

By: ~~February 2008~~ Windows Editor

## [New Features for ATI Catalyst Drivers](#)

### *Hybrid CrossFire with the 8.3 Catalyst release!*

The season for new features added to graphics drivers seems to have begun. First was Nvidia with the High-Definition Video feature added to its ForceWare release, and now we learn that ATI also has in mind some changes for its future Catalyst Software. It seems that the Catalyst 8.3 will bring major changes to the driver and software included in the suite, something more than just the usual monthly updates that we are used to. Besides the small bug fixes and performance enhancements, the first thing that should be noticed at the new driver is the fact that it officially brings support for more than two GPUs connected via CrossFireX. Three or four CrossFireX graphic cards will be supported, not to mention the fact that they don't have to be matching GPUs. The Hybrid CrossFire feature gives more flexibility to the users who want to use multi-GPU setup. Starting with Catalyst 8.3, mismatched cards, like HD 3870 X2 and HD 3870 standard, will work together on the same motherboard, at the same time. This new feature has been extended even more, therefore combinations between 3870 and 3850 will also be possible. Moreover, users will have the ability to pair a RS780G IGP with a Radeon HD 3400 series graphics card in order to improve performance. The three-way and four-way CrossFireX allow even more different cards to be used together. Combinations like two HD 3870 X2 cards, or one HD 3870 X2 and one or two HD 3870 standard cards, are possible. But we have to mention here the fact that these CrossFireX configurations are available only under Windows Vista and only with DirectX 9. The following Catalyst suits will bring support for DirectX 10 and OpenGL. Due to the fact that many games do not scale to four GPUs (some not even to three), ATI declared that it would do everything it could to make as many games as possible to scale to the four cards, according to Hot Hardware; whereas, those which won't will be locked to three in order to prevent inferior performance and anomalies that make users have bad experiences. Catalyst 8.3 brings other features as well. There are some new anti-aliasing features, GPU LCD scaling, some previously unavailable tweaks for video playback and, also, flexibility to multi-monitor users under Windows Vista, who will not be forced to disable CrossFireX or to utilize additional monitors to watch certain types of videos. These tricks won't be necessary, as cards from X1800 to today's series do not require CrossFireX to be disabled when utilizing an extended desktop in a multi-monitor configuration. The software mechanism necessary for exposing the functionality of DirectX 10.1 has also been included in this release. Although support for hardware tessellation for RV670 GPU and DirectX 10.1 has been included in the hardware, the previous Catalyst drivers did lack the necessary software. From now on, Unreal Engine 3 games will have support for anti-aliasing. New edge-detection algorithms working in conjunction with the Super-AA modes, that are available with CrossFireX, are also added in Catalyst 8.3. And even more are to come! HydraVision software and hotkey manager will also be available for Vista users. Catalyst Control Center will have wizards incorporated, so that novice users could take advantage of HydraVision, or configure individual virtual desktops. The GPU LCD scaling feature gives the users the possibility to use GPU accelerated scaling for wide LCD displays. The panel won't scale anymore images from non-native resolutions. The wide panel aspect ratio will also be maintained with the use of a new setting, Maintain Aspect Ratio, which improves image quality. As for the AVIVO package, the level of noise reduction or edge enhancement will be controlled by users from now on, unlike the previous version of the software, where they could only be turned on or off. Along with the following Catalyst Suits, performance enhancements will be added to the Folding @ Home project with Radeon HD 2600 series on up to the Radeon HD 3000 series. Tests made by [Hot Hardware](#) show how performance levels rise from 55.9% with the second GPU, up to 71.4% with the fourth one under *3DMark06*. Under *Half Life 2: Episode 2* the performance levels were up by 82% with the second card, and 152% with the third GPU. If ATI manages to optimize performance support for DirectX 10 and OpenGL, as most of the latest games are DX10 titles, then the ATI graphic cards users will be quite happy in the following weeks! **Note:** There is a beta version of Catalyst Software Suite labeled [8.47](#) available for download on our site, for those users who would like to take a glance at all those new features promised by ATI.