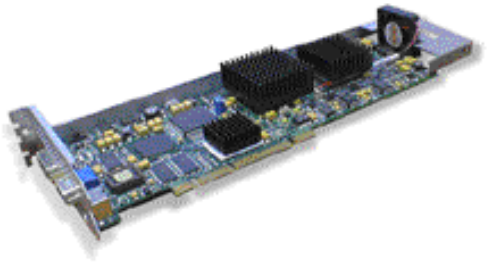
DATA SHEET

Wildcat



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 allows 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.

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

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 suuport 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.

Technical Specifications

Wildcat Chipset Technology

- Data width:
  - Frame buffer: 128 bits
  - Texture buffer: 64 bits
  - DirectBurst: 64 bits
- 220MHz 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 Gourad-shaded triangles, Z-buffered: 6.0M Tri/Sec
- TrilinearTextured, Gouraud-shaded, 32-bit (RGBA) texels: 142M pixels/sec
- 3D Vectors, solid-color, 10-pixel: 12.0M 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 - AGP Version 2.0 Compliant

Memory

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

Display

- True color resolutions up to 1920x1200 double-buffered and 32-bit Z per monitor
- 60Hz-85Hz 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

Supported Screen Resolutions (true color, double-buffered)

Display Resolution	Max. Refresh Rates	SuperScene Support	Stereo Support
1280 x 1024	85		x
1824 x 1368	75		
1600x1200	75		
1280x960	85		x
1152x864	85	x	x
1024x768	85	x	x
800x600	85	x	x
640x480	85	x	x
1920x1200	75		
1824x1128	75		
1600x1024	75		
1440x900	85		x
1280x800	85	x	x
2048x1152	75		
1920x1080	75		
1520x856	85		x
1360x766	85	x	x
1280x720	85	x	x
856x480	85	x	x

Drivers

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

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 32MB DRAM (64MB recommended)
- 3MB of free space on the computer's primary system disk for the video display driver software
- 49W of available power

Warranty

Three (3) years parts and labor limited waranty

The Wildcat 4110 is only available in systems from leading workstation vendors including Dell, Fujitsu, Fujitsu-Siemens, IBM and SGI.