To provide faster video encoding than is possible on a CPU alone, MainConcept has developed codecs capable of running on graphics processors (GPUs). Graphics Processors are highly parallel processors capable of running thousands of threads simultaneously. By taking advantage of these parallel processors, video can be encoded faster while simultaneously offloading the CPU.

The MainConcept AVC/H.264 Encoder for Intel® Quick Sync Video (IQSV) acts as a wrapper that integrates Intel® Media SDK into the MainConcept API providing easy access to dedicated video processing in 3rd Generation Intel® Core™ Processors and newer.

MainConcept AVC/H.264 Encoder for Intel QSV also provides access to a high-performance software encoder specifically optimized for Intel processor micro-architectures. Through the MainConcept Low Level API and DirectShow filter set, developers can simply add Intel Quick Sync Video functionalities to their applications. Even when running on platforms that lack Intel’s dedicated graphics hardware acceleration features, solutions developed with the MainConcept AVC/H.264 Encoder for Intel QSV still gain benefit of optimized, and multi-threaded software-based video encoding, tailoring performance to the system’s capabilities.
An SDK Within an SDK

MainConcept AVC/H.264 QSV Encoder SDK, like Intel Media SDK 2.0, gives developers a streamlined interface for handling otherwise complex coding tasks. Similar to the Intel Media SDK 2.0, the MainConcept SDK uses a dispatcher layer within the API to insulate developers from the complexities of supporting Intel Quick Sync Video technology, and to make use of the well-known MainConcept API.

If you like to evaluate the MainConcept AVC/H.264 Encoder SDK, please submit the online licensing form or contact your sales representative.

MAINCONCEPT AVC/H.264 ENCODER FOR IQSV SDK PACKAGE

AVC/H.264 ENCODER SDK FOR INTEL QUICK SYNC VIDEO

Wrapper that integrates Intel® Media SDK into the MainConcept API providing easy access to dedicated video processing in Intel® Core™ Processors for making use of hardware accelerated AVC/H.264 encoding.

FEATURES

ENCODER:

- Hardware-based encoding compatible with Intel® CPU’s, starting from 3rd Generation Intel® Core™ Processors and newer.
- Bitrate control (CBR, VBR, CQP).
- Selectable profiles up to High Profile.
- Selectable levels up to Level 5.1.
- Bit rate support up to Level 5.1 restriction (288 Mbps).
- 4:2:0 chroma sampling.
- Strict HRD restrictions compliance.
- Configurable GOP structure (I, P and B frames in different combinations).
- Configurable motion estimation (number of reference frames).
- Adaptive GOP structure.
- Configurable number of slices.
- Configurable RD optimization (fastest speed, best quality, balanced quality and speed).
- Wide range of RGB and YUV input color spaces supported.
- Special input pin for the closed caption data receiving (in DirectShow Filter).
COMPONENTS

AVC/H.264 ENCODER SDK FOR INTEL QUICK SYNC VIDEO
- AVC/H.264 Video Encoder Wrapper for Intel QSV
- Intel Media SDK Library

TECH SPECS

- Microsoft® Windows® XP, Vista, Windows 7, Windows 8, Windows 10 (32-bit/64-bit)
- Linux Ubuntu 10.04 LTS (64-bit)
- Intel Media SDK 2.0 or higher

For Windows and Linux, the codec package consists of a Low Level API (in the C programming language). Under Windows, it additionally includes DirectShow® filters for hardware accelerated encoding.