



MAINCONCEPT HEVC SDK

Comprehensive A/V codec library for the rapid development of media encoding, decoding, transcoding and streaming solutions

THE MAINCONCEPT PROMISE

Try our Startup Kit before licensing the SDKs

Free to evaluate, lower cost and reduced time to market.



Worldwide and total customer support.



Up to 60% faster video processing performance.



The MainConcept HEVC SDK offers comprehensive encoding support for 4:2:0 Main and Main 10 profiles including support for HDR signaling and BT.2020 enhanced color gamut as well as SMPTE 2084 based HDR-10. When used on a 6th Generation Intel® Core™ Processor the encoder leverages Intel Quick Sync Video technology for hardware-accelerated operation and significant CPU load reduction.

The H.265/HEVC SDK offers real-time 4K60 encoding for Main and Main 10 profiles to support live streaming solutions, with decoder support for real-time playback on PC in various profiles and levels up to 8K30 for 4:2:0 streams.

The HEVC/H.265 Decoder has been extended to support 4:2:2 10-bit sampling. SABET effectively provides software programmers the ability to enable their solutions to encode adaptive formats.

**ENABLE HEVC SUPPORT IN YOUR APPLICATION,
SERVICE OR ENVIRONMENT TODAY!**

MainConcept HEVC/H.265 SDK Packages

HEVC/H.265 SDK	Complete HEVC/H.265 encoder and decoder without SABET
HEVC/H.265 SDK + SABET	HEVC/H.265 Codec SDK including our Smart Adaptive Bitrate Encoding Technology
HEVC/H.265 Decoder SDK	Stand-alone HEVC/H.265 decoder SDK

Key Features

Smart Adaptive Bitrate Encoding Technology (SABET)	Efficient encoding of adaptive formats to maximize transcoding resources by sharing data across profiles, which reduces total encoding time by over 30 percent.
Encoding Profiles	4:2:0 8-bit (Main) and 10-bit (Main 10) profile support for 4K, 1080p and 720p. Hardware accelerated encoding of 4:2:0 8-bit (Main) profile using the 6th Gen. Intel® Core Processor.
Decoding Profiles	4:2:0 8-bit (Main), 4:2:0 10-bit (Main 10), 4:2:0 12-bit (Main 12) and 4:2:2 8-bit (Main 4:2:2), 4:2:2 10-bit (Main 4:2:2 10) and 4:4:4 10-bit (Main 4:4:4 10), 4:4:4 12-bit (Main 4:4:4 12)
Compression	I-, P-, B-Frames, Pyramid B-Frames, and fixed or adaptive GOP structure with scene change detection, adaptive B-Frame count, and slices and tiles decoding support.
Compliance	Encoder HM 14 compliant, with and decoding compatibility for all HM 11.0, HM 14.0, and 16.2 anchor-streams.
HDR Support	Encoding support for HDR signaling and BT.2020 enhanced color gamut.
Rate Control	ConstantQ, Constant Rate Factor, RDOQ, CBR 1-Pass, and VBR 1-Pass
HRD Conformance	Rate Control Extension for Streaming Applications.
Formats	Multiplexing and demultiplexing support for MKV and MP4 containers.
Quality Control	Full Pixel Motion Estimation, Sub-Pixel Motion Estimation, Deblocking, Sample Adaptive Offset (SAO), Transform Split, Transform Skip, Inter Partitioning including AMP, Intra Partitioning, Data Sign Hide, Strong Intra Smoothing, and Performance Tuning and Coding Tree Unit (CTU) Relevance Detection.
Coding Unit Support	Up to 64 x 64 to support UHD (4K) resolutions
Processor Architectures	Optimized for Multi-Core and Assembler
Supported Platforms	Windows, Mac and Linux (32-bit/64-bit); HEVC Decoder is also available for ARMv7 and ARMv8 platforms (iOS and Android).