



**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 3584 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>
- > Dedicated hardware video encode and decode engines<sup>6</sup>



### SPECIFICATIONS

GPU Memory	16 GB HBM2
Memory Interface	4096-bit
Memory Bandwidth	Up to 717 GB/s
NVIDIA CUDA® Cores	3584
NVIDIA NVLINK™	2 GP100 boards supported
System Interface	PCI Express 3.0 x16
Max Power Consumption	235 W
Thermal Solution	Active
Form Factor	4.4" H x 10.5" L, Dual Slot, Full Height
Display Connectors	4x DP 1.4, 1x DVI-D DL
Max Simultaneous Displays	4 direct, 4 DP 1.4 Multi-Stream
Display Resolution	4x 4096x2160 @ 120Hz 4x 5120x2880 @ 60Hz
Graphics APIs	Shader Model 5.1, OpenGL 4.5 <sup>7</sup> , DirectX 12.0 <sup>8</sup> , Vulkan 1.0 <sup>7</sup>
Compute APIs	CUDA, DirectCompute, OpenCL™

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> Please refer to <http://developer.nvidia.com/video-encode-decode-gpu-support-matrix> for details on NVIDIA GPU video encode and decode support | <sup>7</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>8</sup> GPU supports DX 12.0 API, Hardware Feature Level 12\_1

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