

INTEL® MEDIA SDK 2013

Hardware
Acceleration
for Video



PRODUCT BRIEF
Intel Media SDK 2013

HARDWARE ACCELERATED VIDEO ENCODING, DECODING, AND TRANSCODING FOR INTEL PLATFORMS

Optimize Applications with Media Using Hardware Acceleration

The Intel® Media Software Development Kit (Intel Media SDK) is a cross-platform application programming interface (API) for developing and optimizing consumer and professional media applications, including video editing and processing, media conversion, streaming and playback, and video conferencing.

Benefits for Intel Media SDK Developers:

- **Intel Quick Sync Video:** Hardware-accelerated video encoding, decoding, and transcoding that utilizes the power of Intel Core™ Processor HD graphics for dedicated media processing of intensive workloads. Intel Media SDK includes methods to access Intel's Quick Sync Video hardware acceleration in Microsoft* Windows applications.
- **Development Efficiency:** Code once now and see it work on tomorrow's platforms. This future-proofing saves development time while taking advantage of future Intel architecture power and performance enhancements.
- **Innovation:** Efficiency gains give developers the time to innovate more new, exciting media features.

Intel Media SDK 2013

A complete software development kit to access high-performance hardware acceleration codecs on Intel platforms.

Intel Media SDK gives developers a standard interface for video encoding and simplified access to video decoding and transcoding on Intel platforms. Using Intel Media SDK, developers can access video processing routines for Intel platforms through a standardized interface that simplifies development and reduces the complexities of encoding with Microsoft DirectX* Video Acceleration (DXVA).

Intel Media SDK 2013 Supported Codecs and Features:

- **Video Processing Filters:** Deinterlacing/Inverse Telecine, Resizing, Color Conversion, Denoising, Frame Rate Conversion, Brightness, Contrast, Hue, Saturation Control, Sharpening, Image Stabilization.
- **Video Encoders:** H.264, MPEG-2, MJPEG, and MVC for stereoscopic 3D support. MJPEG is software-only.
- **Video Decoders:** H.264, MPEG-2, MJPEG/JPEG, VC-1, and MVC.
- **Hardware:** Intel HD Graphics, 2nd, 3rd, and 4th generation Intel Core processor-based platforms, including Ultrabook™ devices and now, Intel Atom® processor-based tablets.
- **Platforms without Intel Hardware Acceleration:** Support of platforms without Intel hardware-acceleration capabilities gives developers the benefit of tuned, optimized, multi-threaded software-based video encoding, decoding, and transcoding.
- **Operating Systems:** Microsoft Windows* 7 and Microsoft Windows* 8 (32 and 64-bit versions).
- **Advanced Features:** Microsoft Media Foundation Transforms (MFT), enablement of CPU and processor graphics load balancing, custom user-defined filters, constant QP encoding, and the protected content development package.

>> To download your free copy of Intel® Media SDK 2013, and to learn more about the benefits of Intel fixed-function hardware acceleration, go to: intel.com/software/mediasdk

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Intel Media SDK Free Download Includes:

- **Intel Media SDK API:** A robust interface insulates developers from the complexities of supporting multiple hardware platforms.
 - **Source Code Samples:**
 - Command-line decoding from elementary stream to raw frames
 - Command-line encoding from raw frames to elementary stream
 - Command-line video preprocessing to and from raw frame
 - Application sample for playback and transcoding using Microsoft DirectShow*
 - Microsoft DirectShow transformation filter plug-ins
 - Application sample for playback and transcoding using Microsoft Media Foundation and plug-ins
 - MVC samples for stereoscopic 3D support; command-line video-conferencing application simulation sample
 - Microsoft Windows 8 and DirectX 11.1 samples
 - An OpenCL* sample for interoperability
 - **Detailed Documentation:** Documentation, a user forum, and technical support help get application developers up and running with Intel Media SDK.
 - **Sample Media Applications:** Free-to-use and build-upon example applications utilizing source code examples to help developers quickly test out their hardware.
- **Videoconferencing Extension:** Rolling I-Frame support.
 - **Video Processing Enhancement:** Image stabilization pre-processing filter.
 - **New Samples and Samples Browser:**
 - Windows Store application development sample.
 - Samples Browser allows developers to search across samples to quickly integrate code.
- **Hardware Acceleration for Intel Atom Processor-based Tablets:** Intel Media SDK 2013 now supports basic hardware acceleration on Intel Atom processor-based tablets.

What's New in Intel® Media SDK 2013?

- **Highly Optimized for 4th Generation Intel Core Processors:** Support includes:
 - **Enhanced support for Microsoft* DirectX 11:**
 - Device and surface management using the latest version of DirectX 11.
 - Headless and multi-GPU configurations supported.
 - **Encode Enhancements:** Fully accelerated MPEG2 encode, 4k content encoding, and new software-based MJPEG encode.
 - **Decode Enhancements:** Fully accelerated MPEG/JPEG decode and 4K content decoding.

Intel Fixed-Function Hardware Acceleration: The Real Reason to Use Intel Media SDK 2013.

Video hardware acceleration is now common on a majority of compute devices, including Ultrabook devices, PCs, tablets and phones. Intel Media SDK makes it easy for developers to optimize applications for Intel HD Graphics' fixed-function hardware acceleration. This assures developers that their product fully utilizes the power of Intel Core processor-based platforms and now, Intel Atom processor-based tablets for a consistently high-quality media experience.

To download your free copy of Intel Media SDK 2013, and to learn more about the benefits of Intel fixed-function hardware acceleration, go to: intel.com/software/mediasdk

 @IntelMediaSDK

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