MAINCONCEPT

NAB 2025

April 6 – 9, 2025

mainconcept.com

MAINCONCEPT

Contents

Notable news

SIGNIFICANT HEVC BITRATE SAVINGS

MainConcept HEVC continues to show its worth across 4:2:2 and 4:2:0 10-bit

20% bitrate savings compared to x265

Fundamental CDN cost savings with MainConcept HEVC/H.265

UNIQUE CODEC FEATURES

Easy Video API – save 75% on integration costs

MV-HEVC for Apple Vision Pro

JPEG XS for IP workflows

Snapdragon SDK for Windows ARM

FUTURE BROADCAST TV

Next-gen broadcast enhancement LCEVC SDK with AVC, HEVC & VVC

Officially approved Dolby AC-3 and E-AC-3 processing in FFmpeg

Support for latest German broadcast XAVC XDF-01 production format

MainConcept HEVC/H.265 Encoder

Up to 20% more efficient than x265

Save 20% on your CDN, savings that can far outweigh the cost of the license

Monthly **DATA TRANSFER**	Potential Annual **SAVINGS**
100 TB	$15,000
1000 TB	$75,000
5000 TB	$300,000

MainConcept Easy Video API (EVA)

A single library with one API that enables software and hardware codecs

Hardware processing & **Software codecs**

AMD intel NVIDIA MAINCONCEPT™

- Save up to 75% on integration
- Flexible HW choices
- Efficient energy usage
- Software fallback
- Single support contact

EVA SUPPORTS

AVC/H.264, HEVC/H.265, AV1 and JPEG XS

Plus, MainConcept encoders, decoders, color conversion and scaling

MainConcept EVA

Saving on integration and maintenance

It costs, on average, $150,000 to integrate one API, and $50,000 per year to maintain it.

How much will MainConcept EVA save you?

