

# NVIDIA PROFESSIONAL GRAPHICS SOLUTIONS

NVIDIA RTX™ laptop GPUs power the world's most advanced mobile workstations and unique compact devices to meet the visual computing needs of professionals across a range of industries. The latest generation of NVIDIA RTX laptop GPUs, built on the revolutionary NVIDIA Turing™ architecture and featuring NVIDIA® Quadro® and NVIDIA professional graphics solutions, 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 RTX laptop 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 <sup>2</sup>	DisplayPort <sup>3</sup>	Open GL <sup>4</sup>	Shader Model	DirectX	PCIe Generation	Single-Precision Floating-Point Performance (TFLOPS, Peak)	Tensor Performance (TFLOPS, Peak) <sup>5</sup>	VR Ready <sup>6</sup>	Simultaneous Multi-Projection	NVIDIA FXAA™ / TXAA™ Anti-Aliasing	NVIDIA nView® Display Management Technology	Vulkan Support	NVIDIA 3D Vision® Pro	NVIDIA Optimus®

## Laptop GPUs

Quadro RTX™ 6000	4,608	72	576	24 GB	672 GB/s	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 GB/s	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 GB/s	GDDR6	256-bit	80 - 110 W	1.4	4.6	5.1	12.1	3	8.0	63.9	✓	✓	✓	✓	✓	✓	✓
Quadro RTX 3000	1,920	30	240	6 GB	336 GB/s	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 GB/s	GDDR6	128-bit	40 - 60 W	1.4	4.6	5.1	12.1	3	3.5			✓	✓	✓	✓	✓	✓
Quadro T1000	896			4 GB	128 GB/s	GDDR6	128-bit	40 - 50 W	1.4	4.6	5.1	12.1	3	2.6			✓	✓	✓	✓	✓	✓
<b>NEW</b> NVIDIA T500	896			2 GB or 4 GB	80 GB/s	GDDR6	64-bit	18 - 25 W	1.4	4.6	5.1	12.1	4	3.0				✓	✓	✓	✓	✓
Quadro P620	512			4 GB	96 GB/s	GDDR5	128-bit	25 W	1.4	4.5	5.1	12.1	3	1.5			✓	✓	✓	✓	✓	✓
Quadro P520	384			2 GB or 4 GB	48 GB/s	GDDR5	64-bit	18 - 25 W	1.4	4.5	5.1	12.1	3	1.1				✓	✓	✓	✓	✓

1. CUDA parallel processing cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.

2. Power is TDP-based for NVIDIA T500, P620, and P520.

3. Adaptors available for DVI-SL, DVI-DL, HDMI, and VGA.

4. 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)

5. F16 matrix multiply with FP16 or FP32 accumulate.

6. VR Ready GPUs have the performance and features required for high-quality VR experiences.

For more information on NVIDIA mobile products, visit <https://www.nvidia.com/en-us/design-visualization/quadro-in-laptops/>