

## Wildcat III 6210

*Ultra High-end 3D Acceleration for Performance-driven Graphics Professionals*

### **Complete OpenGL 1.3 support in hardware**

Complete OpenGL<sup>®</sup> 1.3 acceleration which sustains the highest level of real-time, on-screen OpenGL performance in the industry.

### **Six T & L engines for performance and programmability**

Six T & L engines deliver outstanding performance - especially as scene complexity increases. And, since they're fully programmable, you can work with the latest innovations in graphics APIs by means of a simple software driver update. So, you protect your graphics investment and benefit from more power on the desktop.

### **Abundant texture and frame buffer memory**

Apply numerous, extremely detailed texture maps without compromising performance. Large, dedicated 64 MB frame buffer and 128 MB texture memory support lets you create in rich, photorealistic shading and highly detailed textures - always in true color, with maximum depth accuracy and with double buffering enabled.

### **Maximum acceleration for maximum performance**

Wide, independent buses connect frame buffer and texture memory to the graphics chipset for maximum performance. Specialized DirectBurst<sup>™</sup> technology optimizes the 3D graphics pipeline, significantly boosting performance and supplying an additional 16 MB of memory

### **Leading-edge, 3D volumetric texture support**

Hardware accelerated 3D volumetric textures allow you to apply textures throughout the volume of any model, not just the external surfaces. The Wildcat III 6210 provides real-time performance with 3D textures for applications such as medical imaging and GIS.

### **Exclusive SuperScene antialiasing**

SuperScene antialiasing dramatically improves the sense of reality with true, multi-sampled scene mode antialiasing. And, SuperScene can be "forced" to work in any OpenGL window — even in applications with no native support for full scene antialiasing can experience improvements in image quality. With SuperScene, you get higher performance and significantly lower memory use than typical multisampled antialiasing techniques.

Eliminate creative boundaries with 3Dlabs<sup>®</sup> Wildcat<sup>™</sup> III 6210 - the latest Wildcat graphics accelerator to offer the best image quality and highest performance available on the desktop. With a massive 416 MB total on-board memory, you'll get the speed and performance you need without sacrificing any of the renowned quality you've come to expect from 3Dlabs.

If you're working in MCAD, DCC, Visualization, or any professional graphics field where you need ultra high-end performance, you'll appreciate the advances in speed we've made to the "fastest graphics on the planet." Support for 32 lights in hardware and doubled texture memory translate to more realistic renderings and much faster geometry acceleration — even with complex scenes.

In addition to phenomenal performance enhancements, the Wildcat III 6210 offers standard support for dual analog and digital monitors\*. So, when you're working on a complex project or a large assembly, you can increase your visual real estate two-fold. And, with standard multiview and genlock support, DCC, Video Production, CAVE, and Visual Simulation professionals can synchronize multiple Wildcat III 6210s together or to an external sync source.

Wildcat products have always offered the best image quality in the industry with 10-bit sub-pixel accuracy, exclusive SuperScene<sup>™</sup> antialiasing, and high geometry and texture coordinate precision. With this well-established legacy of quality, you can be confident in the accuracy of your designs.

\*Dual monitor support is only available under Windows<sup>®</sup> 2000 and Windows XP.

# 3Dlabs

## Wildcat Chipset Technology

- Data width (per pipeline):
  - Frame buffer: 128 bits
  - Texture buffer: 64 bits
  - DirectBurst: 64 bits
- Integrated 320MHz RAMDAC
- Dual-pipeline configuration
- Complete OpenGL® 1.3 geometry acceleration using a highly-tuned T & L engine. Accelerates the complete OpenGL 1.3 pipeline, including all geometry operations, triangle setup, texturing, and pixel operations
- OpenML™ 1.0 support
- DirectX 7.0 support
- Wide, independent buses connecting frame buffer and texture memory to the graphics chipset for maximum performance
- 3D volumetric texture support
- DirectBurst™ technology optimizes the 3D graphics pipeline, significantly boosting performance

