## Graphics Evolved



## Graphics Productivity and Visual Processing Flexibility for Every Designer

- Leading OpenGL<sup>®</sup> and Direct3D<sup>®</sup> performance
- Dual independent high-resolution displays
- Full 3Dlabs<sup>®</sup> Acuity<sup>™</sup> 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<sup>™</sup> 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**

Refresh Hz Refresh Hz

Digital

60/75/85

60/75/85

60/75/85

60/75/85

60/75/85

60/75/85

60

60

60

32-bit True Color Display Resolutions

Resolution

640x480

800x600

1024x768

1152x864

1280x960

1280x1024

1600x1200

1920x1080

1920x1200

1920x1440

2048x1536

Optimized for Leading

 Autodesk AutoCAD Autodesk Inventor

 Bentley MicroStation CoCreate One Space Designer

Discreet Combustion

Dassault CATIA

EDS I-deas

Discreet 3ds max

**Professional Applications** 

Analog

200

200

200

200

120

120

100

100

85

75

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

Alias|Wavefront Maya and Studio Tools



#### 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

In Europe:

- single card Dual display control panel and Window Manager
- · Double buffered hardware overlays

#### In North America:

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

#### Acuitv<sup>™</sup> 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





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A CREATIVE Company

	Memory	Display	Performance*	Value	Summary
Wildcat VP970	128 MB 256-bit DDR	Independent Dual-head	225M Vertices/sec 42G AA Samp/sec	Processing	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	Vareatila	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		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 VP560	64MB 128-bit DDR	Independent Dual-head	100M Vertices/sec 18G AA Samp/sec		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 flexibility available to everyone

\* Peak performance figures for comparison purposes.

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#### System Requirements

- · Pentium, Athlon or compatible processor
- Windows 98/Me/2000/XP
- AGP 1X/2X/4X/8X Slot
- 64MB System Memory
- 16MB Free Disk Space

#### Support

· Three year limited warranty

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



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