MainConcept HEVC SDK comes equipped with powerful new features you won’t get from open source, including 8K/60fps live video encoding, Canon XF HEVC 4:2:2 10-bit decoder support, and advanced GPU acceleration to maximize video encoding performance on low-cost hardware—saving time and money!

### AVAILABLE PACKAGES

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<th>Package</th>
<th>Description</th>
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<td><strong>HEVC/H.265 ENCODER SDK</strong></td>
<td>HEVC encoder with supported multiplexers and audio encoders, HEVC/H.265 Video Encoder, AAC Encoder, Fraunhofer AAC Encoder, MP4 Multiplexer, MPEG Multiplexer</td>
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<tr>
<td><strong>SABET FOR HEVC ENCODER</strong></td>
<td>Add-on package to enable SABET™, Smart Adaptive Bitrate Encoding Technology, for Intelligent ABR</td>
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<td><strong>HYBRID GPU ACCELERATED ENCODING</strong></td>
<td>Add-on package to enable GPU Accelerated Encoding on NVIDIA RTX boards</td>
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<td><strong>4:2:2 ENCODING</strong></td>
<td>Add-on feature enabling 4:2:2 support in the HEVC/H.265 encoder</td>
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<td><strong>HEVC/H.265 DECODER SDK</strong></td>
<td>HEVC decoder with supported demultiplexers and audio decoders, HEVC/H.265 Video Decoder, AAC Decoder, MP4 Demultiplexer, MPEG Demultiplexer</td>
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<td><strong>CANON XF-HEVC INGEST FOR HEVC/H.265 DECODER SDK</strong></td>
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<td><strong>HDR CONVERSION FOR HEVC/H.265 DECODER SDK</strong></td>
<td>Add-on package to enable PQ / HDR-10 to HLG, HLG to PQ / HDR-10 and PQ / HDR-10 to SDR conversion</td>
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<tr>
<td><strong>WEBASIM FOR HEVC DECODER</strong></td>
<td>Add-on package to enable WebASM decoding across internet browsers supporting the standard</td>
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### CODEC OPTIMIZATION WITH MAINCONCEPT PROFESSIONAL SERVICES

- **HEVC Decoder SDK**: Targeted for professional and enterpriselevel video processing.
- **HEVC Encoder SDK**: Optimized for broadcast-quality video compression.
- **WEBASIM Encoder/Decoder**: Enables seamless integration with web-based platforms.

### OPERATING SYSTEM

- Microsoft Windows 10 (64-bit, x86 and ARM)
- Apple macOS 10.11 and newer (64-bit x86), macOS 11 and newer (M1)
- Linux Ubuntu 14.04 LTS, CentOS 7.9 (64-bit, x86), Ubuntu 18.04 (64-bit, ARM)

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STREAM TYPES & FORMATS

**ELEMENTARY STREAMS:**
Generic HEVC/H.265 ES up to 4:2:2 10-bit

**TRANSPORT STREAMS:**
Ultra HD, UHD; Generic HEVC/H.265 TS up to 4:2:2 10-bit

**MP4:**
DASH-265, Ultra HD, UHD; Generic HEVC/H.265 up to 4:2:2 10-bit; SONY XAVC 2.0 (XAVC-HS) (decode only)

**MXF:**
Canon XF-HEVC (decode only)

SPECIFICATIONS

**ENCODER**
- Main, Main10 and Main422* profiles
- Intel Quick Sync Video and NVIDIA NVENC hardware encoding
- Hybrid GPU accelerated encoding*
- SABET™* intelligent ABR for efficient encoding of adaptive formats
- 2-pass encoding
- Encoding to SMPTE 2084 based HDR-10 including SMPTE 2086 mastering display metadata and MaxFALL, MaxCLL
- HLG transfer characteristics signaling in accordance with ITU-R BT.2100-0
- Intelligent, real-time parameter adjustment to ensure live encoding at best quality
- Optimal retention of film-grain to preserve cinematic look-and-feel
- I-, P-, B-Frames, Pyramid B-Frames, and fixed or adaptive GOP structure with scene change detection, adaptive B-Frame count
- ConstantQ, CRF (Constant Rate Factor), RDOQ, ABR

**DECODER**
- 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) profiles
- Progressive and interlaced support, including deinterlacing
- DXVA 2.0 hardware accelerated video decoding
- Decoder fills a dedicated HDR-10, HLG and PQ-10 data structure provided by UCC
- Real-time PQ / HDR-10 to HLG, HLG to PQ / HDR-10 and PQ / HDR-10 to SDR conversion*
- Slices and tiles decoding support
- Fast Preview Modes for enhanced decoding speed in video editing, surveillance and monitoring
- Decoder HM 11, 14, 16.2 and 16.9 compliant
- Demultiplexing only support for Canon XF-HEVC in MXF*
- WebASM support for decoding on supported internet browsers

* SABET, Hybrid GPU Encoding, 4:2:2 Encoding, HDR Conversion and Canon XF-HEVC decoding are optional features which can be purchased as an add-on to your existing HEVC/H.265 encoder or decoder license.