## Geometry Acceleration

- Model view matrix transformation of vertex and normal coordinates
- Perspective and viewport transformations
- Texture matrix transformation of texture coordinates
- Local display list storage and processing
- Full lighting calculations (up to 32 lights)
- View volume clipping
- Up to six user clip planes
- Image processing

## Hardware Performance

- 3D Gouraud-shaded triangles, Z-buffered, 15-pixel: 33.0 Million Tri/Sec
- TrilinearTextured, Gouraud-shaded, 32-bit (RGBA) texels: 400.0 Million pixels/sec
- 3D Vectors, solid-color, 10-pixel: 26.1 Million Vec/Sec

*NOTE: Performance numbers reflect maximum hardware rate. Numbers may vary depending on application.*

## Professional 3D Features

- SuperScene full-scene multisampled antialiasing:
  - Point sampled with eight samples
  - Sample location jittering
  - Dynamic sample allocation
  - Dynamic sample backoff
- 64-bit hardware accumulation buffer
- Cube-mapped texture mapping
- Bump-mapped texture mapping
- Gradient area fills
- Multitexturing

## Traditional 2D Operations

- 16- and 32-bit color depths (565, 8888)
- Solid and patterned area fills
- Vectors (diamond rule compliant)
- Block moves (screen-to-screen)
- Block gets (screen-to-system)
- Block puts (system-to-screen)

## Board Physical

- Full-length ATX form-factor
- AGP Pro - AGP Version 2.0 Compliant

## Memory

- Frame Buffer: 128 MB DDR
- Texture Buffer: 256 MB DDR
- DirectBurst: 32 MB

## Display

- True color resolutions up to 2048x1152 double-buffered and 32-bit Z per monitor
- 60Hz-90Hz screen refresh rates (monitor dependant)

## Stereo Sync Support

Female, 3-pin, VESA-standard, mini-DIN connector provides connection to a LCD shutter glasses emitter module or to other stereo shutter devices.

## Genlock Support

Synchronizes the vertical refresh rate of the system display to and external signal.

## Multiview Support

Provides frame locking and rate locking of multiple workstations.

## Digital Flat Panel Output

Two 29-pin DVI-I output connectors

## Connectors

- One 3-Pin, Mini-DIN stereo sync output
- Two DVI-I compatible Digital Video Output Ports
- One BNC Connector
- Two BC9 Connectors

## Drivers

- Windows NT 4.0
- Windows 2000
- Windows XP

## System Requirements

- Intel® Pentium® Processor, AMD Athlon™, or compatible
- Microsoft Windows NT 4.0 with Service Pack 5 or higher, Windows 2000, or Windows XP
- One AGP Pro 50 slot
- An open PCI slot adjacent to the AGP Pro slot for cooling and mechanical
- Minimum of 32 MB DRAM (64 MB recommended)
- 3 MB of free space on the computer's primary system disk for the video display driver software
- 50 W of available power
- WarrantyThree (3) years parts and labor limited warranty

## Supported Screen Resolutions (true color, double-buffered)

Resolutions	Max. Refresh Rate (Hz)	SuperScene	
		Antialiasing Supported	Stereo Available At (Hz)
2048 x 1152	75	-	-
1920 x 1440	75	-	-
1920 x 1200	76	-	-
1920 x 1080	85	yes	-
1856 x 1392	80	-	-
1824 x 1368	75	-	-
1824 x 1128	75	yes	-
1792 x 1344	75	-	-
1792 x 1120	75	yes	-
1600 x 1200	90	yes	-
1600 x 1024	76	yes	-
1600 x 900	85	yes	-
1520 x 856	90	yes	106
1440 x 900	90	yes	100
1360 x 766	90	yes	118
1280 x 1024	85	yes	120
1280 x 960	85	yes	120
1280 x 800	90	yes	112
1280 x 720	75	yes	120
1152 x 864	85	yes	120
1024 x 768	85	yes	120
856 x 480	75	yes	120
800 x 600	85	yes	120
640 x 480	85	yes	120

## Contacts, Service and Support

For more information and online technical support, visit us at [www.3dlabs.com](http://www.3dlabs.com).

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