Overview

Models

NVIDIA Quadro K2000 2GB Graphics   C2J93AA

Introduction

The NVIDIA Quadro K2000 graphics board is a single slot PCI Express add-in card based on the new NVIDIA Kepler architecture graphics processing unit (GPU). The Quadro K2000 graphics board is an excellent choice for medium complexity designs and models in professional CAD, M&E and visualization applications.

Performance and Features

- Comprehensive ISV certifications for professional environments
- Ultra-efficient 51W maximum power provides industry leading performance/watt results.
- 2 GB of blazing GDDR5 memory
- Attach up to 4 active digital monitors using DisplayPort daisy chaining monitors or by a DisplayPort hub device.
- Direct attach up to 3 active monitors using all available display connectors on the Quadro K2000
- Latest graphics API's supported including OpenGL 4.3 and CUDA 5.0
- Windows 8 compliant
- NVIDIA Mosaic Technology enabled
- NVIDIA nView™ multi-display management

Compatibility

The Quadro K2000 is supported on the following HP Personal Workstations:

- Z820, Z620, Z420, Z220

Service and Support

The NVIDIA Quadro K2000 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	4.38" H x 7.97" L Single Slot, Full Height
Graphics Controller	NVIDIA Quadro K2000 Graphics Card Kepler GK107 GPU 384 CUDA cores Max Power: 51.1 Watts
Bus Type	PCI Express 2.0 x16
Memory	2 GB GDDR5, 2000 Mhz 128-bit memory I/O path 64 GB/s memory bandwidth
Connectors	1 DL-DVI(I) output, 2 DisplayPort outputs CTO: No video cable adapter included AMO: One DP-to-DVI adapter included with card Additional DVI-to-VGA, DisplayPort-to-VGA or DisplayPort-to-DVI adapters are available as accessories
Maximum Resolution	DisplayPort: - up to 3840 x 2160 x 30 bpp @ 60Hz - supports High Bit Rate 2 (HBR2) and Multi-Stream Transport (MST) DL-DVI(I) output: - up to 2560 x 1600 x 32 bpp @ 60Hz
Image Quality Features	10-bit internal display processing pipeline 10-bit scan-out support
Display Output	VGA: - requires use of DVI-to-VGA and/or DP-to-VGA video cable adapters - 400 Mhz integrated RAMDAC - Max resolution: 2048 x 1536 x 32 bpp @ 85 Hz DL-DVI(I): - Max resolution: 2560 x 1600 x 32 bpp @ 60 Hz SL-DVI(I): - Max resolution: 1920 x 1200 x 32 bpp @ 60 Hz DisplayPort: - Supports HBR2 and MST - Max resolution: 3840 x 2160 x 30 bpp @ 60 Hz (only one monitor can be connected to a Quadro K2000 DisplayPort connector at this resolution) - Max number of DisplayPort daisy-chained monitors or hub connected monitors from a single Quadro K2000 DisplayPort connector: 4 with maximum resolution of 1920 x 1200 Maximum number of monitors across all available Quadro K2000 outputs is 4.
Shading Architecture	Full Microsoft DirectX 11 Shader Model 5.0
Supported Graphics APIs	OpenGL 4.3 DirectX 11 API support includes: CUDA C, CUDA C++, DirectCompute 5.0, OpenCL, Java, Python, and Fortran
Available Graphics	Windows 8 Pro 64-bit

Technical Specifications

Drivers
Windows 8 (China) 64-bit
Genuine Windows 7 Professional (64-bit and 32-bit)

Red Hat Enterprise Linux (RHEL) 5 Desktop/Workstation (64-bit)
Red Hat Enterprise Linux(RHEL) 6 Desktop/Workstation
SUSE Linux Enterprise Desktop 11 (64-bit)

HP qualified drivers may be preloaded or available from the HP support Web site:
http://welcome.hp.com/country/us/en/support.html

SUSE Linux Enterprise drivers may also be obtained from: ftp://download.nvidia.com/novell or
http://www.nvidia.com

Notes
1. Quadro K2000 offered as CTO does not include a video cable adapter. Video cable adapters must be ordered separately.
2. Quadro K2000 offered as AMO includes one DP-to-DVI video cable adapter. Additional cables must be ordered separately.
3. Quadro K2000 is Windows 8 Compliant.
4. A total maximum of 4 active monitors are supported across all display output types. To get 4 monitors, at least one monitor must be daisy chained on a DisplayPort output.
5. A DisplayPort hub device may be used to connect multiple DisplayPort monitors to a single Quadro K2000 DisplayPort output.