NVIDIA QUADRO GV100
Reinventing the Workstation with Real-Time Ray Tracing and AI

The Power To Accelerate AI-Enhanced Workflows

The NVIDIA® Quadro® GV100 reinvents the workstation to meet the demands of AI-enhanced design and visualization workflows. It’s powered by NVIDIA Volta, delivering extreme memory capacity, scalability, and performance that designers, architects, and scientists need to create, build, and solve the impossible.

Supercharge Rendering with AI

- Work with full fidelity, massive datasets
- Enjoy fluid visual interactivity with AI-accelerated denoising

Bring Optimal Designs to Market Faster

- Work with higher fidelity CAE simulation models
- Explore more design options with faster solver performance

Enjoy Ultimate Immersive Experience

- Work with complex, photoreal datasets in VR

Realize New Opportunities with AI

- Access DL frameworks for AI development via NVIDIA NGC
- Accelerate AI training/inferencing with Tensor Cores and NVLink

All Quadro cards are certified with a broad range of professional applications, tested by leading workstation manufacturers, and backed by a global team of support specialists to give you the peace of mind to focus on doing your best work.

Features

- Four DisplayPort 1.4 Connectors
- DisplayPort with Audio
- 3D Stereo Support with Stereo Connectors
- NVIDIA GPU Direct for Video support
- NVIDIA NVLink Support
- Quadro Sync II Compatibility
- NVIDIA RTX Experience
- NVIDIA RTX Desktop Manager software
- HDCP 2.2 Support
- NVIDIA Mosaic technology
- Dedicated hardware video encode and decode engines

SPECIFICATIONS

- GPU Memory: 32GB HBM2
- Memory Interface: 4096-bit
- Memory Bandwidth: Up to 870 GB/s
- ECC: Yes
- NVIDIA CUDA Cores: 5,120
- NVIDIA Tensor Cores: 640
- Double-Precision Performance: 7.4 TFLOPS
- Single-Precision Performance: 14.8 TFLOPS
- Tensor Performance: 118.5 TFLOPS
- NVIDIA NVLink: Connects 2 Quadro GV100 GPUs
- NVIDIA NVLink Bandwidth: 200 GB/s
- System Interface: PCIe 3.0 x 16
- Max Power Consumption: 250 W
- Thermal Solution: Active
- Form Factor: 4.4” H x 10.5” L, Dual Slot, Full Height
- Display Connectors: 4x DP 1.4
- Max Simultaneous Displays: 4x 4096x2160 @ 120 Hz, 4x 5120x2880 @ 60 Hz, 2x 7680x4320 @ 60 Hz
- VR Ready: Yes
- Graphics APIs: Shader Model 6.6, OpenGL 4.6, DirectX 12 Ultimate, Vulkan 1.3
- Compute APIs: CUDA 11.6, DirectCompute, OpenCL 3.0

1 NVIDIA NVLink sold separately. 2 Connecting two GV100 cards with NVLink to scale performance and memory capacity to 64GB is only possible if your application supports NVLink technology. Please contact your application provider to confirm their support of NVLink. 3 VGA/DVI/HDMI/stereo support via adapter/connector/bracket. 4 Quadro Sync II card sold separately. 5 Windows 10, Windows 11, and Linux. 6 Please refer to developer.nvidia.com/video-encode-decode-gpu-support-matrix for details on NVIDIA GPU video encode and decode support. 7 Peak rates based on GPU Boost Clock. 8 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

Learn more To learn more about the NVIDIA Quadro GV100, visit www.nvidia.com/quadro

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