

# NVIDIA PROFESSIONAL GRAPHICS SOLUTIONS

NVIDIA Quadro GPUs power the world's most advanced mobile workstations and new form-factor devices to meet the visual computing needs of professionals across a range of industries. The latest generation of NVIDIA Quadro RTX GPUs, built on the revolutionary NVIDIA Turing architecture, deliver desktop-level performance in a portable form factor. Combine the latest advancements in real-time ray tracing, advanced shading, and AI-based capabilities and tackle the most demanding design and visualization workflows on the go. With the latest graphics memory technology, enhanced graphics performance, and added compute power, NVIDIA Quadro RTX GPUs give designers and artists the tools they need to work efficiently from anywhere.



GPU SPECIFICATIONS													PERFORMANCE		VIRTUAL REALITY (VR)		OPTIONS					
NVIDIA CUDA Processing Cores <sup>1</sup>	NVIDIA® RT Cores	Tensor Cores	GPU Memory	Memory Bandwidth	Memory Type	Memory Interface	TGP Max Power Consumption	DisplayPort <sup>2</sup>	OpenGL <sup>3</sup>	Shader Model	DirectX	PCIe Generation	Single Precision Floating-Point Performance [TFLOPS, Peak]	Tensor Performance [TOPS, Peak] <sup>4</sup>	VR Ready <sup>5</sup>	Simultaneous Multi-Projection	NVIDIA FXAA / TXAA Antialiasing	NVIDIA nView Display Management Technology	GPUDirect for Video	Vulkan Support	NVIDIA 3D Vision Pro	NVIDIA Optimus

## Quadro for Mobile Workstations

	4,608	72	576	24 GB	672 GBps	GDDR6	384-bit	250 W	1.4	4.6	5.1	12.1	3	14.9	119.4	✓	✓	✓	✓	✓	✓	✓	✓
Quadro RTX 6000	4,608	72	576	24 GB	672 GBps	GDDR6	384-bit	250 W	1.4	4.6	5.1	12.1	3	14.9	119.4	✓	✓	✓	✓	✓	✓	✓	✓
Quadro RTX 5000	3,072	48	384	16 GB	448 GBps	GDDR6	256-bit	80 - 110 W	1.4	4.6	5.1	12.1	3	9.4	75.2	✓	✓	✓	✓	✓	✓	✓	✓
Quadro RTX 4000	2,560	40	320	8 GB	448 GBps	GDDR6	256-bit	80 - 110 W	1.4	4.6	5.1	12.1	3	8	63.9	✓	✓	✓	✓	✓	✓	✓	✓
Quadro RTX 3000	1,920	30	240	6 GB	336 GBps	GDDR6	192-bit	60 - 80 W	1.4	4.6	5.1	12.1	3	5.4	42.9	✓	✓	✓	✓	✓	✓	✓	✓
Quadro T2000	1,024			4 GB	128 GBps	GDDR5	128-bit	40 - 60 W	1.4	4.6	5.1	12.1	3	3.5			✓	✓	✓	✓	✓	✓	✓
Quadro T1000	768			4 GB	128 GBps	GDDR5	128-bit	40 - 50 W	1.4	4.6	5.1	12.1	3	2.6			✓	✓	✓	✓	✓	✓	✓
Quadro P620	512			4 GB	96 GBps	GDDR5	128-bit	25 W	1.4	4.5	5.1	12.1	3	1.5			✓	✓	✓	✓	✓	✓	✓
Quadro P520	384			2 GB	48 GBps	GDDR5	64-bit	18 W	1.4	4.5	5.1	12.1	3	1.1			✓	✓	✓	✓	✓	✓	✓
Quadro P5200	2,560			16 GB	230 GBps	GDDR5	256-bit	150 W	1.4	4.5	5.1	12	3	8.9		✓	✓	✓	✓	✓	✓	✓	✓
Quadro P4200	2,304			8 GB	224 GBps	GDDR5	256-bit	115 W	1.4	4.5	5.1	12	3	7.6		✓	✓	✓	✓	✓	✓	✓	✓
Quadro P3200	1,792			6 GB	168 GBps	GDDR5	192-bit	78 W	1.4	4.5	5.1	12	3	5.3		✓	✓	✓	✓	✓	✓	✓	✓
Quadro P2000	768			4 GB	96 GBps	GDDR5	128-bit	50 W	1.4	4.5	5	12	3	2.4			✓	✓	✓	✓	✓	✓	✓
Quadro P1000	512			4 GB	96 GBps	GDDR5	128-bit	40 W	1.4	4.5	5	12	3	1.6			✓	✓	✓	✓	✓	✓	✓
Quadro P600	384			4 GB	80 GBps	GDDR5	128-bit	25 W	1.4	4.5	5	12	3	1.2			✓	✓	✓	✓	✓	✓	✓
Quadro P500	256			2 GB	40 GBps	GDDR5	64-bit	18 W	1.4	4.5	5	12	3	0.75			✓	✓	✓	✓	✓	✓	✓

1. CUDA parallel processing cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.  
 2. Adaptors available for DVI-SL, DVI-DL, HDMI and VGA.  
 3. 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)

4. FP16 matrix multiply with FP16 or FP32 accumulate.  
 5. VR Ready GPUs have the performance and features required for high-quality VR experiences.

For more information on NVIDIA mobile products, visit [www.nvidia.com/quadro-laptops](http://www.nvidia.com/quadro-laptops)

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