

Technical Specifications

NVIDIA Quadro K2200 4GB Graphics



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J3G88AA

INTRODUCTION

The NVIDIA Quadro K2200 delivers outstanding professional 3D application performance in a sub-75 Watt graphics design. Ultra-fast 4GB of GDDR5 GPU memory enables you to create large, complex models. The single-slot full height form factor makes it compatible with every currently offered HP Z workstation tower system. Plus, an all-new display engine drives up to four displays with DisplayPort 1.2 support for ultra-high resolutions up to 4096x2160 @ 60 Hz with 30-bit color.

The NVIDIA Quadro K2200 is an excellent choice as a mainstream workhorse graphics solution for many product design challenges and media and entertainment creation.

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PERFORMANCE AND FEATURES

- Powerful midrange graphics performance delivered by NVIDIA's new Maxwell GPU architecture
- Large 4GB ultra-fast GDDR5 memory accommodates larger models and datasets
- Quad-display support with a new display engine that can drive ultra-high resolutions up to 4096 x 2160 @ 60Hz with 30-bit color depth
- All the professional ISV application certifications that one can expect
- Support for NVIDIA® Quadro® Mosaic, NVIDIA® nView® multi-display technology
- 640 CUDA parallel processing cores can be used to accelerate single precision computing workflows

COMPATIBILITY

The NVIDIA Quadro K2200 is supported in the following HP Z Workstations:

- Z440, Z640, Z840

SERVICE AND SUPPORT

The NVIDIA Quadro K2200 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	Dimensions: 4.376" H x 7.97" L Single Slot, Full Height Cooling: Active Weight: 240 grams
Graphics Controller	NVIDIA Quadro K2200 Graphics Card GPU: GM107 with 640 CUDA cores Power: 68 Watts
Bus Type	PCI Express 2.0 x16
Memory	Size: 4GB GDDR5 Memory Bandwidth: 80 GB/s Memory Width: 128-bit
Connectors	1 DL-DVI(I) 2 DisplayPort 1.2a Factory Configured Option: No video cable adapter included Option Kit: 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 4096 x 2160 x 30 bpp @ 60Hz - supports High Bit Rate 2 (HBR2) and Multi-Stream Transport (MST)

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DL-DVI(I) output:
- up to 2560 x 1600 x 32 bpp @ 60Hz

Single Link-DVI(I) output:
- up to 1920 x 1200 x 32 bpp @ 60Hz

VGA (via adapter cable):
- 2048 x 1536 x 32 bpp at 85 Hz

Image Quality Features

12-bit internal display pipeline (hardware support for 12-bit scanout on supported panels, applications and connection)

Stereoscopic 3D display support including NVIDIA® 3D Vision™ technology, 3D DLP, Interleaved, and passive stereo

Display Output

Maximum number of displays
- 3 direct attached monitors
- 4 using DP 1.2a with MST and HBR2 enabled monitors

Maximum number of DisplayPort displays possible (may require MST and/or HBR2):
- 4 1920x1200
- 4 2560x1600
- 2 4096x2160

Maximum number of monitors across all available Quadro K2200 outputs is 4.

Shading Architecture

Shader Model 5.0

Supported Graphics APIs

OpenGL 4.4
DirectX 11.1

API support includes:
CUDA C, CUDA C++, DirectCompute 5.0, OpenCL, Java, Python, and Fortran

Available Graphics Drivers

Microsoft Windows 8.1
Microsoft Windows 8
Microsoft Windows 7
Linux - Full OpenGL implementation, complete with NVIDIA and ARB extensions

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

Notes

1. Quadro K2200 offered as Factory Configured Option does not include a video cable adapter. Video cable adapters must be ordered separately.
2. Quadro K2200 offered as an Option Kit includes one DP-to-DVI video cable adapter. Additional cables must be ordered separately.
3. A total maximum of 4 active monitors are supported across all display output types. This may be accomplished by using daisy chained DisplayPort 1.2 displays (displays must support MST and HBR2).

Summary of Changes

Date of change:	Version History:		Description of change:
Sept 15, 2014	Version 1	Added	Migrate to current template, add product photo

Summary of Changes

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