



## UNMATCHED POWER. UNMATCHED CREATIVE FREEDOM. NVIDIA® QUADRO® GP100

### World's Most Advanced Visual Computing Accelerator.

The NVIDIA Quadro GP100, powered by Pascal GPU architecture, is equipped with the most advanced visualization and simulation capabilities to meet the needs of the most demanding professional workflows. A single GP100 with 3580 FP32/1792 FP64 CUDA cores has incredible horsepower to render photorealistic design concepts interactively, create extremely detailed 3D models, run intensive CAE simulations to validate designs, and evaluate design prototypes in immersive VR. You can even connect two GP100 boards with NVIDIA NVLink™ technology<sup>1</sup> to scale performance with an amazing 32 GB of combined HBM2 ultra-high bandwidth memory.<sup>2</sup>

The GP100 is an excellent choice for developers who want to tap into the power of NVLink and Unified Memory to maximize their application performance. Additionally, its fast FP16 performance makes it an ideal desktop workstation solution for developers working on the latest Deep Learning/AI algorithms and frameworks.

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 1.4 Connectors<sup>3</sup>
- > DisplayPort with Audio
- > 3D Stereo Support with Stereo Connector<sup>3</sup>
- > NVIDIA GPUDirect™ Support
- > NVIDIA NVLink™ Support<sup>1</sup>
- > Quadro Sync II<sup>4</sup> Compatibility
- > NVIDIA nView® Desktop Management Software
- > HDCP 2.2 Support
- > NVIDIA Mosaic<sup>5</sup>
- > NVIDIA Iray and mental ray Support



#### SPECIFICATIONS

GPU Memory	<b>16 GB HBM2</b>
Memory Interface	<b>4096-bit</b>
Memory Bandwidth	<b>Up to 717 GB/s</b>
NVIDIA CUDA® Cores	<b>3584 FP32 1792 FP64</b>
NVIDIA NVLINK™	<b>2 GP100 boards supported</b>
System Interface	<b>PCI Express 3.0 x16</b>
Max Power Consumption	<b>235 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 1.4, 1x DVI-D DL</b>
Max Simultaneous Displays	<b>4 direct, 4 DP 1.4 Multi-Stream</b>
Display Resolution	<b>4x 4096x2160 @ 120Hz 4x 5120x2880 @ 60Hz</b>
Graphics APIs	<b>Shader Model 5.1, OpenGL 4.5<sup>6</sup>, DirectX 12.0<sup>7</sup>, Vulkan 1.0<sup>6</sup></b>
Compute APIs	<b>CUDA, DirectCompute, OpenCL™</b>

To learn more about the NVIDIA Quadro GP100 visit [www.nvidia.com/quadro](http://www.nvidia.com/quadro)

<sup>1</sup> NVIDIA NVLink sold separately | <sup>2</sup> Access to 32 GB of memory via NVLink requires specific application support. | <sup>3</sup> VGA/DVI/HDMI/stereo support via adapter/connector/bracket | <sup>4</sup> Quadro Sync II card sold separately | <sup>5</sup> Windows 7, 8, 8.1, 10 and Linux | <sup>6</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>7</sup> GPU supports DX 12.0 API, Hardware Feature Level 12\_1

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