

NVIDIA PureVideo Brings Home-Theater Quality Video to Your PC

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NVIDIA Corporation announced NVIDIA PureVideo technology, a combination of hardware and software technologies designed to raise the bar on the video capabilities of today's desktop and notebook PCs. The addition of PureVideo technology to the GeForce 6 Series of graphics processing units (GPUs) allows for accelerated playback of MPEG-2 and high-definition video content at home-theater levels of quality, resulting in crisp, vibrant and stutter-free video on any display.

Today, consumers are demanding smooth, high-quality DVD playback and stutter-free, high-definition viewing for a home theater experience driven by their PC. And the only way to achieve this is with NVIDIA PureVideo technology, part of the GeForce 6 Series of GPUs.

Watch videos on your desktop PC, notebook PC, or HDTV without the annoying artifacts and imperfections of traditional PC-based video solutions. NVIDIA PureVideo technology delivers smooth HD video in all formats and with superb picture clarity. And the high-precision subpixel processing enables videos to be scaled to any size so that even small videos look like high-resolution videos.

Enabled by a dedicated, programmable video processing engine found on the Company's award-winning GeForce 6 Series GPUs, PureVideo technology eliminates the trade-off in quality traditionally associated with video on the PC by executing on an advanced set of algorithms typically found in high-end consumer electronics devices. PureVideo technology eliminates the need for separate hardware or chipsets and

takes the load off the PC's multi-purpose central processing unit to deliver to consumers, high-quality video playback at resolutions up to 720p and 1080i.

“The personal computer has never been well-regarded for its abilities to deliver high-quality video playback,” said Dan Vivoli, executive vice president of marketing at NVIDIA. “The GeForce 6 Series with PureVideo technology finally merges the flexibility of the PC platform with the capabilities of high-end consumer electronics to give consumers more choice over how they experience video.”

Recent analyst reports cite that the adoption of HD is on the rise, with an estimated 60 million households expected to embrace high-definition devices by 2008¹. Similarly, 33.5 million US households are expected to adopt digital video recorder (DVR) technology in the same time period².

Key features of PureVideo include:

- High-definition MPEG-2 Hardware Acceleration. A dedicated 16-way vector processor enables smooth playback of HD video with minimal CPU usage.
- WMV High-definition Hardware Acceleration. Programmable support of the newest format enabled by Microsoft Windows Media Player and Windows XP Media Center Edition 2005 for fluid playback of WMV and WMV HD content.
- High-quality Real-time Video Recording. An advanced motion-estimation engine makes it possible to record in real-time without a loss in quality.
- Spatial / Temporal Adaptive De-Interlacing. Experience interlaced content from satellite, cable, and DVD feeds in full detail and without jagged edges or artifacts.
- 3:2 Pull-down Correction and “Bad Edit” Correction³. Restore video to its original 24fps film format to experience a crystal clear picture,

frame after frame.

-- Flicker-free Multi-Stream Scaling. High-quality 4-tap by 5-tap scaling maintains image detail, even when scaling a small video to a large area of the screen.

-- Display Gamma Correction. Automatic format detection adjusts the color quality of video playback so that it is not too dark, overly bright or washed out, regardless of the display.

To maximize the complete PureVideo experience, NVIDIA has released the NVIDIA DVD Decoder. The software decoder—the first software decoder to receive "Designed for Media Center" certification from Microsoft—unleashes the broad range of PureVideo technology features for DVD and recorded video playback and works with both Windows Media Player and Microsoft Windows XP Media Center Edition 2005. The Company has also released an update for its ForceWare software unified driver architecture to enable the functionality of the PureVideo technology algorithms.

"The programmability of the PureVideo engine gives us more flexibility as a development platform as we are able to support key new features designed to enhance video playback, such as motion estimation, to deliver a competitive advantage to our products," said Lewis Liaw, president of Ulead Systems, North America. "With Ulead's products and NVIDIA GeForce 6 Series GPUs, consumers have a cost-effective solution for creating high-quality video."

Graphics cards based on NVIDIA GeForce 6 Series GPUs with PureVideo technology are available today from leading add-in card vendors, system builders, and major OEMs worldwide.

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