NVIDIA® Unified Architecture

- Unified shader architecture
- GigaThread™ technology
- Full support for Microsoft® DirectX® 10
  - Geometry shaders
  - Geometry instancing
  - Streamed output
  - Shader Model 4.0
- Full 128-bit floating point precision through the entire rendering pipeline

NVIDIA Lumenex™ Engine

- 16x full screen anti-aliasing
- Transparent multisampling and transparent supersampling
- 16x angle independent anisotropic filtering
- 128-bit floating point high dynamic-range (HDR) lighting with anti-aliasing
  - 32-bit per component floating point texture filtering and blending
- Advanced lossless compression algorithms for color, texture, and z-data
- Support for normal map compression
- Z-cull
- Early-Z

NVIDIA Quantum Effects™ Technology

- Advanced shader processors architected for physics computation
- Simulate and render physics effects on the graphics processor

NVIDIA® TurboCache™ Technology

- Combines the capacity and bandwidth of dedicated video memory with dynamically allocated system memory to dramatically turbocharge performance.

NVIDIA PureVideo™ HD Technology²

- Dedicated on-chip video processor
- High-definition H.264, VC-1, MPEG2 and WMV9 decode acceleration
- Advanced spatial-temporal de-interlacing
• HDCP capable
• Spatial-Temporal De-Interlacing
• Noise Reduction
• Edge Enhancement
• Bad Edit Correction
• Inverse telecine (2:2 and 3:2 pull-down correction)
• High-quality scaling
• Video color correction
• Microsoft® Video Mixing Renderer (VMR) support

**Advanced Display Functionality**

• One single-link DVI outputs for digital flat panel display resolutions up to 1920x1200
• Dual integrated 400MHz RAMDACs for analog display resolutions up to and including 2048x1536 at 85Hz
• Integrated HDTV encoder provides analog TV-output (Component/Composite/S-Video) up to 1080i resolution
• NVIDIA nView® multi-display technology capability
• 10-bit display processing

**Built for Microsoft® Windows Vista™**

• Full DirectX 10 support
• Dedicated graphics processor powers the new Windows Vista Aero 3D user interface
• VMR-based video architecture

**High Speed Interfaces**

• Designed for PCI Express® x16
• Designed for high-speed GDDR3 and DDR2 memory

**Operating Systems**

• Built for Microsoft Windows Vista
• Windows XP/Windows XP 64
• Linux

**API Support**

• Complete DirectX support, including Microsoft DirectX 10 Shader Model 4.0
• Full OpenGL® support, including OpenGL 2.0

---

2 Feature requires supported video software. Features may vary by product.
3 Requires other compatible components that are also HDCP capable.
6 Feature available on GeForce 8400 GPUs only.

[Back to our video cards / graphics cards for sale page](#) or,
[The OrpheusComputing.com home page for custom computers, computer hardware parts and upgrades](#)