Features and Benefits – GeForce Go 7900 GPUs

Next-Generation Superscalar GPU Architecture
Delivers up to 2x the shading power of previous generation products taking gaming performance to extreme levels.

Full Microsoft® DirectX® 9.0 Shader Model 3.0 Support
The standard for today's PCs and next-generation consoles enables stunning and complex effects for cinematic realism. NVIDIA GPUs offer the most complete implementation of the Shader Model 3.0 feature set—including vertex texture fetch (VTF)—to ensure top-notch compatibility and performance for all DirectX 9 applications.

NVIDIA® CineFX® 4.0 Engine
Delivers advanced visual effects at unimaginable speeds. Full support for Microsoft® DirectX® 9.0 Shader Model 3.0 enables stunning and complex special effects. Next-generation shader architecture with new texture unit design streamlines texture processing for faster and smoother gameplay.

NVIDIA® Intellisample™ 4.0 Technology
The industry's fastest antialiasing delivers ultra-realistic visuals, with no jagged edges, at lightning-fast speeds. Visual quality is taken to new heights through a new rotated grid sampling pattern, advanced 128 Tap sample coverage, 16x anisotropic filtering, and support for transparency supersampling and multisampling.

Transparency Antialiasing
The industry's first notebook GPU family to support transparency supersampling and multisampling to dramatically improve the quality of objects modeled in alpha-tested textures (typically environmental details like chain link fences, grass, leaves, or other vegetation).

NVIDIA® SLI™ Technology
Delivers up to 2x the performance of a single GPU configuration for unparalleled gaming experiences by allowing two graphics cards to run in parallel. The must-have feature for performance PCI Express® graphics, SLI dramatically scales performance on today's hottest games. *Feature available on select GeForce Go 7900 GPUs and GeForce Go 7800 GPUs only.*

64-Bit Floating Point Texture Filtering and Blending
Based on the OpenEXR technology from Industrial Light & Magic (http://www.openexr.com/), NVIDIA's 64-bit texture implementation delivers state-of-the-art high dynamic-range (HDR) visual effects through floating point capabilities in shading, filtering, texturing, and blending.

NVIDIA® PureVideo™ Technology
The combination of high-definition video processors and video decoding software that delivers unprecedented picture clarity, smooth video, accurate color, and precise image scaling for all video content to turn your PC into a high-end home-theater. *Feature requires supported video software. Feature may vary by product.*

Adaptable Programmable Video Processor
PureVideo's programmable technology adapts to new video encoding formats as they are developed to provide a future-proof video solution. *Feature requires supported video software. Feature may vary by product.*

High-Definition H.264, MPEG-2, and WMV Hardware Acceleration
Smoothly playback H.264, MPEG-2, and WMV video – including WMV HD – with minimal CPU usage so the notebook is free to do other work. *Feature requires supported video software. Feature may vary by product.*

Inverse Telecine (3:2 & 2:2 Pulldown Correction)
Recovers original film format data to provide more accurate video playback and superior picture quality. *Feature requires supported video software. Feature may vary by product.*

LCD Sharpening
Compensates for slower response time by overdriving color signals, thereby automatically eliminating ghosting effects. Notebook LCD displays can exhibit "ghosting" effects because of the slow response time of liquid crystals.

Advanced Spatial-Temporal De-Interlacing
Smoothes video and DVD playback on progressive displays to deliver a crisp, clear picture that rivals high-end home theater systems. *Feature requires supported video software. Feature may vary by product.*

High-Quality Scaling
Allows for upscaling of a low-resolution video to HDTV resolutions (up to 1080), while maintaining a clear, clean image. Also allows for downscaling videos, including high-definition, without experiencing any annoying flicker, while preserving image detail.

Video Color Correction
Corrects differences in color characteristics of RGB monitors and TV monitors through NVIDIA PureVideo's ProcAmp Color Controls settings, such as Brightness and Contrast. The display gamma correction ensures videos are not too dark, overly bright, or washed out regardless of the video format or display.

Integrated TV Output
Provides world-class TV-out functionality (Composite/S-Video/Component) up to 1080i resolution.

256-Bit Memory Interface
Delivers more memory bandwidth and efficiency to power the latest games and applications at blazing speeds.

NVIDIA® UltraShadow™ II Technology
Enhances the performance of bleeding-edge games, featuring complex scenes with multiple light sources and objects. 2nd-generation technology delivers more than 4x the shadow processing power over the previous generation.

128-Bit Studio-Precision Computation
128-bit studio-precision computation through the entire pipeline prevents image defects due to low precision and ensures the best image quality for even the most demanding applications.

Full-Speed 32-Bit Color Precision
Delivers increased image quality with no performance compromise.

NVIDIA® ForceWare® Unified Driver Architecture (UDA)
Delivers a proven record of compatibility, reliability, and stability with the widest range of games and applications. ForceWare ensures the best out-of-box experience for every user and delivers continuous performance and feature updates over the life of NVIDIA GeForce GPUs.

OpenGL® 2.0 Optimizations and Support
Ensures the best performance and application compatibility for all OpenGL applications.

NVIDIA® Digital Vibrance Control® 3.0 Technology
Allows the user to adjust color controls digitally to compensate for the lighting conditions of their workspace, in order to achieve accurate, bright colors in all conditions.

PCI Express Support
PCI Express bus doubles the bandwidth of AGP 8X delivering over 4GB/s in both upstream and downstream data transfers.

Dual 400MHz RAMDACs
Blazing-fast RAMDACs support dual QXGA displays with ultra-high, ergonomic refresh rates–up to 2048x1536 @ 85Hz.

NVIDIA® PowerMizer® 6.0 Technology
The sixth generation of NVIDIA's advanced hardware power management technology that reduces notebook power consumption & heat generation for the graphics subsystem, thereby enabling a truly mobile, cool & quiet, uncompromised user experience.

Built for Microsoft® Windows Vista™
NVIDIA's third-generation GPU architecture built for Windows Vista gives users the best possible experience with the 3D graphical user interface in the upcoming operating system (OS) from Microsoft.