MainConcept AVC SDK, now also available for ARM processors, is proven to encode faster than open source and comes packed with features, including 4:2:2 10-bit pro format support and HDR support for HLG and PQ/HDR-10. That’s why MainConcept AVC remains the top choice of professionals.

**AVAILABLE PACKAGES**

| AVC/H.264 ENCODER SDK | Create AVC-based media up to 4:2:0 color space with 8-bit-depth and related audio and multiplexing components | AVC/H.264 Video Encoder
AAC Encoder
Fraunhofer AAC Encoder
MP4 Multiplexer
MPEG Multiplexer |
|------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| AVC/H.264 ENCODER SDK BROADCAST | Add-on package for AVC Encoder SDK supporting up to 4:2:2 10-bit (plus 4:2:0 8-bit Software and NVENC) & related audio & multiplexing components | AVC/H.264 Encoder SDK, plus AVC Encoder Broadcast License
M0F Multiplexer |
| INTEL QUICK SYNC FOR AVC/H.264 ENCODER SDK* | Add-on package for AVC Encoder SDK enabling AVC/H.264 video encoding in hardware on Intel® Core® processors | AVC/H.264 Encoder SDK, plus AVC IQSV License
MPEG Multiplexer |
| AVC/H.264 DECODER SDK | AVC Decoder SDK with support for up to 4:2:0 8-bit video and related audio and demultiplexing components | AVC/H.264 Video Decoder
Media File Importer (LL)
AAC Decoder
MP4 Demultiplexer
MPEG Demultiplexer |
| AVC/H.264 DECODER SDK BROADCAST | Add-on package for AVC Decoder SDK supporting up to 4:2:2 10-bit video with related audio & demultiplexing components | AVC/H.264 Decoder SDK, plus AVC Decoder Broadcast License
M0F Demultiplexer |
| AVC/H.264 SMART RENDERING SDK | Add-on package to enable PQ / HDR-10 to HLG, HLG to PQ / HDR-10 and PQ / HDR-10 to SDR conversion | AVC/H.264 Encoder SDK, plus AVC/H.264 Smart Render Wrapper
AVC Smart Render License
M0F Multiplexer |
| SVR360 FOR AVC/H.264 | Add-on feature license to AVC Encoder SDK Broadcast allowing encoding in virtually unlimited resolution, designed to meet the needs of 360 VR applications | AVC/H.264 Encoder SDK Broadcast, plus SVR360 AVC License |

**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 AVC/H.264 ES up to 4:2:2 10-bit (up to 4:4:4 12-bit in decoder), Apple HLS, DASH-264

PROGRAM STREAMS:
Generic AVC/H.264 Program Streams

TRANSPORT STREAMS:
Blu-ray Disc, HD DVD, HDTV, Digital TV, AVCHD 1.0 / 2.0, Sony NXCAM, 1Seg

MP4:
Sony XAVC-S, Sony PS3 / PS4, Sony PSP, Apple iPod / iPhone / iPad / TV, Adobe Flash (F4V), HTML, Microsoft Silverlight

3GP:
Suitable for older generation cell phones and tablets

MXF (BROADCAST ONLY):
Sony XAVC, Panasonic LongG, Panasonic P2 AVC-Ultra (AVC-I Class 200), P2 AVC-Intra Class 50 / 100 (Specialized Operational Pattern "Atom" SMPTE 390M), Panasonic AVC-Intra LT-4K and LT-2K, RP 2027 AVC-Intra 50, 100 and 200, AVC- Ultra (AVC-Intra 200) into OP-Atom (MXF)

SPECIFICATIONS

ENCODER
- ISO/IEC 14496-10 compliant
- Baseline, Main & High Profile up to 4:2:2 10-bit*
- Maximum resolution 8192x4320 @ 60 fps (Level 6.2)
- SVR360 to encode VR360 spheres beyond the AVC resolution limit*
- Smart Rendering modes: Smart Copy and Re-Encode*
- Strict HRD compliance
- Advanced compression algorithms
- Parameter compatibility validation
- Target Quality Mode (TQM) support
- CBR/VBR, 1-pass & 2-pass encoding
- Quarter pel motion estimation
- Low Delay flag (no latency) and rate-distortion optimization
- Pyramid GOP coding
- Direct access to NVIDIA NVENC HW Encoding if supported by system
- IQSV hardware encoding support through MainConcept API (optional)

DECODER
- Baseline, Main, High, High 4:2:2 / 4:4:4 profile support*
- Optimized for most efficient CPU usage
- 8-bit / 10-bit / 12-bit support
- I, P and B slices
- Low Delay flag (no latency)
- Field pictures
- Symmetric multi-processing, optimized for Hyper Threading processors and multi-CPU platforms
- Color space conversion
- Deinterlacing (via two software modes, and by means of VMR)
- Chroma upsampling
- Double rate (generating a progressive frame from every field)
- Fields reordering
- DXVA Hardware acceleration
- Stream-Analyzing API (VESA)

* 4:2:2 10-bit encoding and decoding support, Smart Rendering, and SVR360 are optional features which can be purchased as an add-on to your existing AVC/H.264 encoder or decoder license.