

NVIDIA Quadro FX Mobile Features and Benefits

12-Bit Subpixel Precision

3x that of the nearest competitive workstation graphics, 12-bit sub-pixel precision delivers high geometric accuracy, eliminating speckles, cracks, and other rasterization anomalies.

256-Bit Memory Interface

Delivers the industry's highest memory bandwidth (up to 38.4GB/sec) for blistering data transfer. Supports the world's fastest GDDR3 memory with lower power consumption than previous generation systems.

32-Bit Floating Point Precision

Sets new standards for image clarity and quality through 32-bit floating point capabilities in shading, filtering, texturing, and blending. Enables unprecedented rendered image quality for visual effects processing.

Cg High-Level Graphics Shader Language

Cg—"C" for graphics—is a high-level, open-standard programming language for OpenGL that takes advantage of the power of programmable GPUs. NVIDIA Quadro® FX programmable graphics pipelines leverage high-level shading languages to enable the creation and integration of real-time photorealistic effects into 3D models, scenes, and designs. This represents a major leap forward in ease and speed for the creation of real-time, realistic graphics within MCAD, DCC, and scientific applications.

Full 128-Bit Precision Graphics Pipeline

Enables sophisticated mathematical computations to maintain high accuracy, resulting in unmatched visual quality. Full IEEE 32-bit floating-point precision per color component (RGBA) delivers millions of color variations with the broadest dynamic range.

Full-Scene Antialiasing (FSAA)

Up to 8x FSAA dramatically reduces visual aliasing artifacts or "jaggies" at resolutions up to 1920x1200, resulting in highly realistic scenes.

Hardware 3D Window Clipping

Hardware accelerated clip regions (data transfer mechanism between a window and the frame buffer) which improve overall graphics performance by increasing transfer speed between color buffer and frame buffer.

Next-Generation Vertex and Pixel Programmability

The NVIDIA Quadro FX ultra-high-end and high-end GPUs introduce infinite length vertex programs and dynamic flow control, removing the previous limits on complexity, and structure of shader programs. With full support for Vertex and Shader Model 3.0, NVIDIA Quadro FX Mobile GPUs deliver sophisticated effects never before imagined for real-time graphics systems.

NVIDIA High Precision Dynamic-Range (HPDR) Technology

Sets new standards for image clarity and quality through floating point capabilities in shading, filtering, texturing, and blending. Enables unprecedented rendered image quality for visual effects processing.

NVIDIA Quadro Unified Memory Architecture

Allows for superior memory management, which efficiently allocates and shares memory resources between concurrent graphics windows and applications.



nView Multi-Display Technology

The NVIDIA® nView® hardware and software technology combination delivers maximum flexibility for multi-display options, and provides unprecedented end-user control of the desktop experience. NVIDIA GPUs are designed to support multi-displays, but graphics cards vary. Please verify multi-display support in the graphics card before purchasing.

PCI Express Certified

PCI Express doubles the bandwidth of the AGP 8X bus, delivering over 4GB/sec. in both upstream and downstream data transfers.

PowerMizer Mobile Technology

Advanced hardware and software technology specifically designed to extend the battery life of notebook PCs. NVIDIA PowerMizer® Mobile Technology ensures that users enjoy cinematic quality and performance for extended periods of time.

Proven Workstation Graphics Architecture

The NVIDIA Quadro FX architecture takes application performance to new levels by featuring parallel vertex engines, a radically new line engine, the industry's first on-chip vertex cache, and fully programmable pixel pipelines coupled to a high-speed graphics DDR DRAM bus.

Rotated-Grid Full-Scene Antialiasing (RG FSAA)

The rotated grid FSAA sampling algorithm introduces far greater sophistication in the sampling pattern, significantly increasing color accuracy and visual quality for edges and lines, reducing "jaggies" while maintaining performance.

Unified Driver Architecture (UDA)

The NVIDIA UDA guarantees forward and backward compatibility with software drivers. Simplifies upgrading to a new NVIDIA product because all NVIDIA products work with the same driver software.

NVIDIA PureVideo Technology

NVIDIA® PureVideo™ technology is the combination of high-definition video processors and software that delivers unprecedented picture clarity, smooth video, accurate color, and precise image scaling for SD and HD video content. Features include, high-quality scaling, spatial temporal de-interlacing, inverse telecine, and high quality HD video playback from DVD.