

## Backgrounder

# ATI Stream Software Development Kit (SDK)

Latest Version Available: 1.3 Beta



### Overview

The ATI Stream SDK is a freely distributed and fully open toolset that enables programmers to write, run and debug ATI Stream accelerated applications capable of running on an expanding range of AMD graphics processing units (GPUs).

AMD is evolving the SDK through a series of planned releases throughout 2008 and 2009 to provide superior ease-of-use, stability, performance, access to a wide installed base of hardware and outstanding cross-platform development capabilities.

AMD believes that the key to broad mainstream adoption is through the use of industry standard software interfaces. Future SDK releases will therefore focus on use of both established and emerging industry standards such as OpenCL and DirectX. However, AMD is also committed to minimizing disruption to developers already in process of developing applications, or whose applications have already gone to market. AMD therefore plans to evolve the SDK in such a way that does not require developers to extensively re-write the applications they've already created.

The SDK can be downloaded free of charge by registered users of AMD Developer Central located at [developer.amd.com](http://developer.amd.com).

### ATI Stream SDK Version 1.3

With the release of ATI Stream SDK 1.3, AMD continues to deliver on its promise of providing a fully featured software development environment that exposes the amazing computational power of AMD GPUs in an easy to use interface. This release serves as an upgrade to AMD Stream SDK v1.2.1-beta, and is planned to be available for download starting in late Q408, free of charge.

It is expected to be released in conjunction with the next release of ATI Catalyst™ driver, version 8.12, which will include built-in ATI Stream technologies and enable millions of users with ATI Radeon graphics processors to run ATI Stream enabled applications such as Cyberlink's upcoming PowerDirector 7 and ArcSoft's upcoming TotalMedia Theater.

"We turned to ATI Stream technology as a means to enhance ArcSoft SimHD™, DVD upscaling technology of ArcSoft TotalMedia™ Theatre. Working with the developer tools provided in the ATI Stream SDK, in less than one month we were able to instruct our application to draw upon the compute power of the GPU to give viewers close-to-HD video from standard definition multimedia files and DVDs, resulting in a sharper and more vivid picture in real time. We were able to complete the project in less time than expected due to the performance enhancements AMD has made to the Brook+ runtime language in the SDK, which allowed us to efficiently program our software in a C-like environment." – George Tang, ArcSoft Vice President and General Manager of Video and Home Entertainment Group

Additional key improvements in this release include:

- Completely rewritten Brook+ runtime for increased stability and performance
- Improved flexibility in the Brook+ kernel language
- Increased support for development of applications capable of running across a broader range of ATI hardware, including the AMD FireStream™ 9250 and AMD FireStream™ 9270, ATI FirePro™ V5700 and ATI FirePro™ V8700, and ATI Radeon™ HD 4000 series graphics cards.

For more information and a complete list of improvements in the ATI Stream SDK v1.3, please visit <http://www.amd.com/stream>.