$50,000

$150,000

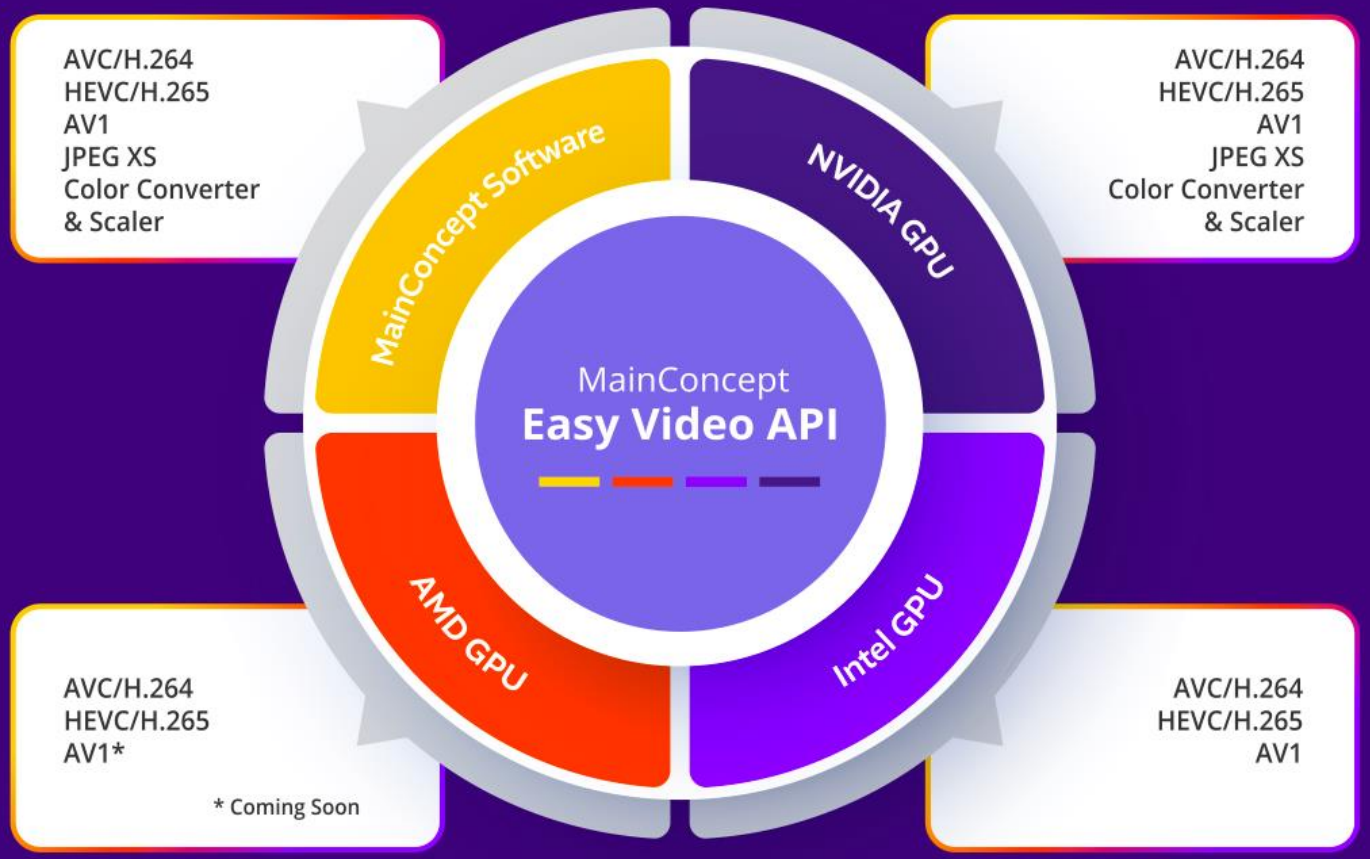
$300,000

$450,000

or more?

MainConcept EVA

Codecs, Converters & Vendors



MainConcept on Snapdragon

Use Our Codecs on latest Windows ARM devices powered by Qualcomm

Real-time encoding & decoding performance

Complete set of libraries for **OTT, broadcast** & **production**

Legacy, present & future **codec support on Windows ARM**

FEATURES

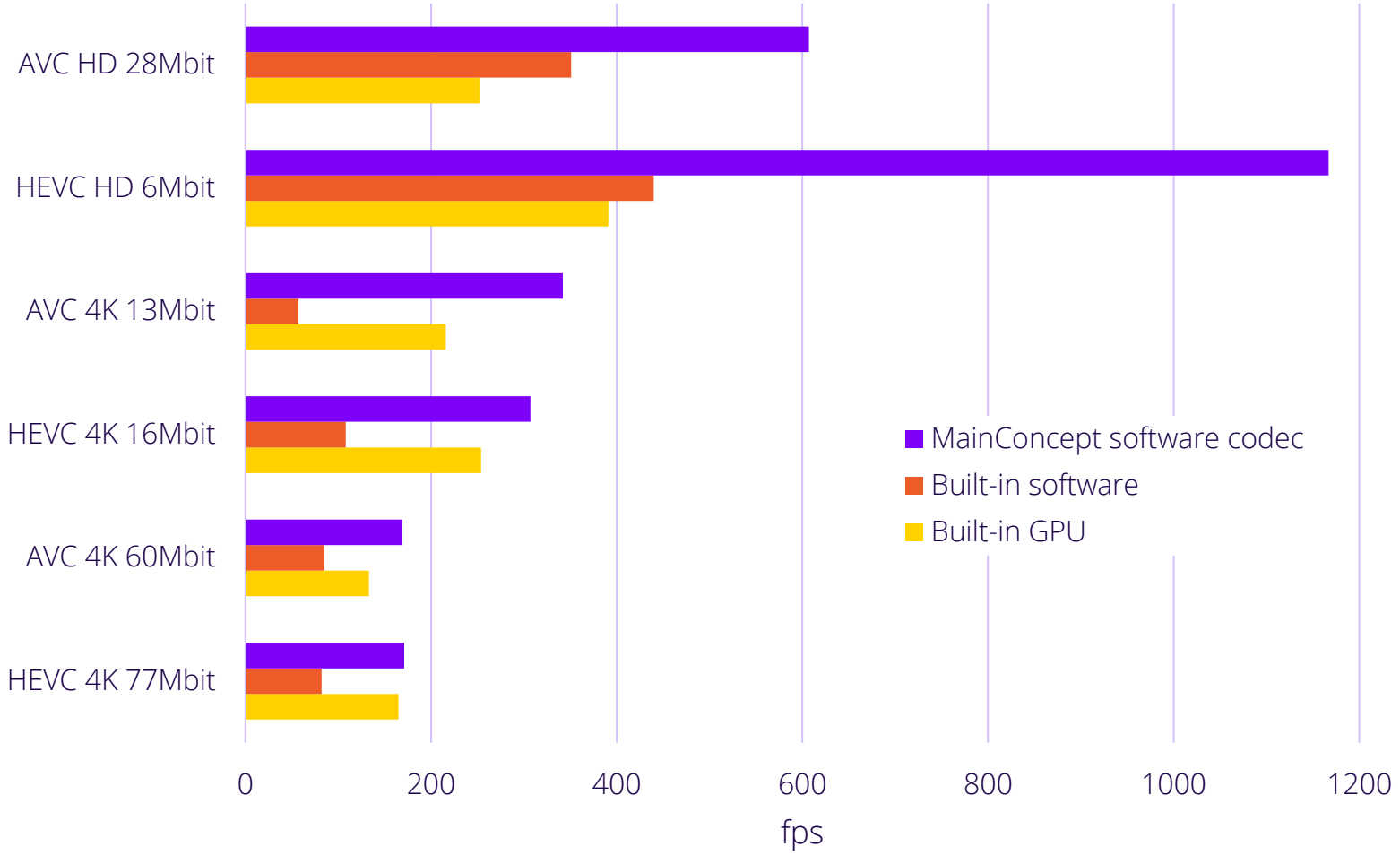
- Deploy MainConcept Codec libraries and related components on Snapdragon powered devices running Windows
- Libraries for broadcast, OTT and professional production workflows
- Optimized for Qualcomm's latest flagship CPU
- Snapdragon X Elite X1E-84-100 clearly outperforms the Altra Ampere and previous generation of ARM-based Microsoft Surface
- Enormous cost savings compared to ARM-based laptops from different vendors
- Significant performance gains compared to laptops with similar ARM-based CPUs from other vendors

