

# VOODOO 4 4500 PCI

2D/3D ACCELERATOR 32MB MEMORY

Voodoo4 4500 PCI delivers all the power and performance PC owners demand from 3dfx™. Designed around the new 3dfx VSA-100™ chip, Voodoo4 4500 PCI features a 3D engine capable of rendering over 333 Megapixels per second and a 350 MHz RAMDAC for 2D resolutions as high as 2048x1536. Working together they bring both 2D Windows applications and 3D games to life in glorious 32-bit color. With support for all major API's including DirectX®, Glide® and OpenGL®, Voodoo4 4500 PCI boasts the largest library of titles available for PC. A perfect balance of price and performance, Voodoo4 4500 PCI is the ideal 2D/3D accelerator for today's home PC enthusiast.

## Product Features

- Fully-Integrated 128-bit 2D/3D/Video Accelerator
- 32MB of Graphics Memory
- 32-bit Color Rendering
- 3dfx FXT1™ and DirectX® Texture Compression
- 2K x 2K Textures
- 350MHz RAMDAC for Resolutions Up to 2048 x 1536
- Windows® 95, 98, and 2000 Drivers



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## 3D Acceleration

- Dual Pixel Pipeline: 2-Pixels/Clock (Single Texture) or 2 Textures/Clock (Single Pixel)
- Exclusive T-Buffer™ Digital Cinematic Effects
  - Depth of Field Blur
  - Motion Blur
  - Soft Shadows
  - Soft Reflections
- 32-bit RGBA Color Rendering
- 24-bit Floating Point Depth Buffer (Z and W)
- 8-bit Stencil Buffer
- 32-bit Textures
- 2K x 2K Texture Size
- DirectX® and FXT1™ Texture Compression Support
- Supports Multi-Triangle Strips and Fans
- Transparency/Chroma-Key with Dedicated Color Mask
- Alpha Blending of Source and Destination Pixels
- Sub-Pixel and Sub-Texel Correction to 0.4 x 0.4 Resolution
- Per-Pixel Atmospheric Fog with Programmable Fog Zones
- Dynamic Environment Mapping
- Perspective-Correct True Divide-per-Pixel 3D Texture Mapping and Gouraud Shading
- Single-Cycle Bump Mapping
- Single-Cycle Trilinear Mip-Mapping

## Video Acceleration and Features

- Planar-to-Packed-Pixel Digital Video Format Conversion
- Industry Standard VMI 1.4 (ITU601) and VIP 1.1 (ITU656) Video Input Port
- 350MHz RAMDAC for Refresh Rates up to 160Hz
- FIFO Optimized for High-Speed Bursting of Geometry and Texture Data
- Bi-Endian Byte Ordering Support

## Refresh Rates (Hz)

NUMBER OF COLORS						
RESOLUTION	Aspect Ratio	256	65K	16.7M	Recomm. Monitor Size	
	640x480	4:3	60:160	60:160	60:160	14" +
	800x600	4:3	60:160	60:160	60:160	
	1024x768	4:3	60:120	60:120	60:120	17" +
	1152x864	4:3	60:120	60:120	60:120	
	1280x1024	5:4	60:100	60:100	60:100	21" +
	1600x1024	16:10	60:85	60:85	60:85	
	1600x1200	4:3	60:100	60:100	60:100	24" +
	1920x1080	16:9	60:85	60:85	60:85	
	1920x1200	16:10	60:85	60:85	60:85	
	1920x1440	4:3	60:75	60:75	60:75	
	2048x1536	4:3	60:75	60:75	60:75	

## Software Support

- Windows® 95, 98, and 2000 Device Drivers
- Industry's Most Comprehensive 3D API Support: Microsoft DirectX®, OpenGL®, Glide 2.x and 3.x
- MPEG-2: Support for Hardware and Software MPEG-2 Encoders and Decoders from Leading Suppliers via Microsoft DirectShow®

**3dfx**  
www.3dfx.com

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