NVIDIA Ada Lovelace Streaming Multiprocessors
- Up to 2x performance and power efficiency

4th Generation Tensor Cores
- Up to 2X AI performance

3rd Generation RT Cores
- Up to 2X ray tracing performance

COLOSSAL PERFORMANCE AND SPEED
NVIDIA® GeForce RTX™ 40 Series GPUs are beyond fast for gamers and creators. They’re powered by the ultra-efficient NVIDIA Ada Lovelace architecture which delivers a quantum leap in both performance and AI-powered graphics. Experience lifelike virtual worlds with ray tracing and ultra-high FPS gaming with the lowest latency. Discover revolutionary new ways to create and unprecedented workflow acceleration.

The NVIDIA® GeForce RTX™ 4080 delivers the ultra performance and features that enthusiast gamers and creators demand. Bring your games and creative projects to life with ray tracing and AI-powered graphics. It’s powered by the ultra-efficient NVIDIA Ada Lovelace architecture and up to 16GB of superfast G6X memory.

The new NVIDIA® Ada Lovelace architecture delivers a quantum leap in performance, efficiency, and AI-powered graphics. It has new Streaming Multiprocessors, 3rd generation Ray Tracing Cores, and 4th generation Tensor Cores. It’s built on a new custom TSMC 4N process, runs with blazing fast clocks, and features a large L2 cache. It enables fast ray tracing, new ways to create, and much more. Featuring electrifying EPIC-X RGB lighting, for the ultimate controllable lighting experience with endless ARGB lighting possibilities.

KEY FEATURES
- Powered by NVIDIA DLSS 3, ultra-efficient Ada Lovelace arch, and full ray tracing
- Dedicated Ray Tracing Cores
- Dedicated Tensor Cores
- NVIDIA DLSS 3
- Game Ready and NVIDIA Studio Drivers
- NVIDIA® GeForce Experience™
- NVIDIA Broadcast
- NVIDIA G-SYNC®
- NVIDIA GPU Boost™
- GDDR6X Graphics Memory
- PCI Express® Gen 4
- Microsoft DirectX® 12 Ultimate
- Vulkan RT APIs, Vulkan 1.3, OpenGL 4.6
- HDCP 2.3
- DisplayPort 1.4, up to 4K at 240Hz or 8K at 60Hz with DSC, HDR
- As specified in HDMI 2.1a: up to 4K 12-bit HDR at 240Hz with DSC, Gaming VRR, HDR
- Support Bracket Included
- One 16-pin to Three 8-pin Power Cable Included

SYSTEM REQUIREMENTS
- PCI Express-compliant motherboard with one 3.5-width x16 graphics slot
- Three 8-pin supplementary power connectors
- 750 W or greater system power supply
- Microsoft Windows® 11 64-bit, Windows 10 (November 2018 or later) 64-bit, Linux 64-bit
- Internet connection

PRODUCT SPECIFICATIONS
- NVIDIA® CUDA Cores: 9728
- Clock Speed: 2205 MHz
- Boost Speed: 2505 MHz
- Memory Speed (Gbps): 23
- Memory Size: 16GB GDDR6X
- Memory Interface: 256-bit
- Memory Bandwidth (Gbps): 736
- TDP: 320 W
- NVLink: Not Supported
- Outputs: DisplayPort 1.4 (x3), HDMI 2.1
- Multi-Screen: 4
- Resolution: 7680 x 4320 @120Hz (Digital)
- Power Input: One 16-Pin (One 16-pin to Three 8-pin)
- Bus Type: PCI-Express 4.0 x16

PRODUCT INFORMATION
- PNY Part Number: VCG408016TFXXPB1
- UPC Code: 751492756400
- Card Dimensions: 331.8 x 136.8 x 71.1mm, 3.5 Slot
- Box Dimensions: 15.94" x 7.83" x 4.06", 405 x 199 x 103mm

1 Graphics Card driver is not included in the box; GeForce Experience will download the latest GeForce driver from the Internet after install.
2 Minimum is based on a PC configured with a Ryzen 9 5900X processor. Power requirements can be different depending on system configuration.
3 Up to 4K 12-bit HDR at 240Hz with DP 1.4a + DSC or HDMI 2.1a + DSC. Up to 8K 12-bit HDR at 60Hz with DP 1.4a + DSC or HDMI 2.1a + DSC