Graphics Evolved



Graphics Productivity and Visual Processing Flexibility for Every Designer

- Leading OpenGL[®] and Direct3D[®] performance
- Dual independent high-resolution displays
- Full 3Dlabs[®] Acuity[™] Driver Suite
- Fully compatible with the Wildcat VP family
- Professional-grade reliability and quality

Visual Processing Architecture

BDlabs

Wildcat VP560 uses 3Dlabs' groundbreaking Visual Processing Architecture to provide industrial-strength 2D and 3D performance, quality and functionality for OpenGL and Direct3D applications for unmatched graphics productivity.

Enhanced Dual-head Display

Wildcat VP560 directly drives two independent, highresolution digital displays. An adaptor is included to drive an analog display and a second analog adaptor is available free-of-charge from 3Dlabs for dual analog output. Dual 10-bit DACs provide flawless color representation by eliminating distracting display artifacts.

100% Programmability

Genuine programmability throughout the entire Wildcat VP560 pipeline provides a superset of traditional graphics processor functionality. Support for emerging high-level shading languages, such as OpenGL 2.0 and Microsoft HLSL, will enable Wildcat VP560 to support new generation advanced authoring applications.

High Performance Virtual Memory

The highly innovative 16GB virtual memory of Wildcat VP560 shatters the limitation of on-board memory by automatically handling huge datasets, while caching essential data for fastest access.

3Dlabs Acuity[™] Driver Suite

The new, unified 3Dlabs Acuity Driver Suite runs across the entire Wildcat VP family and includes highly optimized OpenGL and Direct3D drivers, a customized driver for 3D Studio Max and the new 3Dlabs Acuity Window Manager that provides precision window control over multiple displays.

Designed by Professionals for Professionals

3Dlabs is the only PC graphics company solely focused on designing professional-grade accelerators. Wildcat VP560 is a part of the Wildcat VP family that continues this tradition through relentless driver reliability testing and constant optimization and certification of leading professional applications.



Entry-level Dual Display Workstation Graphics with State-of-the-art Programmability

Graphics Evolved



Wildcat VP500 Visual Processor Unit (VPU)

- Over 100 32-bit processors • Programmable SIMD scalar arrays for geometry, texture, pixel processing
- 128-bit DDR memory interface
- Dual integrated 370MHz 10-bit RAMDACs

High-level Programmable Architecture

- · General-purpose programmability throughout pipeline
- · Effective high-level shading language compiler target
- · RISC instruction sets for efficient code generation
- · Automatic parallelization for software transparent speed and scalability
- Sophisticated program flow-control (superset of DX9)

Command Processor

- · Multi-threading capability for multiple virtual VPUs
- · Circular hardware scan for active CPU threads
- 15us second task-switch time
- 3us real-time interrupt response

Geometry Processor

- · Eight 32-bit floating point vertex processors
- Flexible surface and vertex processing
- 16 accelerated lights
- · High precision 32-bit Z-buffer

Texture Processor

- · Industry's most capable texture processor
- · 64 32-bit floating point and integer texture processors
- · Up to eight simultaneous textures in a single pass
- · Programmable texture formats and filters

Pixel Processor

- · 32 32-bit integer pixel processors
- · Highly programmable antialiasing
- · Optimized for superior antialiased lines · Up to four multi-samples in a single pass
- · Programmable image processing and compositing

Virtual Memory Architecture

• Memory used as efficient L2 cache

- · Seamless handling of huge datasets
- Optimal buffer download performance
- Automatically pages out unused buffers

Flexible Dual Display

- Full 2D and 3D acceleration on two displays from a single card
- Dual display control panel and Window Manager
- · Double buffered hardware overlays

In North America:

VP560

1901 McCarthy Boulevard Milpitas, CA 95035 (408) 530-4700 (800) 464-3348

Acuitv[™] Driver Suite

- Unified, highly optimized, certified OpenGL and Direct3D drivers that run on any Wildcat VP board Custom 3D Studio Max drivers
- Acuity Window Manager provides precision window control on dual displays
- Windows XP/Windows 2000/Windows 98/Me
- · OpenGL 1.3 with shader extensions
- DirectX 8.1 with vertex shader 1.1 and pixel shader 1.2
- · Prototype OpenGL 2.0 drivers on request



