

Overview



NVIDIA Quadro K620 2GB Graphics

J3G87AA

Introduction

The NVIDIA Quadro K620 offers impressive power-efficient 3D application performance and capability in a low profile design. 2 GB of DDR3 GPU memory with fast bandwidth enables you to create large, complex 3D models, and a flexible single-slot and low-profile form factor makes it compatible with even the most space and power-constrained chassis. Plus, an all-new display engine drives up to four displays with DisplayPort 1.2 support for ultra-high resolutions like 4096x2160 @ 60 Hz with 30-bit color.

The Quadro K620 is an excellent card for medium sized product development activities and media creation.

Performance and Features

- Powerful graphics in a flexible form factor
- New NVIDIA Maxwell GPU architecture delivers advanced, power-efficient 3D application performance
- Comes with an extensive set of ISV applications certifications
- 2GB DDR3 GPU memory to handle more demanding models and datasets
- Up to quad-display support (using DisplayPort 1.2 MST technology)
- New display engine supports ultra-high resolution monitors like 4096x2160 @ 60Hz
- Support for NVIDIA® Quadro® Mosaic, NVIDIA® nView® multi-display technology

Overview

Compatibility

The NVIDIA Quadro K620 is supported in the following HP Z Workstations:

- Z440, Z640, Z840

Service and Support

The NVIDIA Quadro K620 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: 2.713" H x 6.3" L Single Slot, Low Profile Cooling: Active Weight: 133 grams
Graphics Controller	NVIDIA Quadro K620 GPU: GM107 GPU with 384 CUDA cores Power: 45 Watts
Bus Type	PCI Express 2.0 x16
Memory	Size: 2GB GDDR3 Memory Bandwidth: 29 GB/s Memory Width: 128-bit
Connectors	1 DL-DVI(I) 1 DisplayPort Factory Configured: No video cable adapter included After market 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 Factory Configuration or Option Kit accessories.
Maximum Resolution	DisplayPort 1.2: - up to 4096x2160 x 30 bpp @ 60Hz - supports High Bit Rate 2 (HBR2) and Multi-Stream Transport (MST) Dual Link 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: - 2 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 - 2 2560x1600 - 1 4096x2160 Maximum number of monitors across all available Quadro K620 outputs is 4.

Technical Specifications

Shading Architecture Shader Model 5.0

Supported Graphics APIs OpenGL 4.4
DirectX 11

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. Factory configured Quadro K620 does not include a video cable adapter. Video cable adapters must be ordered separately.
2. Quadro K620 offered as an Option Kit (AMO) includes one DP-to-DVI video cable adapter. Additional cables must be ordered separately.
3. Full Height Profile bracket installed. Low Profile bracket included in after market kit.

© Copyright 2014 Hewlett-Packard Development Company, L.P.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.