



QUADRO

# REAL INTERACTIVE EXPRESSION NVIDIA® QUADRO® M5000

## Get real interactive expression with NVIDIA® Quadro®—the world’s most powerful workstation graphics.

The NVIDIA Quadro M5000, accelerated by NVIDIA’s Maxwell™ GPU architecture, delivers incredible performance within just 150W to let you unleash your creativity and conquer extreme workloads with ease. 8 GB of GDDR5 GPU memory with fast bandwidth allows you to create and render large, complex models and compute massive datasets with ECC support for added reliability. Plus, there’s a new display engine that drives up to four 4K resolution displays natively for ultra-high resolutions like 4096x2160 @ 60 Hz with 30-bit color. Pair up two or more outputs to drive displays greater than 4K, and take advantage of NVIDIA Quadro Sync support to frame-lock multiple displays together<sup>1</sup>.

Quadro cards are certified with a broad range of sophisticated professional applications, tested by leading workstation manufacturers, and backed by a global team of support specialists. This gives you the peace of mind to focus on doing your best work. Whether you’re developing revolutionary products or telling spectacularly vivid visual stories, Quadro gives you the performance to do it brilliantly.

### THE PNY ADVANTAGE

PNY provides unsurpassed service and commitment to its professional graphics customers. In addition, PNY delivers a complete solution that includes the appropriate adapters, cables, brackets, driver software installation disc, and documentation to ensure a quick and successful install.

### FEATURES

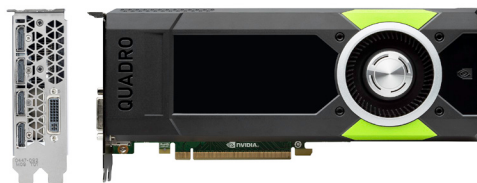
- > Four DisplayPort 1.2 Connectors
- > DisplayPort with Audio
- > VGA Support<sup>2</sup>
- > 3D Stereo Support<sup>2</sup>
- > NVIDIA GPUDirect™ Support
- > Quadro Sync Compatibility
- > Stereo Connector
- > NVIDIA nView® Desktop Management Software Compatibility
- > HDCP Support
- > NVIDIA Mosaic<sup>3</sup>

### PACKAGE CONTENTS

- > NVIDIA Quadro M5000 Professional Graphics Board
- > Software Installation Disc
- > Printed Quick Start Guide
- > Auxiliary Power Cable
- > Stereo Connector Bracket
- > Two DisplayPort to DVI-D SL Adapters
- > DVI to VGA Adapter

### WARRANTY AND SUPPORT

- > 3-Year Warranty
- > Pre- and Post-Sales Technical Support
- > Dedicated Field Application Engineers
- > Direct Tech Support Hot Lines



**PNY PART NUMBER** VCQM5000-PB

### SPECIFICATIONS

GPU Memory	<b>8 GB GDDR5</b>
Memory Interface	<b>256-bit</b>
Memory Bandwidth	<b>211 GB/s</b>
NVIDIA CUDA® Cores	<b>2048</b>
System Interface	<b>PCI Express 3.0 x16</b>
Max Power Consumption	<b>150 W</b>
Thermal Solution	<b>Active</b>
Form Factor	<b>4.4" H x 10.5" L, Dual Slot, Full Height</b>
Display Connectors	<b>4x DP 1.2 + DVI-I DL</b>
Max Simultaneous Displays	<b>4 direct, 4 DP 1.2 Multi-Stream</b>
Max DP 1.2 Resolution	<b>4096 x 2160 at 60 Hz</b>
Max DVI-I DL Resolution	<b>2560 x 1600 at 60 Hz</b>
Max DVI-I SL Resolution	<b>1920 x 1200 at 60 Hz</b>
Max VGA Resolution	<b>2048 x 1536 at 85 Hz</b>
Graphics APIs	<b>Shader Model 5.0, OpenGL 4.5<sup>4</sup>, DirectX 12.0<sup>5</sup></b>
Compute APIs	<b>CUDA, DirectCompute, OpenCL™</b>

<sup>1</sup> NVIDIA Quadro Sync board sold separately. Learn more at [www.nvidia.com/quadro](http://www.nvidia.com/quadro) | <sup>2</sup> Via adapter/connector/bracket | <sup>3</sup> Windows 7, 8, 8.1, 10 and Linux | <sup>4</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](http://www.khronos.org/conformance) | <sup>5</sup> GPU supports DX 12.0 API, Hardware Feature Level 12\_1

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