

# Wildcat II 5110

High-end 3D for performance-driven graphics professionals

3Dlabs<sup>®</sup> revolutionary Wildcat<sup>™</sup> 3D graphics technology enters its second generation with the Wildcat II - featuring a full dual-pipeline architecture and new chipset for more affordability and even faster performance.

The combination of Wildcat II's dual-pipeline-powered architecture, increased chipset speed, and highly-tuned geometry engine offers the highest graphics performance for the price. And, with dual-screen support (under Windows 2000), you get more visual real estate for large design projects.

If you're a scientist, artist, engineer, or graphics expert working in the 3D realm, these features and more translate to the highest level of real-time, on screen performance available at a price that won't hurt your budget.



#### ■ Complete OpenGL 1.2 geometry acceleration

Complete OpenGL<sup>®</sup> 1.2 geometry acceleration using two highly-tuned geometry engines which sustain the highest level of real-time, on screen performance in the industry.

#### ■ Dedicated texture memory and frame buffers

Apply numerous, extremely detailed texture maps without compromising performance. Large, dedicated 64 MB frame buffer and 64 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.

#### ■ 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 II provides real-time performance with 3D textures for applications such as medical imaging and GIS.

#### ■ Exclusive SuperScene antialiasing

Forget about jaggies and crawling, twinkling edges. SuperScene<sup>™</sup> antialiasing dramatically improves the sense of reality with true, multi-sampled scene mode antialiasing. With SuperScene, you get higher performance and significantly lower memory utilization than typical multisampled antialiasing techniques.

#### ■ 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.

#### ■ Fully programmable geometry ASICs

With programmable geometry ASICs, you can work with the latest innovations in graphics APIs by means of a simple software driver update. This protects your graphics investment and gives you more power on the desktop.



## Wildcat Chipset Technology

### Data widths:

- Frame buffer: 128 bits
- Texture buffer: 64 bits
- DirectBurst: 64 bits
- Integrated 300 MHz RAMDAC
- Dual-pipeline configuration featuring wide, independent buses to connect frame buffer and texture memory to the graphics chipset.
- Complete OpenGL® 1.2 geometry acceleration accelerates the complete OpenGL 1.2 pipeline, including all geometry operations, triangle setup, texturing, and pixel operations
- 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 24 lights)
- View volume clipping
- Up to six user clip planes
- Image processing

## Professional 3D Features

### SuperScene full-scene antialiasing:

- Point sampled with sixteen samples
- Sample location jittering
- Dynamic sample allocation
- Dynamic sample backoff

### 64-bit hardware accumulation buffer

## 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 50 - AGP Version 2.0 Compliant

## Memory

- 64 MB dedicated frame buffer
- 64 MB dedicated texture buffer
- 16 MB DirectBurst

## Display

- True color resolutions up to 2048 x 1152 double-buffered and 32-bit Z per monitor
- 60 Hz-90 Hz screen refresh rates (monitor dependant)
- Dual-screen capable (under Windows 2000)

## 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.

## Digital Flat Panel Output

- 29-pin DVI-I output connector

## Drivers

- Microsoft® Windows® NT
- Microsoft® Windows® 2000

## Connectors

- 3-pin, MiniDIN stereo sync output
- 15-pin, D-sub analog video output
- 29-pin DVI-I output connectors
- Genlock and Multiview (options)

## Genlock Support (option)

- Provides a periodic signal to the display system to lock vertical refresh rate

## Multiview Support (option)

- Provides frame locking and rate locking of multiple workstations

## System Requirements

- Intel® Pentium® Processor or compatible
- Microsoft Windows NT 4.0 with Service Pack 5 or higher or Windows 2000
- One AGP Pro 50 slot
- An open PCI slot adjacent to the AGP Pro slot for cooling
- 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

## Warranty

- Three (3) years parts and labor limited warranty

## Maximum Screen Resolutions

True color, double buffered

Single/Dual Display Resolutions	Max Refresh (Hz)	SuperScene	Stereo (@120Hz)
2048 x 1152	75	-	-
1920 x 1440	75	-	-
1920 x 1200	76	-	-
1920 x 1080	85	-	-
1856 x 1392	85	-	-
1824 x 1368	90	-	-
1824 x 1128	75	-	-
1792 x 1344	75	-	-
1792 x 1120	75	-	-
1600 x 1200	90	-	-
1600 x 1024	76	-	-
1600 x 900	85	-	-
1520 x 856	90	-	-
1440 x 900	90	-	-
1360 x 766	90	-	-
1280 x 1024	85	-	yes
1280 x 960	85	-	yes
1280 x 800	90	-	yes
1280 x 720	75	-	yes
1152 x 864	85	yes*	yes*
1024 x 768	85	yes*	yes*
856 x 480	75	yes	yes*
800 x 600	85	yes	yes*
640 x 480	85	yes	yes

\*Features supported in single display mode only

## Application Tested

With over 17 years of OpenGL driver experience, 650+ application certifications and a real dedication to quality, 3DLabs offers the ultimate in application support. Through our **advanced control panel** you can automatically configure and optimize your system for your favorite professional applications, including, but not limited to:

- 3ds max
- Houdini
- Lightscape
- Lightwave
- Maya
- Unigraphics
- Multigen
- SOFTIMAGE
- AutoCAD
- CATIA
- I-DEAS
- Microstation
- SolidEdge
- SolidWorks
- SolidDesigner
- Mirai
- ProEngineer

## Complete Product Range

3DLabs' award winning Oxygen and Wildcat graphics cards represent the most comprehensive range of professional graphics cards available.

Wildcat : High-end

Oxygen GVX : Mid to High-end

Oxygen VX : Entry-level

## Contacts, Service and Support

For more information contact us at:

- [www.3dlabs.com](http://www.3dlabs.com)
- [info@3dlabs.com](mailto:info@3dlabs.com)

### In North America:

Corporate Headquarters  
480 Potrero Avenue, Sunnyvale, CA 94085  
Tel: (800) 464-3348, Fax: (408) 530-4701

Huntsville - Wildcat Division  
P.O. Box 6937, Huntsville, AL 35824  
Tel: (877) 286 1185, Fax: (256) 730 1454

### In Europe:

Meadlake Place, Thorpe Lea Road, Egham,  
Surrey TW20 8HE, UK  
Tel: +44 1784 470555, Fax: +44 1784 470699

### In Germany:

3DLabs, GmbH Breckenheimer Weg 29  
65205 Weisbaden Deutschland  
Tel: +49 6122 916778, Fax: +49 6122 919646

### In Asia/Pacific:

Shiroyama JT Mori Bldg., 16F Toranomon,  
4-3-1 Minato-ku Tokyo 105-6016, Japan  
Tel: +81 3-5403-4653

