Wildcat 4110

Feature-rich, High-end Graphics for Power-minded Graphics Professionals

Based on innovative Wildcat™ 3D Graphics Technology, the Wildcat 4110 offers professional features and outstanding performance on the desktop. Features such as ParaScale™ architecture allow the Wildcat 4110 to accelerate the entire 3D graphics pipeline in hardware, enabling you to achieve new, unparalleled levels of productivity with the most complex visual data sets. With the Wildcat 4110, graphics professionals can experience the unmatched 3D graphics feature set, on-screen responsiveness, and display quality offered by Wildcat technology.

- **Complete OpenGL 1.2 geometry acceleration**
  Wildcat 4110 uses a highly-tuned hardware geometry engine - sustaining the highest level of real-time, on-screen performance and increasing the ability to deliver real-time, on-screen response for graphics of tremendous complexity.

- **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 texture support allows you to apply textures throughout the volume of any model, not just the external surfaces. The Wildcat 4110 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™ 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™ technology optimizes the 3D graphics pipeline, significantly boosting performance.

- **Fully programmable geometry ASIC**
  With programmable geometry ASIC, 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.

PRAISE FOR THE WILDCAT 4110

"...Wildcat 4110 graphics accelerators deliver record-breaking performance and outstanding reliability for 3D Studio MAX users."

Phillip Miller
Product Manager
3D Studio MAX

3Dlabs

Technical Specifications

Wildcat Chipset Technology

- Data width:
  - •Frame buffer: 128-bits
  - •Texture buffer: 64-bits
  - •DirectBurst: 64-bits
- 220 MHz RAMDAC
- Complete OpenGL® 1.2 geometry acceleration using a highly-tuned hardware geometry engine. Accelerates the complete OpenGL 1.2 pipeline, including all geometry operations, triangle setup, texturing, and pixel operations
- 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 24 lights)
- View volume clipping
- Up to six user clip planes
- Image processing

Hardware Performance

- 3D Gouraud-shaded triangles, Z-buffered: 6.0 million triangles/sec
- Trilinear-textured, Gouraud-shaded, 32-bit (RGBA) texels: 142 million pixels/sec
- 3D Vectors, solid-color, 10-pixel: 12.0 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

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

Memory

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

Display

- True color resolutions up to 1920x1200 double-buffered and 32-bit Z per monitor
- 60 Hz - 85 Hz screen refresh rates (monitor dependent)

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

Drivers

- Microsoft® Windows® NT
- Microsoft Windows 2000
- LINUX (Xfree86, v.4x)

Connectors

- 3-Pin, MiniDIN stereo sync output
- 15-Pin, D-sub analog video output
- 29-pin DVI-I output connector

System Requirements

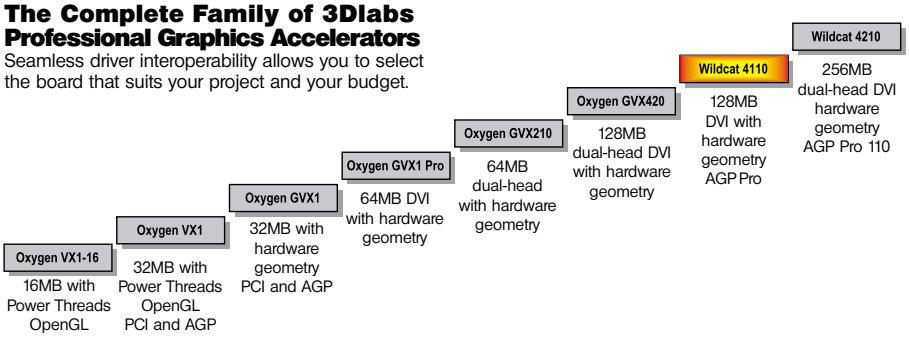
- Intel® Pentium® processor or compatible
- Microsoft Windows NT 4.0 with Service Pack 5 or higher or Windows 2000
- One AGP Pro slot
- One open PCI slot adjacent to the AGP Pro slot for cooling
- Minimum of 32 MB DRAM (64 MB recommended)
- 3 MB of free space on the computer's primary system disk for the video display driver software
- 49 W of available power

Warranty

Three (3) years parts and labor limited warranty

The Complete Family of 3Dlabs Professional Graphics Accelerators

Seamless driver interoperability allows you to select the board that suits your project and your budget.



Supported Screen Resolutions (true color, double-buffered)

Display Resolution	Max. Refresh Rates (H)	SuperScene Support	Stereo Support
1280 x 1024	85		x
1824 x 1368	75		
1600 x 1200	75		
1280 x 960	85		x
1152 x 864	85	x	x
1024 x 768	85	x	x
800 x 600	85	x	x
640 x 480	85	x	x
1920 x 1200	75		
1824 x 1128	75		
1600 x 1024	75		
1440 x 900	85		x
1280 x 800	85	x	x
2048 x 1152	75		
1920 x 1080	75		
1520 x 856	85		x
1360 x 766	85	x	x
1280 x 720	85	x	x
856 x 480	85	x	x

Maximum refresh rates. Actual rates are dependent on your monitor and operating system.

Fully Tested and Optimized On All Leading Professional Applications

3D Studio Max	3D Studio Viz	Houdini
Lightscape	Lightwave	3D Maya NT
Mirai	MultiGen Creator	Softimage/3D
AutoCAD	CATIA	I-DEAS
Microstation	Pro/ENGINEER	Solid Edge
SolidDesigner	SolidWorks	Unigraphics

Contacts, Service and Support

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