

# 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

	Quadro RTX 5000	Quadro RTX 4000	Quadro RTX 3000	Quadro T2000	Quadro T1000	Quadro P620	Quadro P520	Quadro P5200	Quadro P4200	Quadro P3200	Quadro P2000	Quadro P1000	Quadro P600	Quadro P500
NEW	3,072	2,560	2,304	1,024	768	512	384	2,560	2,304	1,792	768	512	384	256
	48	40	36											
	384	320	288											
	16 GB	8 GB	6 GB	4 GB	4 GB	4 GB	2 GB	16 GB	8 GB	6 GB	4 GB	4 GB	4 GB	2 GB
	448 GBps	448 GBps	336 GBps	128 GBps	128 GBps	96 GBps	48 GBps	230 GBps	224 GBps	168 GBps	96 GBps	96 GBps	80 GBps	40 GBps
	GDDR6	GDDR6	GDDR6	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5	GDDR5
	256-bit	256-bit	192-bit	128-bit	128-bit	128-bit	64-bit	256-bit	256-bit	192-bit	128-bit	128-bit	128-bit	64-bit
	80 - 110 W	80 - 110 W	60 - 80 W	40 - 60 W	40 - 50 W	25 W	18 W	150 W	115 W	78 W	50 W	40 W	25 W	18 W
	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5	5	5	5
	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12	12	12	12	12	12	12
	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	9.4	8	6.4	3.5	2.6	1.5	1.1	8.9	7.6	5.3	2.4	1.6	1.2	0.75
	75.2	63.9	51.4											
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

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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