

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

The NVIDIA Quadro M4000 is accelerated by NVIDIA Maxwell™ GPU architecture, letting you easily tackle your most demanding visualization workloads with extreme performance and the flexibility of a single-slot form factor. 8 GB of GDDR5 GPU memory with fast bandwidth allows you to create and render large, complex models and compute massive datasets. Plus, there's a new display engine that drives up to four 4K resolution displays natively with DisplayPort 1.2 support for ultrahigh resolutions like 4096 x 2160 @ 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 up to 16 4K displays in a single system¹.

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.

## **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>



## **SPECIFICATIONS**

GPU Memory	8 GB GDDR5
Memory Interface	256-bit
Memory Bandwidth	192 GB/s
NVIDIA CUDA® Cores	1664
System Interface	PCI Express 3.0 x16
Max Power Consumption	120 W
Thermal Solution	Active
Form Factor	4.4" H × 9.5" L, Single Slot, Full Height
Display Connectors	4x DP 1.2
Max Simultaneous Displays	4 direct, 4 DP 1.2 Multi-Stream
Max DP 1.2 Resolution	4096 × 2160 at 60 Hz
Max VGA Resolution	2048 × 1536 at 85 Hz
Graphics APIs	Shader Model 5.0, OpenGL 4.5 <sup>4</sup> , DirectX 12.0 <sup>5</sup>
Compute APIs	CUDA, DirectCompute, OpenCL™

<sup>&</sup>lt;sup>1</sup> NVIDIA Quadro Sync board sold separately. Learn more at 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 | <sup>5</sup> GPU supports DX 12.0 API, Hardware Feature Level 12\_1