

### PART NUMBER:

VCQK620WE-PB

# NVIDIA Quadro K620 + 2 Year Warranty Extension by PNY

POWERFUL GRAPHICS IN A FLEXIBLE FORM FACTOR

To better protect your investment, PNY offers a comprehensive extended 5 Year warranty to your NVIDIA Quadro K620 card.

- Additional 2 Year Extended Warranty Service for your **NVIDIA** card by PNY
- Advanced Product Replacement (for European Union countries, Norway and Switzerland)



The NVIDIA Quadro K620 offers impressive power-efficient 3D application performance and capability. 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, there's the DisplayPort 1.2 support for ultra-high resolutions like 4096x2160 @ 60 Hz with 30-bit color and the all-new display engine that drives up to four displays natively.

The PNY Warranty Extension Service must be purchased and activated within the first 90 days from the date of purchase of the NVIDIA card from PNY subject of the so-called Warranty Extension, with proof of invoice requested.

Activation of the PNY Warranty Extension must be done on http://warranty.pny.eu/activation.html using the Activation Code included in the purchased Warranty Extension Packaging. Serial Number and proof of purchase of the NVIDIA card by PNY subject to the Warranty Extension will also be needed to register.

# **QUADRO K620 - PRODUCT SPECIFICATIONS**

GPU MEMORY	2 GB GDDR3
MEMORY INTERFACE	128-bit
MEMORY BANDWIDTH	29 GB/s
CUDA CORES	384
SYSTEM INTERFACE	PCI Express 2.0 x16
MAX POWER CONSUMPTION	45 W
THERMAL SOLUTION	Ultra-quiet active fansink
FORM FACTOR	68.91 mm (H) x 160.02 mm (L) Single Slot, Low Profile
DISPLAY CONNECTORS	1 x DVH DL, 1 x DP1.2
MAX SIMULTANEOUS DISPLAYS	2 direct, 4 DP 1.2 Multi-Stream
MAX DP 1.2 RESOLUTION	4096 x 2160 @ 60 Hz
MAX DVI-I DL RESOLUTION	2560 x1600 @ 60 Hz 1920 x1200 @ 120 Hz
MAX DVI-I SL RESOLUTION	1920 x1200 @ 60 Hz
MAX VGA RESOLUTION	2048 × 1536 at 85 Hz
GRAPHICS APIS	Shader Model 5.0, OpenGL 4.5 <sup>1</sup> , DirectX 11.2 <sup>2</sup>
COMPUTE APIS	CUDA, DirectCompute, OpenCL
PACKAGE CONTENT	- 1 x DP to DVI (SL) adapter - 1 x DVI to VGA adapter - 1 x Low Profile bracket - 1 x Warranty Extension Pack
PART NUMBER	VCQK620WE-PB
EAN NUMBER	3536403344405

<sup>1</sup> Product is based on a published Khronos Specification, and is expected to pass the Khronos Conformance Testing Process when available. Current conformance status can be found at www.khronos.org/conformance  $^2$  GPU supports DX 11.2 API, Hardware Feature Level DX 11.0





## Quadro K620 - TECHNICAL SPECIFICATIONS AND FEATURES

QUAD-DISPLAY SUPPORT	A 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.
	NVIDIA GPU architecture delivers advanced, power-efficient 3D application performance. A flexible single-slot, low-profile form factor with no need for external power connectors makes this card compatible with even the most space and power constrained chassis.
2 GB DDR3 GPU MEMORY WITH FAST DATA TRANSFER	Large GPU memory with fast bandwidth enables the creation of large, complex 3D models.

# Quadro K620 - FEATURES

- DisplayPort 1.2
- DisplayPort with Audio
- DVI-I Dual-Link Connector
- VGA Support
- Professional 3D Support
- $NVIDIA GPUDirect^{m}$  Support
- NVIDIA nView® Desktop Management Software Compatibility

- NVIDIA Mosaic Mode
- **Energy Star Enabling**

# **QUADRO K620 - TECHNICAL SPECIFICATIONS**

### SUPPORTED PLATFORMS

- Microsoft Windows 8.1 (64-bit and 32-bit)
- Microsoft Windows 8 (64-bit and 32-bit)
- Microsoft Windows 7 (64-bit and 32-bit)
- Linux® Full OpenGL implementation, complete with NVIDIA and ARB extensions (64-bit and 32-bit))

# 3D GRAPHICS ARCHITECTURE

- Scalable geometry architecture
- Hardware tessellation engine
- FXAA/TXAA dedicated anti-aliasing engine
- Bindless Textures
- Shader Model 5.0 (OpenGL 4.53 and DirectX 11.23)
- Up to 16K x16K texture and render processing
- Transparent multisampling and super sampling
- 16x angle independent anisotropic filtering 32-bit per-component floating point texture filtering and blending
- Up to 64x full scene antialiasing (FSAA)
- Decode acceleration for MPEG-2, MPEG-4 Part 2 Advanced Simple Profile, H.264, MVC, VC1, DivX (version 3.11 and later), and Flash (10.1 and later)
- Dedicated H.264 Encoder
- Blu-ray dual-stream hardware acceleration (supporting HD picture-in-picture playback)
- Quadro Boost (Automatically adjusts GPU engine throughput to maximize application performance.)

# PARALLEL COMPUTING CAPABILITIES

- Streaming Multi-Processor Design (SM 5.0) delivers high performance and energy efficiency
- Support for all the latest CUDA 6 features, including Unified Memory, Dynamic Parallelism and Dedicated Shared Memory
- Programming support for CUDA C, CUDA C++, DirectCompute 5.0, OpenCL, Python, and Fortran

### ADVANCED DISPLAY FEATURES

- Simultaneously drive up to two displays when connected natively
- Support up to four displays when using DisplayPort 1.2 Multi-Stream
- Dual DisplayPort 1.2 (supporting resolutions up to 4096x2160 @60 Hz)
- Dual-link DVI-I (Supports 330MPixels/sec which enables resolutions like 2560x1600 @ 60Hz and 1920x1200 @ 120Hz)
- Internal 400 MHz DAC DVI-I output (analog display up to 2048x1536 @ 85Hz)
- DisplayPort to VGA, DisplayPort to DVI (single-link and dual-link) and DisplayPort to HDMI cables (resolution support based on dongle specifications)
- HDCP support over DisplayPort, DVI and HDMI connectors
- 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
- OpenGL and Direct3D quad buffered stereo support
- Underscan/overscan compensation and hardware scaling
- Support for NVIDIA® Quadro® Mosaic, NVIDIA® nView® multi-display technology, NVIDIA® Enterprise Management Tools

## DISPLAY PORT AND HDMI DIGITAL AUDIO

- Support for the following audio modes: Dolby Digital (AC3), DTS 5.1, Multichannel (7.1) LPCM, Dolby Digital Plus (DD+), andMPEG-2/MPEG-4 AAC
- Data rates of 44.1 KHz, 48 KHz, 88.2 KHz, 96 KHz, 176 KHz, and 192 KHz
- Word sizes of 16 bits, 20 bits, and 24 bits









# PACKAGE CONTENT:

- 1 x DP to DVI (SL) adapter
- 1 x DVI to VGA adapter
- 1 x Low Profile bracket 1 x Warranty Extension Pack Drivers + Installation Guide
- P/N: QSP-DPDVISL P/N: QSP-DVIVGA P/N: QSP-LPBRAK600 P/N: WEVCPACKOO1