High-Quality Video Processing

- Hardware color-space conversion Native support for YUV422 video (YUY2 and UYVY)
- · High-quality up/down scaling

Display Connectors

- Dual DVI-I connectors
- · Directly drives dual digital displays
- · One analog display adaptor included
- · Second free analog display adaptor can be requested from 3Dlabs DDC1/2b/2b+ support
- VESA display power management

Package Contents

- Wildcat VP560 professional graphics accelerator
- Installation Guide
- DVI-VGA adapter
- · Second DVI-VGA adaptor available free on request
- · Driver CD, including 3Dlabs Acuity Driver Suite



In Europe: Meadlake Place, Thorpe Lea Road Egham, Surrey TW20 8HE, UK Tel: (44) 1784-470-555

18G AA Samp/sec

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

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|------------------|--------------------------|--------------------------|--------------------------------------|--|--|
| | Memory | Display | Performance* | Value | Summary |
| Wildcat VP970 | 128 MB 256-bit DDR | Independent Dual-head | 225M Vertices/sec 42G AA Samp/sec | Ultimate Visual Processing Performance | The high-end Wildcat VP900 VPU matched with a full 128MB of on-board memory effortlessly handles the toughest applications with extreme levels of geometry and textures. |
| Wildcat VP870 | 128 MB 256-bit DDR | Independent Dual Head | 188M Vertices/sec 35G AA Samp/sec | Powerful, Versatile Productivity | The powerful Wildcat VP800 VPU with 128MB of memory provides the ideal mix of performance and versatility for a wide range of today's most popular professional graphics applications. |
| Wildcat VP760 | 64 MB 256-bit DDR | Independent Dual Head | 165M Vertices/sec 23G AA Samp/sec | Affordable, CAD-optimized Performance | The cost–effective Wildcat VP700 VPU with 64MB of memory delivers highly optimized performance for geometry-intensive CAD applications at a very competitive price. |
| Wildcat | 64MB 128-bit | Independent | 100M Vertices/sec | Entry-level Dual Display | The new-generation Wildcat VP500 VPU packs all the programmability and functionality of the full 3Dlabs Visual processing architecture into an entry level package, making graphics productivity and Visual Processing |

Peak performance figures for comparison purposes

DDR

Dual-head

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Workstation

Graphics

32-bit True Color Display Resolutions

| | Analog | Digital |
|------------|------------|------------|
| Resolution | Refresh Hz | Refresh Hz |
| 640x480 | 200 | 60/75/85 |
| 800x600 | 200 | 60/75/85 |
| 1024x768 | 200 | 60/75/85 |
| 1152x864 | 200 | 60/75/85 |
| 1280x960 | 120 | 60/75/85 |
| 1280x1024 | 120 | 60/75/85 |
| 1600x1200 | 100 | 60 |
| 1920x1080 | 100 | 60 |
| 1920x1200 | 85 | 60 |
| 1920x1440 | 75 | |
| 2048x1536 | 60 | |

This list is a sample of available resolutions. These are maximum values and may not be achieved under all operating conditions.

Optimized for Leading

- **Professional Applications**
- Alias|Wavefront Maya and Studio Tools
- Autodesk AutoCAD
- Autodesk Inventor
- Bentley MicroStation CoCreate One Space Designer
- Dassault CATIA
- Discreet 3ds max
- Discreet Combustion
- EDS I-deas
- NewTek LightWave
 PTC Pro/ENGINEER
 PTC CDRS
- Side Effects Houdini
- Softimage XSI and DS
- SolidWorks SolidWorks
- UG SolidEdge
- UG Unigraphics

System Requirements

· Pentium, Athlon or compatible processor

· Phone hotline, e-mail and Web-based User Forum

3 Dlabs

Graphics **Evolved**

A CREATIVE Company

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• Windows 98/Me/2000/XP

entry-level package - making graphics productivity and Visual Processing flexibility available to everyone

- AGP 1X/2X/4X/8X Slot
- 64MB System Memory
- 16MB Free Disk Space

Support · Three year limited warranty