Overview

NVIDIA Quadro FX2000 Graphics Controller

Models

DE806B

Introduction

The new high end NVIDIA Quadro FX 2000 graphics card offers ultimate workstation feature-set and performance. With programmable shaders, dual DVI-I display support and the new nView software, the Quadro FX 2000 is the most powerful and robust workstation graphics product on the market. The Quadro FX 2000 represents a revolutionary combination of performance and features, including 128 MB DDR2 memory, nfiniteFX II programmable graphics pipeline and performance optimized OpenGL and DirectX drivers. Features also include a unified memory architecture, which dynamically allocates memory between graphics subsystems, Lightspeed Memory Architecture (LMA) II, which optimally load balances across NVIDIA's patented crossbar memory controller, resulting in maximum memory bandwidth utilization. The Quadro FX 2000 Graphics Controller is a perfect solution for the high end CAD and professional DCC user communities requiring breakthrough application performance.

Key Benefits

- Hardware overlays
- Hardware accelerated antialiased points and lines
- Two-sided lighting
- Occlusion culling
- Advanced full-scene antialiasing
- OpenGL quad-buffered stereo
- Optimized and certified for OpenGL1.3 and DirectX.8
- Multi-display productivity

Performance

The Quadro FX 2000 is optimized for professional High End CAD and DCC configurations.

Compatibility

The Quadro FX 2000 is supported on HP Personal Workstations xw4100, xw6000 and xw8000.

Service and Support

The NVIDIA Quadro FX 2000 has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.

Technical Specifications

Form Factor	ATX
Graphics Controller	NVIDIA NV30GL GPU
Bus Type	AGP 8X Version 3.0 compliant
RAMDAC	Dual 400 MHz integrated
Memory	128 MB DDR2 SDRAM unified frame buffer, Z-buffer and Texture storage
Connectors	2 DVI-I analog/digital monitor outputs, 1 3-pin Mini DIN stereo output
Multi-monitor support	Dual integrated display controllers supporting up to 2048x1536 @ 85Hz on both displays
Additional product features	128 MB DDR2 SDRAM unified frame buffer, Z-buffer and Texture storage 128 KB BIOS 3.3V Flash ROM reprogrammable by SW Hardware Overlay Planes Hardware two-sided lighting Hardware accelerated antialiased points and lines Quad-buffered Stereo Diamond exit rule line rasterization for improved line quality 3D Texture support Occlusion Culling Dual Link DVI on one output enabling driving digital displays up to 2048x1536 Compliant with Microsoft®/Intel® PC2001 Workstation requirements Video Timings compliant with VESA DMT 1.0 and VESA GTF 1.0 specifications DDC2B+ Monitor support on all OS platforms ACPI Version 1.0b Power Management support (all modes)
AGP1x/2x/4x/8x Version 3.0 compliant including	Sideband Addressing AGP Texturing (Execute Mode) Fast writes support
NV30GL GPU featuring:	400 MHz engine clock rate 400 MHz memory clock rate 128-bit memory interface VGA controller 8 parallel pixel pipelines 3 parallel geometry engines nfiniteFX II programmable vertex and pixel shader technology
Supported graphics APIs	OpenGL 1.3 ICD with immediate mode support for all OGL primitive types DirectX 8,9
Available graphics drivers	Microsoft Windows 2000 and Microsoft Windows XP Red Hat Linux HP qualified drivers may be preloaded or available from the HP support Web site: http://welcome.hp.com/country/us/eng/software_drivers.html.

NVIDIA Quadro FX 2000 Graphics Card display resolutions & refresh rates

MONITOR 1, 2 ANALOG/DIGITAL

Resolution	Maximum Refresh Rate	Bits per Pixel
640x480	240Hz/240Hz	8, 16, 32
800x600	240Hz/200Hz	8, 16, 32
1024x768	200Hz/140Hz	8, 16, 32
1152x864	170Hz/100Hz	8, 16, 32
1280x720	150Hz/120Hz	8, 16, 32
1280x960	150Hz/85Hz	8, 16, 32
1280x1024	150Hz/85Hz	8, 16, 32
1600x900	120Hz/75Hz	8, 16, 32
1600x1024	100Hz/72Hz	8, 16, 32
1600x1200	120Hz/60Hz	8, 16
1600x1200	100Hz/60Hz	32
1920x1080	100Hz/60Hz in Dual Link Mode	8, 16
1920x1080	85Hz/60Hz in Dual Link Mode	32
1920x1200	100Hz/60Hz in Dual Link Mode	8, 16
1920x1200	85Hz/60Hz in Dual Link Mode	32
1920x1440	85Hz/60Hz in Dual Link Mode	8, 16, 32
2048x1536	85Hz/60Hz in Dual Link Mode	8, 16, 32