

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 Fansink
NVIDIA SLI Technology	No



Images Courtesy of Mado Image created by MDOV Design Strategies (Mick Leach and Robert Henry), Mado Image created by Maharaj Studios (Khalid Al-Muharramiq), MFX / Percival Productions AG, NVIDIA Corporation, and Right Hemisphere.



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 Technology¹	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

