# NVIDIA Quadro

NVIDIA Quadro FX 570

## Entry-Level Professional Graphics with Uncompromised Features

The NVIDIA Quadro® FX 570 graphics board delivers unprecedented entry-level professional application capabilities.

The NVIDIA Quadro FX 570 featuring a revolutionary unified architecture, Quadro dynamically allocates geometry, shading, and compute processing power to deliver optimized GPU performance. Featuring a 256MB frame buffer, the Quadro FX 570 is Microsoft® Windows Vista™ ready, and certified on CAD, DCC, and visualization applications. The reference standard for Shader Model 4.0, the Quadro FX 570 graphics board solution enables next generation ultra-realistic, real-time OpenGL and Direct X 10 visualization applications.

With two dual-link DVI connectors, NVIDIA Quadro FX 570 offers superb image quality at resolutions up to 2560 x 1600 @ 60Hz.

The Quadro FX 570 is the entry-level solution from the latest generation of unified architecture based product offerings. The entire NVIDIA Quadro family takes the leading professional applications to a new level of interactivity by enabling unprecedented capabilities in programmability and precision. The industry's leading workstation applications leverage this architecture to enable hardware-

accelerated features, performance, and quality not found in any other professional graphics solutions. From Quadro FX 5600 at the ultra-high-end, and Quadro FX 4600 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 point.

## Product Specifications

| | |
|---|---|
| Form Factor | ATX, 4.38" (H) x 6.6" (L) |
| Frame Buffer Memory | 256MB DDR2 |
| Memory Interface | 128-bit |
| Memory Bandwidth | 12.8GB/sec. |
| Max Power Consumption | 38W |
| Graphics Bus | PCI Express x16 |
| Display Connectors | DVI-I, DVI-I |
| Dual Link DVI | Yes (2) |
| Auxiliary Power Connectors | No |
| Number of Slots | 1 |
| Thermal Solution | Active Fansinkk |
| NVIDIA SLI Technology | No |

## Features and Benefits

| | |
|---|---|
| **NVIDIA® Unified Architecture** | Industry's first unified architecture designed to dynamically allocate geometry, shading, pixel, and compute processing power to deliver optimized GPU performance. |
| **Next-Generation Vertex and Pixel Programmability Shader Model 4.0** | Reference standard for shader model 4.0 enabling a higher level of performance and ultra-realistic effects for next generation OpenGL and DirectX 10 industry-leading professional applications. |
| **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. |
| **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. |
| **nView® Multi-Display Technology[1]** | 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. |
| **Unified Driver Architecture** | 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. |

## 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

**NVIDIA QUADRO FX 570 ARCHITECTURE**
- 128-bit color precision
- Unlimited fragment instruction
- Unlimited vertex instruction
- 3D volumetric texture support
- 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)
- 16x FSAA dramatically reduces visual aliasing artifacts or "jaggies," resulting in highly realistic scenes

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

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

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