



HD Video Codec

High Quality and High Performance Video Coding for Windows, MacOS and Linux

HD video codec is a high performance video coding and playback application available for Windows. It may be licensed by Professional and OEM customers. An easy to use Software Developer Kit allows integration into custom applications.

Major Features

- MPEG-2 and MPEG-AVC (H.264) compliance for many profiles and levels (ISO 13818 ISO 14496 Part 10 (MPEG-AVC) / ITU H.264)
- Highly optimized software coding with support for latest CPU generations
- Real-Time encoding and Multi-Core support
- Wide range of applications from Mobile Phones (3GP), Portable Devices (iPod etc.) up to HDTV
- Full HD 1080i and 1080p support
- X-HD support for Custom Applications (Dome Cinema, Projections), up to 4096x4096 resolution
- Support for realtime Full HD 1080 encoding and decoding of dual channel video (stereo video / 3d)

Architecture and Availability

The HD Codec is available for Windows Intel platforms for project partners.

Components

- AVC/H.264 HD Video Encoder and Decoder
- MPEG audio, AMR and AAC codecs.
- MP4, 3GP and optionally Quicktime and AVI file format writers
- MPEG-2 HD Video Encoder and Decoder

Licensing model

We offer several licensing models, dependent on customer requirements.

- Developer License (SDK)
With the Developer License, you will get a documented SDK including shared library objects (DLLs), interface specifications, header files and source code samples to develop video coding applications.
- Redistribution License (Royalties)
For redistributing video coding modules with your application, a per-item additional royalty license is needed. You may also get flat fees for high sales volumes. Please contact us for further information.
- Customization and flat fees are possible



H.264 / AVC Video Encoder

The Video Encoder produces compatible streams according to ITU H.264 / ISO MPEG/AVC Reference Model JM9.2, as well as MP4 file format output.

Dual channel encoding for stereo video is supported.

The encoder accepts the following parameters:

- GOP Structure (I-frame distance / P-frame distance)
- Bit rate
- Profile/Level (baseline, main, extended, high)
- Field Structure (Interlaced/Progressive)
- Frame rate (15, 24, 25, 30, 50, 60)
- chroma_format / aux_format (monochrome, 4:2:0)
- misc. rate controls (fixed quantization, vbr, cbr)
- Motion Estimation method
- full pel, half pel and quarter pel motion vectors
- SVC chroma deblocking filter mode
- transform_8x8_mode
- Frame Size from Mobile to HDTV (64x64 to 4096x2048)

H.264/AVC Video Decoder

The decoder supports decoding of files created by JM9.2 compliant encoders or later, as well as MP4 file format input. The decoder supports baseline, main, extended and high profiles features, including HD, e.g. 1080i.

MPEG-2 and other codec types

Ask for special configurations and custom codec development.

Contact and further information

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