3Dlabs

Wildcat VP 970

Ultimate Visual Processing Performance

- 128 MB 256-bit DDR SDRAM
- 100% Programmable Visual Processing
- Leading OpenGL and Direct3D performance
- Over 200Gflop and 1.2 TeraOp VPU
- Professional-grade reliability and quality
- From a family of price/performance options

Visual Processing Architecture

Wildcat VP uses 3Dlabs' ground-breaking Visual Processing Architecture to integrate over 200 32-bit processors into a single Visual Processing Unit (VPU) for a staggering 200Gflops and 1.2 TeraOps of programmable power. Wildcat VP's power and flexibility provide industrial-strength 2D and 3D performance, quality and functionality for OpenGL® and Direct3D® applications.

Advanced Multitasking Architecture

Wildcat VP's innovative fast task-switching capability provides the power of multiple dedicated graphics engines. Designers can move seamlessly among numerous graphics windows for a highly productive workflow, using multiple virtual VPUs.

Enhanced Dual-head Display

Wildcat VP drives two independent, high-resolution displays with a mix of analog and digital display options. Dual 10-bit DACs provide flawless color representation by eliminating distracting display artifacts.

Designed by Professionals for Professionals

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

100% Programmability

Genuine programmability throughout the entire Wildcat VP pipeline provides a superset of traditional graphics processor functionality and is a step towards interactive Renderman-class rendering. Wildcat VP supports the emerging OpenGL 2.0 and Microsoft's HLSL high-level shading languages that extend the boundaries of interactive visual realism.

High Performance Virtual Memory

The highly innovative 16GB virtual memory of Wildcat VP shatters the limitation of on-board memory by automatically handling huge datasets, while caching essential data for fastest access. The industry's first genuine 256-bit DDR memory interface delivers incredible bandwidth to keep the most demanding applications running smoothly.

Wildcat VP delivers ultimate graphics design freedom through leading-edge visual programmability.

Wildcat VP 970

Wildcat VP Visual Processor Unit (VPU)
- Over 200 32-bit processors
- 200GFlops and 1.2 TeraOps of processing power
- SIMD scalar arrays: geometry, texture, pixel processing
- 256-bit DDR memory interface
- Dual integrated 370MHz 10-bit RAMDACs

High-level Programmable Architecture
- General-purpose programmability throughout pipeline
- Effective shading language compiler target
- RISC instruction sets for efficient code generation
- Automatic parallelization for 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
- 16 32-bit floating point processors
- Flexible surface and vertex processing
- 16 accelerated lights
- High precision 32-bit Z-buffer

Texture Processor
- Industry's most capable texture processor
- 128 32-bit floating point and integer processors
- Up to eight simultaneous textures in a single pass
- Programmable texture formats and filters

Pixel Processor
- 64 32-bit integer processors
- Highly programmable antialiasing
- Optimized for superior antialiased lines
- Up to eight 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

Drivers
- Windows XP/Windows 2000/Windows 98/Me
- OpenGL with shader extensions
- DirectX 8.1 with vertex shader 1.1 and pixel shader 1.2
- Prototype OpenGL 2.0 drivers on request

Flexible Dual Display
- Full 2D and 3D acceleration on two displays
- Double buffered hardware overlays
- Two Analog displays (DVI-VGA adapter incl.) *or*
- One Analog and One Digital display
- Dual display control panel

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

Display Connectors
- VGA connector (DB-15 analog)
- DVI-I connector - digital and analog output
- 3-pin mini-DIN stereo sync output
- DDC1/2b/2b+ support
- VESA display power management

Package Contents
- Wildcat VP professional graphics accelerator
- Installation Guide
- DVI-VGA adapter
- Driver CD
- Bonus Applications CD *including*
- Virtual desktop manager

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	120	60
1920x1080	120	60
1920x1200	100	60
1920x1440	90	
2048x1536	80	
2048x2048	60	

This list is only a sample of those available. These values are maximums 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 Combustion2
- EDS I-deas
- NewTek LightWave
- PTC Pro/ENGINEER
- PTC CDRS
- Side Effects Houdini
- Softimage XSI and DS
- SolidWorks SolidWorks 2001 Plus
- UG SolidEdge
- UG Unigraphics

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

Support
- Three year limited warranty
- Phone hotline, e-mail and WebForum

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3Dlabs Graphics Evolved
A CREATIVE Company

Product	Memory	Display	Performance	Value	Summary
Wildcat VP970	128MB 256-bit DDR	Independent Dual Head	225M Vertices/sec 42G AA Samples/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 texture.

Peak performance figures are provided for relative geometry and texture performance purposes.