

Overview

Models

NVIDIA Quadro FX 4800 1.5GB PCIe Graphics Card

FQ138AA

Introduction

Whether designing and bringing the next luxury vehicle to market, creating the next blockbuster film, or providing a diagnosis of a patient's condition, professionals push the boundaries of realism, performance, and quality everyday. In an increasingly competitive and high-pressure landscape, they need to deliver results better, faster, and more cost effectively than ever before and traditional processing paradigms just cannot keep up.

To get ahead of this trend, a new visual computing model is emerging based on the latest generation NVIDIA® Quadro® FX high-end graphics cards, like the Quadro FX 4800. Professional applications take advantage of the card's advanced feature set, including 1.5 GB of graphics memory and high color fidelity, providing the right set of tools to deliver results that push the realms of visual computing. The Quadro FX 4800 is built on the second-generation NVIDIA GPU unified architecture, delivering up to 50% increased performance over the first generation through 192 processor cores.

The entire Quadro family takes professional visualization applications to a new level of interactivity by enabling unprecedented programmability and precision. The industry's leading workstation applications leverage these capabilities to deliver hardware-accelerated features, performance, and quality not found in other professional graphics solutions.

Performance and Features

- Massive 1.5GB frame buffer and memory bandwidth up to 76.8 GB/sec. delivers high throughput for interactive visualization of large models and high-performance for real time processing of large textures and frames and enables the highest quality and resolution full-scene antialiasing (FSAA).
- Highest Color Fidelity: 10-bit per component color fidelity enables billions rather than millions of color variations for rich, vivid image quality with the broadest dynamic range.
- Dual DisplayPort Digital Display Connectors: Dual DisplayPort connectors support ultra-high-resolution panels (up to 2560 x 1600) --resulting in amazing image quality and producing detailed photorealistic images.
- Single Dual-Link Digital Display Connector: Dual-link TMDS transmitter supports ultra-high-resolution panels (up to 2560 x 1600) resulting in amazing image quality producing and detailed photorealistic images.
- Quad Buffered Stereo: Offers enhanced visual experience for professional applications that demand stereo viewing capability.
- NVIDIA® SLI® Technology: A revolutionary platform innovation that enables professional users to dynamically scale graphics performance, enhanced image quality, and expands display real estate.
- NVIDIA® SLI® Multi OS: Allows a user to run multiple Windows workstation environments from a single system, with each Operating System directly assigned to a Quadro graphics solution.
- NVIDIA® CUDA™ Parallel Computing Processor: The parallel computing processor architecture is exposed through a C language environment and tool suite. In combination with high performance visualization, CUDA unleashes new capabilities to solve highly complex challenges such as real-time ray tracing, video encoding, and interactive volume rendering.

*Paired with NVIDIA Quadro® G-Sync (available from a 3rd party) option delivers Frame lock/Genlock functionality for unprecedented levels of realism, visualization and collaborative capabilities

*NVIDIA Quadro® SDI (available from a 3rd party) is the industry-leading integrated graphics-to-video solution for broadcast and video professionals that delivers high performance graphics to uncompressed 12-bit HD SDI, enabling a direct connection to broadcast equipment.

*Integrated in NVIDIA Quadro® Plex Visual Computing System (available from a 3rd party) delivers a quantum leap in visual computing, enabling breakthrough levels of capability and productivity from a high density, industry standards-based architecture



Overview

Compatibility

The Quadro FX 4800 is supported on the following HP Personal Workstations: Z400, Z600, Z800, xw4600, xw6600, xw8600 and xw9400.

Service and Support

The NVIDIA Quadro FX 4800 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	4.36" (H) x 10.5" (L) Dual slot card
Graphics Controller	NVIDIA Quadro FX 4800 graphics board
Bus Type	PCI Express x16, Generation 2.0
Memory	1.5 GB GDDR3 SDRAM unified graphics memory
Connectors	2 DisplayPort, 1 Dual-Link DVI-I, 1 3-pin Mini DIN stereo output, One DisplayPort to DVI-D adapter included (DVI to VGA, DisplayPort to VGA and DisplayPort to Dual Link DVI adapters available as an accessory)
Maximum Resolution	<ul style="list-style-type: none">• 2 DisplayPort connectors support ultra-high-resolution panels (up to 2560 x 1600)• Dual-link DVI-I output drives one digital display at resolutions up to 2560 x 1600 @ 60Hz• Internal 400 MHz DACs-One analog display up to 2048 x 1536 @ 85Hz
Shading Architecture	<p>NOTE: This card supports up to two displays</p> <ul style="list-style-type: none">• Full Shader Model 4.0 (OpenGL 2.1/DirectX 10 class)• Long fragment programs (unlimited instructions)• Long vertex programs (unlimited instructions)• Looping and subroutines (up to 256 loops per vertex program)• Dynamic flow control• Conditional execution
Supported Graphics APIs	OpenGL 3.0 DirectX 10.0
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) 5 Desktop/Workstation Red Hat Enterprise Linux (RHEL) 6 Desktop/Workstation 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
Power Consumption	146 Watts

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