PART NUMBER:
VCQK2200-PB

NVIDIA Quadro K2200 by PNY
POWERFUL GRAPHICS

Accelerate your creativity with NVIDIA® Quadro®—the world's most powerful workstation graphics. Support for multiple 4K displays, large memory capacity, advanced photorealistic rendering and flexible multi-GPU configurations.

The NVIDIA Quadro K2200 delivers exceptional power-efficient 3D application performance. 4 GB of GDDR5 GPU memory with fast bandwidth enables you to create large, complex models, and a flexible single-slot 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 up to 4096x2160 @ 60 Hz with 30-bit color and the all-new display engine that drives up to four displays natively.

NVIDIA Quadro is the world's most advanced visual computing platform for workstations. Much more than a powerful graphics accelerator for sophisticated applications used by professionals, NVIDIA Quadro enables you to create and collaborate in exciting new ways. This makes it the #1 solution for designing, visualizing, and simulating your ideas.

NVIDIA Quadro by PNY GPUs are designed, built, and tested by NVIDIA specifically for professional workstations powering more than 150 professional applications across a broad range of industries, including manufacturing, media and entertainment, sciences, and energy.

QUADRO K2200 - PRODUCT SPECIFICATIONS

GPU MEMORY	4 GB GDDR5
MEMORY INTERFACE	128-bit
MEMORY BANDWIDTH	80 GB/s
CUDA CORES	640
SYSTEM INTERFACE	PCI Express 2.0 x16
MAX POWER CONSUMPTION	68 W
THERMAL SOLUTION	Ultra-quiet active fansink
FORM FACTOR	111.15 mm (H) x 203.438 mm (L) Single Slot, Full Height
DISPLAY CONNECTORS	1 x DVI-I DL, 2 x DP1.2
MAX SIMULTANEOUS DISPLAYS	3 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 x 1536 at 85 Hz
GRAPHICS APIS	Shader Model 5.0, OpenGL 4.5[1], DirectX 11.2[2]
COMPUTE APIS	CUDA, DirectCompute, OpenCL
PACKAGE CONTENT	- 2 x DP to DVI (SL) adapter P/N: QSP-DPDVISL - DVI to VGA adapter P/N: QSP-DVIVGA
PART NUMBER	VCQK2200-PB
EAN NUMBER	3536403343804

[1] 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

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Quadro K2200 - TECHNICAL SPECIFICATIONS AND FEATURES

INCREDIBLE GRAPHICS PERFORMANCE	The NVIDIA GPU architecture provides incredible 3D application performance with dual copy engines for seamless data movement within GPU memory—all in a flexible single-slot form factor.
QUAD-DISPLAY SUPPORT	A new display engine drives up to four displays and DisplayPort 1.2 support for ultra-high resolutions like 3840x2160 @ 60 Hz with 30-bit color. NVIDIA SYNC allows multiple displays to be frame-locked together.
4 GB GDDR5 GPU MEMORY WITH ULTRA-FAST BANDWIDTH	Large GPU memory with fast bandwidth enables the creation and rendering of large, complex models.

Quadro K2200 - FEATURES

- DisplayPort 1.2
- DisplayPort with Audio
- DVI-I Dual-Link Connector
- VGA Support
- Professional 3D Support
- NVIDIA GPUDirect™ Support
- NVIDIA nView® Desktop Management Software Compatibility
- HDCP Support
- NVIDIA Mosaic Mode
- Energy Star Enabling

QUADRO K2200 - 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)
- Microsoft Windows XP (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 11.2[3])
- 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

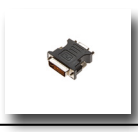
- Simultaneously drive up to three displays when connected natively
- Support up to four displays when using DisplayPort 1.2 Multi-Stream
- Dual DisplayPort 1.2 (supporting resolutions such as 4096x2160 @60 Hz)
- Dual-link DVI-I (Supports 330MPixels/sec which enables resolutions like 2560x1600 @ 60Hz 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:

- 2 x DP to DVI (SL) adapter — P/N: **QSP-DPDVISL**
- DVI to VGA adapter — P/N: **QSP-DVIVGA**
- Drivers + Installation Guide

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