



## THE WORLD'S FIRST RAY TRACING GPU NVIDIA QUADRO RTX 4000



### REAL TIME RAY TRACING FOR PROFESSIONALS

NVIDIA® Quadro RTX™ 4000 combines the NVIDIA Turing GPU architecture with the latest memory and display technologies, to deliver the best performance and features in a single-slot PCI-e form factor. Enjoy greater fluidity with photorealistic rendering, experience faster performance with AI-enabled applications and create detailed, lifelike VR experiences more cost-effectively and across a broader range of workstation chassis configurations.

Quadro RTX™ 4000 features 36 RT cores to accelerate ray tracing, 288 Tensor cores to accelerate AI and 8GB GDDR6 memory to accommodate large datasets. It is equipped with three DisplayPort 1.4 connectors with HDR support and features the latest VirtualLink<sup>1</sup> connector to simplify connectivity to next-gen VR HMDs. Additionally, in conjunction with Quadro Sync II you can deploy massive digital signage solutions with higher density and at lower cost.

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.

<sup>1</sup> In preparation for the emerging VirtualLink standard, Turing GPUs have implemented hardware support according to the "VirtualLink Advance Overview". To learn more about VirtualLink, please see [www.virtuallink.org](http://www.virtuallink.org). | <sup>2</sup> Via adapter/connector/bracket | <sup>3</sup> Quadro Sync II card sold separately | <sup>4</sup> Windows 7, 8, 8.1, 10 and Linux | <sup>5</sup> GPU supports DX 12.0 API, Hardware Feature Level 12\_1 | <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)

© 2018 NVIDIA Corporation and PNY. All rights reserved. NVIDIA, the NVIDIA logo, Quadro, nView, CUDA, and NVIDIA Turing are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. The PNY logotype is a registered trademark of PNY Technologies. OpenCL is a trademark of Apple Inc. used under license to the Khronos Group Inc. All other trademarks and copyrights are the property of their respective owners. FEB19

#### FEATURES

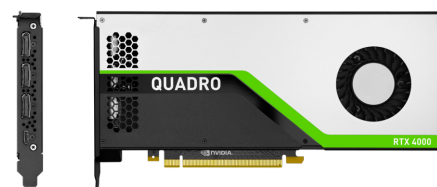
- > Three DisplayPort 1.4 Connectors
- > VirtualLink Connector<sup>1</sup>
- > DisplayPort with Audio
- > 3D Stereo Support with Stereo Connector<sup>2</sup>
- > NVIDIA GPUDirect™ Support
- > Quadro Sync II<sup>3</sup> Compatibility
- > NVIDIA nView® Desktop Management Software
- > HDCP 2.2 Support
- > NVIDIA Mosaic<sup>4</sup>

#### PACKAGE CONTENTS

- > NVIDIA Quadro RTX 4000
- > Quadro RTX Quick Start Guide
- > Quadro Support Guide
- > USB Type-C to DP adapter
- > 1 DisplayPort to DVI Adapter
- > 1 DisplayPort to HDMI Adapter
- > 1 Auxiliary Power Cable (8-pin to dual 6-pin 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** VCQRTX4000-PB  
**EAN CODE** 3536403366926

#### SPECIFICATIONS

GPU Memory	8 GB GDDR6
Memory Interface	384-bit
Memory Bandwidth	Up to 416 GB/s
ECC	NO
NVIDIA CUDA Cores	2,034
NVIDIA Tensor Cores	288
NVIDIA RT Cores	36
Single-Precision Performance	16.3 TFLOPS
Tensor Performance	130.5 TFLOPS
System Interface	PCI Express 3.0 x 16
Power Consumption	Total board power: 160 W Total graphics power: 125W
Thermal Solution	Active
Form Factor	111.8 mm H x 266.7 mm L, Single Slot, Full Height
Display Connectors	4x DP 1.4, 1x VirtualLink
Max Simultaneous Displays	4x 4096x2160 @ 120 Hz, 4x 5120x2880 @ 60 Hz, 2x 7680x4320 @ 60 Hz
Encode / Decode Engines	1x Encode, 1x Decode
VR Ready	Yes
Graphics APIs	DirectX 12.0 <sup>5</sup> , Shader Model 5.1 <sup>5</sup> , OpenGL 4.5 <sup>6</sup> , Vulkan 1.0 <sup>6</sup>
Compute APIs	CUDA, DirectCompute, OpenCL™



PNY Technologies Europe  
9 rue Joseph Cugnot, 33708 Mérignac cedex | France  
T +33 (0)5 56 13 75 75 | F +33 (0)5 56 13 75 77

For more information visit: [www.pnyeu/quadro](http://www.pnyeu/quadro)