QuickSpecs

Overview

Models

NVIDIA Quadro 2000 1GB Graphics Card   WS094AA

Introduction

The NVIDIA Quadro 2000, based on Fermi architecture, maximizes productivity for engineers and designers by up to 5 times*

Overview

Performance and Features

- Powered by the Quadro Scalable Geometry Engine, Quadro 2000 delivers dramatically higher performance across leading CAD and DCC applications such as SolidWorks and 3ds max.
- Configured with 1GB of fast GDDR5 memory, the Quadro 2000 has 33% more memory for interactive visualization of assemblies and scenes*
- Armed with 3 times the number of NVIDIA CUDA Cores*, Quadro 2000 enables professionals to perform real-time simulation and analysis, along with advanced visualization.
- The highest visual fidelity for the discerning designer and engineer is enabled by a rich, 30-bit color engine that produces vivid image quality with the broadest dynamic range of over one billion colors. Dramatically reduce visual aliasing artifacts with up to 64X full-scene antialiasing (FSAA).
- The Quadro GPU Tessellation Engine for OpenGL 4.0 and DirectX11 with Shader Model 5.0 automatically generates finely detailed geometry for cinematic quality environments and scenes without sacrificing performance.
- Robust NVIDIA drivers that increase application performance over time delivering the ultimate in investment protection.
- NVIDIA SLI Multi OS enables professionals to run multiple Windows or Linux environments from a single workstation, with each Operating System directly assigned to a Quadro 2000 graphics solution.
- Professional applications take full advantage of Quadro GPU accelerated features on both operating systems.
- Efficiently lowers system total cost of ownership by reducing capital equipment, power consumption, and space requirements.
- NVIDIA Panoramic Mode enables any application to seamlessly scale across multiple, matching Quadro professional graphics boards and up to 8 high resolution displays with no loss in performance. Whether the application is CATIA, 3dsMax or Microsoft PowerPoint, press the maximize button and the application will seamlessly span across all displays.
- NVIDIA nView™ display management software allows users to spread their work across single or multiple high resolution displays through user friendly desktop and application management features.

* Compared to previous generation Quadro FX 1800 solution

Compatibility

The Quadro 2000 is supported on the following HP Personal Workstations: Z800, Z600, Z400, Z200

Service and Support

The NVIDIA Quadro 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	4.376" H x 7" L Single Slot
Graphics Controller	NVIDIA Quadro 2000 Graphics Card
Bus Type	PCI Express 2.0 x16
Memory	1 GB GDDR5 128-bit
Connectors	1 DVI-I output, 2 DisplayPort outputs One DP to DVI adapter included with card DVI to VGA, DisplayPort to VGA and DisplayPort to DVI adapters available as accessories
Maximum Resolution	Dual DisplayPort (up to 2560 x 1600 @ 60Hz and 1920x1200 @ 120Hz) Dual-link DVI-I output (up to 2560 x 1600 @ 60Hz and 1920x1200 @ 120Hz)
Image Quality Features	• Up to 16K x16K texture and render processing • Transparent multisampling and super sampling • 16x angle independent anisotropic filtering • 128-bit floating point performance • 32-bit per-component floating point texture filtering and blending • Support for any combination of two connected displays • DisplayPort 1.1a, HDMI 1.3a, and HDCP support • NVIDIA® 3D Vision™ technology, 3D DLP, Interleaved, and other 3D stereo format support • Full OpenGL quad buffered stereo support • Underscan/overscan compensation and hardware scaling • NVIDIA® nView® multi-display technology
Shading Architecture	Shader Model 5.0
Supported Graphics APIs	OpenGL 4.0 DirectX 11 CUDA API support includes: CUDA C, CUDA C++, DirectCompute 5.0, OpenCL, Java, Python, and Fortran
Available Graphics Drivers	Genuine Windows 7 Professional (64-bit and 32-bit) Genuine Windows Vista Business (64-bit and 32-bit) Microsoft Windows XP Professional (64-bit and 32-bit) Red Hat Enterprise Linux (RHEL) WS4 (64-bit and 32-bit) * WS4 not supported on Z200 and Z200 SFF Red Hat Enterprise Linux (RHEL) 5 Desktop/Workstation (64-bit and 32-bit) SUSE Linux Enterprise Desktop 11 (64-bit and 32-bit) HP qualified drivers may be preloaded or available from the HP support Web site: http://welcome.hp.com/country/us/en/support.html Novell SUSE Linux Enterprise drivers may also be obtained from: ftp://download.nvidia.com/novell or http://www.nvidia.com
Parallel Processor Cores	192 CUDA parallel processing cores
Power consumption	62 Watts