NVIDIA Quadro FX
Workstation Graphics

The Definition of Performance.
The Standard for Quality.
The Quadro Revolution Continues…

- Transform & Lighting
- Per-Pixel Effects
- 1st Generation Programmability
- Breakthrough Performance
- Precision, Programmability & HLSL

Embargoed until 7/22/03
NVIDIA Quadro FX:
The Definition of Performance.
The Standard for Quality.

Performance
- Scalable Quadro FX Architectures

Programmability
- Empowers a new class of professional Applications

Precision
- Floating point and sub-pixel precision

Quality
- UDA, Certifications, Image Quality

Embargoed until 7/22/03 NVIDIA CONFIDENTIAL
NVIDIA Quadro FX 3000 / FX 3000G: Revolutionizing Advanced Visualization

- Highest Performance for full-scale models
- Precision and programmability for breakthrough realism
- Advanced Features for high-resolution visualization
- Certified Quality for all workstation applications

Embargoed until 7/22/03
Single System POWERwall

- Application Transparent
- NVIDIA Projected Convergence Control
- Projected Overlap
- Luminosity Blending
Ultra High Resolution Displays

2048x1536 (QXGA)

3840x2400 (QUXGA-W)
IBM T221
Viewsonic VP2209b

Embargoed until 7/22/03
NVIDIA Quadro FX 3000G

- Full Quadro FX 3000 capabilities
- Framesync - multi-system synchronization
- Genlock – sync to an external source
- Windows and Linux Control / API
Framelock: Multi-System Synchronization
Genlock: Synch to an External Signal

Post Production

- Compositing
- NL Editing
- Sync to Audio
- Sync to character generator

On-Air Broadcast

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Workstation Applications

Taking increasing advantage of Quadro FX Programmability, Precision, Performance

Complete Development Environment for Production Software

- High-Level Shading Language
- Shader Portability
- Sub-shaders
- Quality
Maya 5 with Quadro FX Smashes Rendering Barrier

Graphics industry leaders Alias|Wavefront and NVIDIA introduce Hardware rendering breakthrough

Las Vegas, NV - NAB – April 7, 2003 - Alias|Wavefront™, an SGI (NYSE: SGI) company, revealed today an innovative Hardware rendering capability in its recent release of Maya® 5. Until now, only Software rendering offered 3D artists the level of quality required for final image output. With Maya 5, artists can now take advantage of advances in per vertex and per pixel programmable shading technology to render quality images with specular highlights, bump and reflection mapping and shadows, at a fraction of traditional render time. Maya 5’s unified rendering workflow significantly simplifies shading, texturing and lighting allowing non-technical artists to benefit from this functionality as well.

Maya 5 in combination with NVIDIA’s new Quadro® FX graphics engine - provides customers with unprecedented rendering power. Maya 5 is the first 3D application to fully take advantage of the Quadro FX’s power and precision to render high quality images that in many cases are indistinguishable from Software rendering. The combination of Maya 5 and advanced graphics card technology raises the bar in quality for pre-visualization and boosts speed for broadcast quality output.
Quadro FX – MCAD

- Industrial Realism
  - Performance
  - Precision
  - Programmability
  - Quality

- Solidworks 2004 Launch Platform

- CATIA Demo Platform

Embargoed until 7/22/03
Quadro FX – Industrial Design and Styling
Quadro FX for Volumetric Imaging

- 3D Volumetric Data
- 256x256x256 voxels, 4 bytes per voxel, 27 Hz (1.8 GB/s)
- 2,048 fragment instructions
- 128-bit Precision Graphics Pipeline