PACKAGES

HEVC/H.265 Encoder/Decoder
AVC/H.264 Encoder/Decoder
MPEG-2 Encoder/Decoder
DV/DVCPRO Encoder/Decoder
MPEG-4 Part 2/H.263 Encoder/Decoder
AAC/xHE-AAC Encoder
AAC Decoder
MPEG Audio Encoder/Decoder
Converter & Scaler Pack
File Format
OTT Content Creation
DASH/HLS Demultiplexing/Client
SCTE-35
Network Source/Client

MainConcept on Snapdragon

Consumer Grade Decoding: improved performance on Snapdragon X



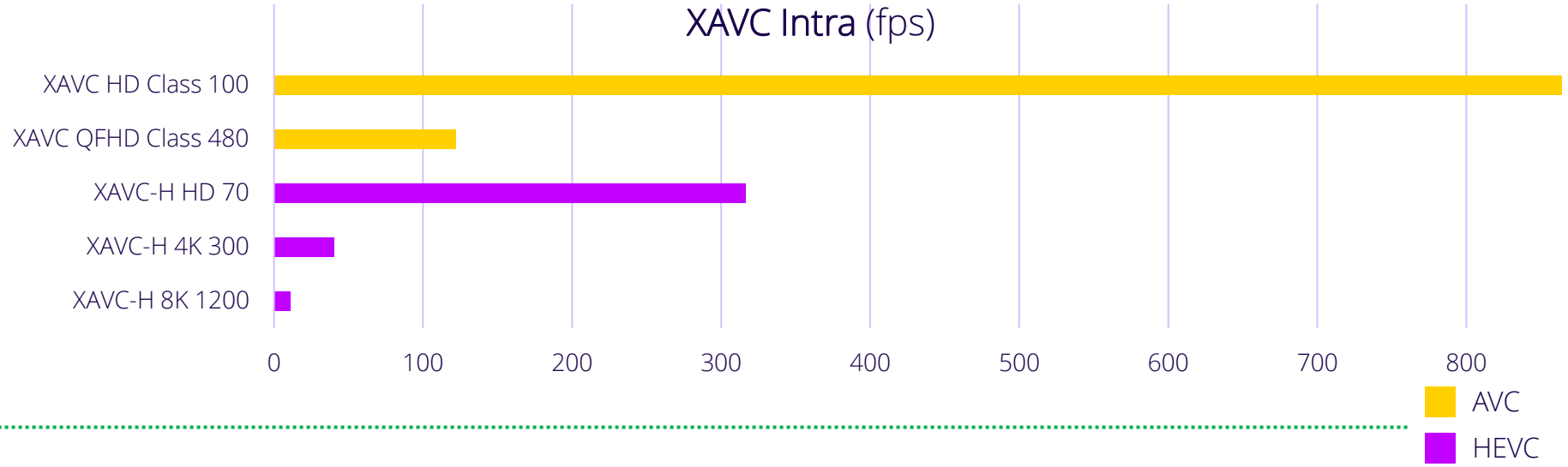
2.5x vs. built-in software

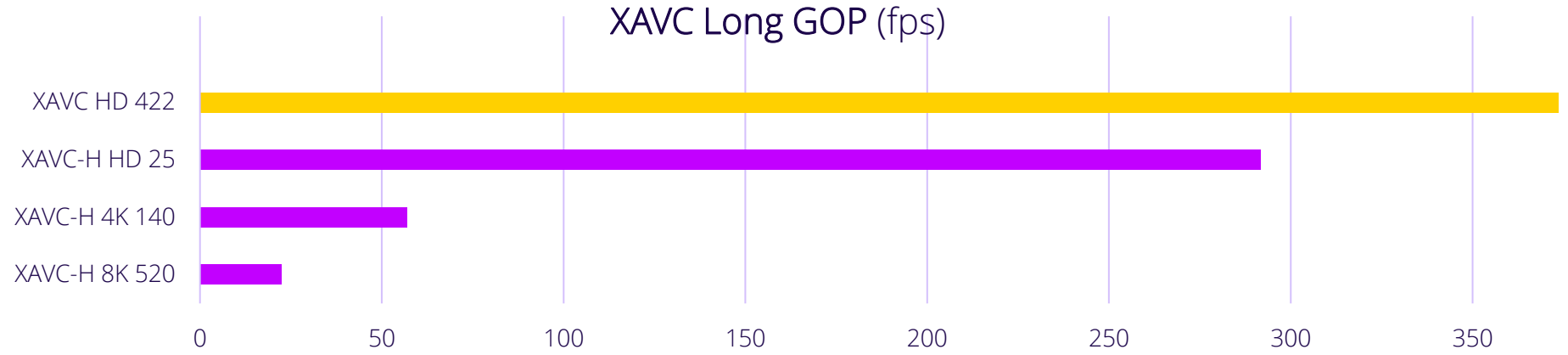
2x vs. built-in hardware

AVC/HEVC 8-bit 420
Hardware:
- Samsung Galaxy Book Edge 960XMB-KB1
- Snapdragon X Elite X1E-84-100, On Board, 16GB
- Windows 11

MainConcept on Snapdragon

The only solution for professional grade media production





Decode over

10

concurrent HD videos

Sony XAVC 10-bit 422
Hardware:
- Samsung Galaxy Book Edge 960XMB-KB1
- Snapdragon X Elite X1E-84-100, On Board, 16GB
- Windows 11

