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**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPU MEMORY</td>
<td>4 GB GDDR5</td>
</tr>
<tr>
<td>MEMORY INTERFACE</td>
<td>128-bit</td>
</tr>
<tr>
<td>MEMORY BANDWIDTH</td>
<td>80 GB/s</td>
</tr>
<tr>
<td>CUDA CORES</td>
<td>640</td>
</tr>
<tr>
<td>SYSTEM INTERFACE</td>
<td>PCI Express 2.0 x16</td>
</tr>
<tr>
<td>MAX POWER CONSUMPTION</td>
<td>68 W</td>
</tr>
<tr>
<td>THERMAL SOLUTION</td>
<td>Ultra-quiet active fansink</td>
</tr>
<tr>
<td>FORM FACTOR</td>
<td>111.15 mm (H) x 203.438 mm (L)</td>
</tr>
<tr>
<td></td>
<td>Single Slot, Full Height</td>
</tr>
<tr>
<td>DISPLAY CONNECTORS</td>
<td>1 x DVI-I DL, 2 x DP1.2</td>
</tr>
<tr>
<td>MAX SIMULTANEOUS DISPLAYS</td>
<td>3 direct, 4 DP 1.2 Multi-Stream</td>
</tr>
<tr>
<td>MAX DP 1.2 RESOLUTION</td>
<td>4096 x 2160 @ 60 Hz</td>
</tr>
<tr>
<td>MAX DVI-I DL RESOLUTION</td>
<td>2560 x 1600 @ 60 Hz</td>
</tr>
<tr>
<td>MAX DVI-I SL RESOLUTION</td>
<td>1920 x 1200 @ 120 Hz</td>
</tr>
<tr>
<td>MAX VGA RESOLUTION</td>
<td>2048 x 1536 at 85 Hz</td>
</tr>
<tr>
<td>GRAPHICS APIS</td>
<td>Shader Model 5.0, OpenGL 4.5¹, DirectX 11.2²</td>
</tr>
<tr>
<td>COMPUTE APIS</td>
<td>CUDA, DirectCompute, OpenCL</td>
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<td>PACKAGE CONTENT</td>
<td>- 2 x DP to DVI (SL) adapter</td>
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<td></td>
<td>- DVI to VGA adapter</td>
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<tr>
<td>PART NUMBER</td>
<td>VCQK2200-PB</td>
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<tr>
<td>EAN NUMBER</td>
<td>3536403343804</td>
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</table>

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
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.

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.

Large GPU memory with fast bandwidth enables the creation and rendering of large, complex models.

Quadro K2200 - TECHNICAL SPECIFICATIONS AND FEATURES

**INCREDIBLE GRAPHICS PERFORMANCE**

**QUAD-DISPLAY SUPPORT**

**4 GB GDDR5 GPU MEMORY WITH ULTRA-FAST BANDWIDTH**

Quadro K2200 - FEATURES

- DisplayPort 1.2
- DisplayPort with Audio
- DVI-Dual-Link Connector
- VGA Support
- Professional 3D Support
- NVIDIA GPU Direct™ Support
- NVIDIA nView® Desktop Management Software Compatibility
- HDP Support

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)
- 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
- Bilinear Textures
- Shader Model 5.0 (OpenGL 4.5) and DirectX 11.2
- 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 (IFSAI)
- Decode acceleration for MPEG-2, MPEG-4 Part 2 Advanced Simple Profile, H.264, MVC, VC1, DviX (version 3.11 and later), and Flash (10.1 and later)

**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 2560x1600 @ 50Hz 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, and NVIDIA 3D Vision™ technology, 3D DLP
- 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+), and MPEG-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

**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

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**PACKAGE CONTENT:**

- 2 x DP to DVI (SL) adapter
- DVI to VGA adapter
- Drivers + Installation Guide