NVIDIA Quadro FX 3700

Revolutionary Visual Computing Solutions

NVIDIA Quadro® FX 3700 graphics board delivers performance and quality on high-end CAD, DCC, and visualization applications to the professional user.

Featuring NVIDIA's new unified architecture, the Quadro FX 3700 professional graphics board dynamically allocates geometry, shading, pixel processing, and compute power to deliver optimized GPU performance while enabling Energy Star power savings. The reference standard for Shader Model 4.0, the Quadro FX 3700 enables next-generation, ultra-realistic, real-time OpenGL® and DirectX 10 visualization applications. With two dual-link DVI connectors, the Quadro FX 3700 also offers the industry's best image quality at resolutions up to 2560 x 1600 @ 60Hz.

The NVIDIA Quadro FX 3700 is the high-end solution in NVIDIA's latest generation of unified-architecture, professional product offerings. The entire NVIDIA Quadro family takes computer-aided design (CAD), digital-content creation (DCC), and visualization applications to a new level of interactivity by enabling unprecedented programmability and precision. The industry's leading workstation applications leverage these capabilities to deliver hardware-accelerated features, performance, and quality not found in other professional graphics solutions. From Quadro FX 5600 at the ultra-high-end, and Quadro FX 4600 and 3700 at the high-end, through Quadro FX 1700 at the mid-range, to Quadro FX 570 and 370 at the entry-level, Quadro delivers the productivity you need at every price.

Product Specifications

Form Factor	ATX, 4.38"(H) x 9.0" (L)
Frame Buffer Memory	512MB GDDR3
Memory Interface	256-bit
Memory Bandwidth	51.2GBps
Max Power Consumption	78W
Graphics Bus	PCI Express x16
Display Connectors	Dual DVI-I, Stereo
Dual Link DVI	Yes (2)
Auxiliary Power Connectors	Yes (1)
Number of Slots	1
Thermal Solution	Active Fansink

NVIDIA Quadro | **The Definition of Performance. The Standard for Quality.**

Features and Benefits

NVIDIA® Unified Architecture	Industry's first unified architecture designed to dynamically allocate compute, geometry, shading, and pixel processing power to deliver optimized GPU performance.
Shader Model 4.0: Next-Generation Vertex and Pixel Programmability	Reference standard for shader model 4.0, enabling a higher performance and ultra-realistic effects in OpenGL and DirectX 10 professional applications.
PCI Express 2.0 Support	Doubles the data transfer rate up to 5 GBps per lane, for an aggregate bandwidth of 16 GBps bi-directional (8 GBps in each direction).
GPU Computing	NVIDIA CUDA™ provides a C language environment and tool suite that unleashes new computational capabilities to solve complex, visualization challenges such as real-time ray tracing and interactive volume rendering.
NVIDIA SLI™ Technology	NVIDIA SLI technology enables dynamically scalable graphics performance, enhanced image quality, and expanded display real-estate.
Ultra-Quiet Design	Acoustics at sub 40 db, for a quiet desktop environment.
Full-Scene Antialiasing (FSAA)	Up to 32x FSAA dramatically reduces visual aliasing artifacts or "jaggies," resulting in highly realistic scenes.
Essential for Microsoft Windows® Vista™	Offering an enriched 3D user interface, increased application performance, and the highest image quality, NVIDIA Quadro graphics boards and NVIDIA OpenGL ICD drivers are optimized for 32- and 64-bit architectures to enable the Windows Vista experience.

Product Specifications

SUPPORTED PLATFORMS

- Microsoft Windows Vista (64-bit and 32-bit)
- Microsoft Windows XP (64-bit and 32-bit)
- Microsoft Windows 2000 (32-bit)
- Linux® - Full OpenGL implementation, complete with NVIDIA and ARB extensions (64-bit and 32-bit)
- Solaris®
- AMD64, Intel EM64T
- PCI Express 2.0 Support

NVIDIA QUADRO FX 3700 ARCHITECTURE

- 128-bit color precision
- Unlimited fragment instruction
- Unlimited vertex instruction
- 3D volumetric texture support
- Single-system powerwall
- 12 pixels per clock rendering engine
- Hardware accelerated, antialiased points & lines
- Hardware OpenGL overlay planes
- Hardware-accelerated, two-sided lighting
- Hardware-accelerated clipping planes
- 3rd-generation occlusion culling
- 16 textures per pixel in fragment programs
- Window ID clipping functionality
- Hardware-accelerated line stippling

SHADING ARCHITECTURE

- Full Shader Model 4.0 (OpenGL 2.1/ DirectX 10 class)
- Long fragment programs (unlimited instructions)
- Long vertex programs (unlimited instructions)
- Looping and subroutines (up to 256 loops per vertex program)
- Dynamic flow control
- Conditional execution

HIGH LEVEL SHADER LANGUAGES

- Optimized compiler for Cg and Microsoft HLSL
- OpenGL 2.1 and DirectX 10 support
- Open source compiler

HIGH-RESOLUTION ANTIALIASING

- Rotated Grid Full-Scene Antialiasing (RG FSAA)
- 32x FSAA dramatically reduces visual aliasing artifacts or "jaggies" at resolution up to 1920 x 1200

DISPLAY RESOLUTION SUPPORT

- Dual-link DVI-I outputs drive two digital displays at resolutions up to 2560 x 1600 @ 60Hz
- Internal 400 MHz DACs – Two analog displays up to 2048 x 1536 @ 85Hz

nVIEW ARCHITECTURE

- Advanced multi-display desktop & application management, seamlessly integrated into Microsoft Windows.

ASK ABOUT ENERGY STAR

[1] NVIDIA nView will be available for Windows Vista Spring 2008

To learn more about NVIDIA Quadro, go to **www.nvidia.com**