Stereoscopic 3D Output
<b>FireGL V3300</b>	128MB	-	6.4	✓	2	300M	4	2.4G	✓	✓	✓	8, 10, 16-bit	2 DVI-I			
<b>FireGL V3400</b>	128MB	256-bit	16.0	✓	5	625M	12	6.0G	✓	✓	✓	8, 10, 16-bit	2 DVI-I	1	✓	
<b>FireGL V5200</b>	256MB	256-bit	22.4	✓	5	750M	12	7.2G	✓	✓	✓	8, 10, 16-bit	2 DVI-I	2	✓	
<b>FireGL V7200</b>	256MB	512-bit	41.6	✓	8	1200M	16	9.6G	✓	✓	✓	8, 10, 16-bit	2 DVI-I	2	✓	✓
<b>FireGL V7300</b>	512MB	512-bit	41.6	✓	8	1200M	16	9.6G	✓	✓	✓	8, 10, 16-bit	2 DVI-I	2	✓	✓
<b>FireGL V7350</b>	1GB	512-bit	41.6	✓	8	1200M	16	9.6G	✓	✓	✓	8, 10, 16-bit	2 DVI-I	2	✓	✓

For additional information, visit [ati.com/firegl](http://ati.com/firegl)

<sup>1</sup> Required for V7200, V7300, and V7350 models only

<sup>2</sup> 350-Watt power supply required for V3300, V3400, and V5200 models

<sup>3</sup> See product matrix for specific Dual Link configuration

<sup>4</sup> VGA output supported through DVI-I to VGA adapters included with product

<sup>5</sup> HD Component Video (YPrPb) output adapter included with product

<sup>6</sup> Toll free hotline available in North America

<sup>7</sup> Linux drivers can be downloaded from [ati.com/FireGL](http://ati.com/FireGL)