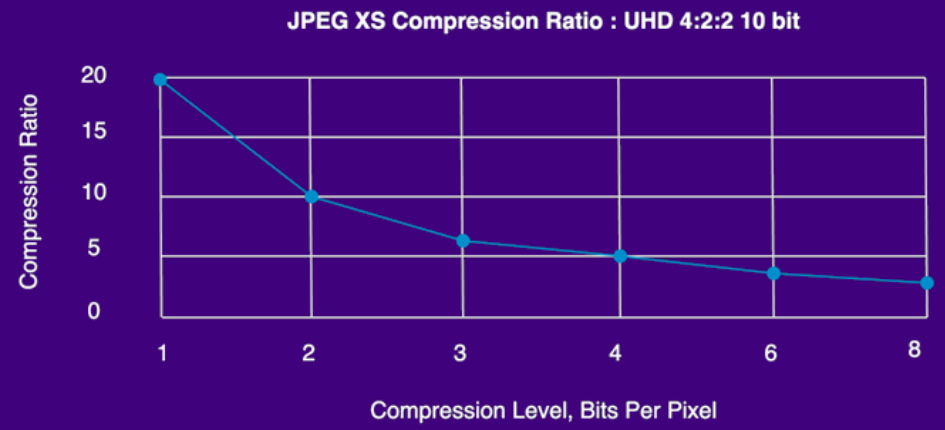
JPEG XS

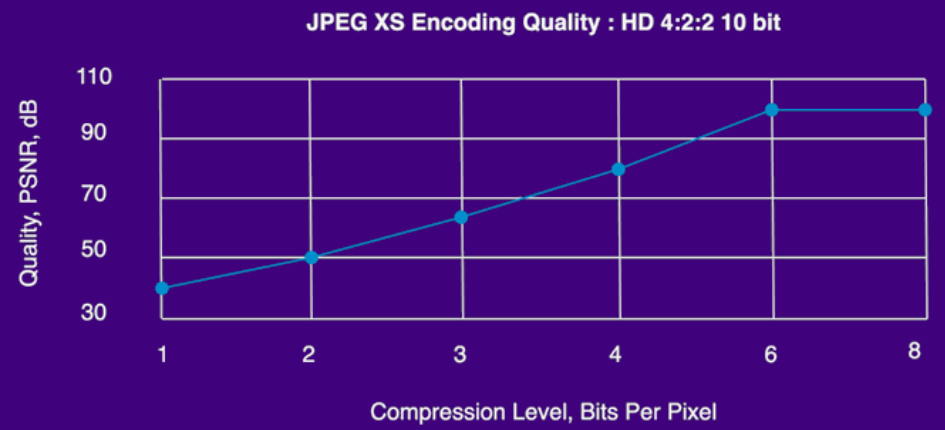
Interoperable, lightweight image coding for broadcast studios & video networks

ENCODER & DECODER SDK FEATURES

- CPU with SIMD and GPU accelerated processing powered by NVIDIA
- Visually lossless and lightweight compression format
- Low latency processing
- Intra-frame codec for professional streaming workflows
- RGB/YCbCr (4:4.4, 4:2:2, 4:2:0) and CFA/RAW up to 16-bit
- MPEG-2 TS & MXF multiplexing & demultiplexing
- Suitable for both live and VoD use-cases
- Seamlessly compliant with existing ST 2110 IP frameworks
- Real-time playback
- Available for Windows & Linux x86

FPS Achieved for Encoding HD 4:2:2 10 bit
System: i7-11700K, 16GB, Ubuntu 22.04





MainConcept + LCEVC

Enhancing current and next-gen codecs

MPEG-5 LCEVC

Lower cost encoding and reduced bitrates

Enhances any base codec up to 45% in compression efficiency

Playback even on legacy devices

FEATURES

- Standardized as MPEG-5 Part 2 LCEVC (Low Complexity Enhancement Video Coding)
- Enhancement codec
- Integrated with MainConcept AVC, HEVC and VVC video encoders
- SEI messages carried within base layer or as dual track
- Standards compliant base layer encoded at quarter resolution
- Enhancement layer is typically 15%-20% of the total bitrate
- Supports MPEG-DASH live streaming
- SBTVD TV 2.5 & DTV+ approved
- Available for Windows and Linux x86

AVAILABLE NOW

+ Live Encoder

FEATURES

+ LCEVC AVC Encoder SDK
+ LCEVC HEVC Encoder SDK
+ LCEVC VVC Encoder SDK

V-NOVA FÓRUM SBTVD MAINCONCEPT

Dolby Digital Plus™ Pro Plugins for FFmpeg

The first FFmpeg plugins certified by Dolby

Dolby

MainConcept handles the **royalties**

Live and on-demand, **on-prem and in the cloud**

Integrates with plugins from MainConcept & FFmpeg

Dolby Digital Plus Pro Encoding

- AC-3 and E-AC-3 encoding support in FFmpeg
- Officially approved by Dolby
- Output bit rates from 0.032 to 6.144 Mbit/s
- Sample rate 48000 Hz
- Encoding of up to 7.1 audio channels

Dolby Digital Plus Pro Decoding

- AC-3 and E-AC-3 decoding support in FFmpeg
- Officially approved by Dolby
- Sample rates 32000, 44100 or 48000 Hz
- Decoding of up to 7.1 audio channels

PACKAGES

+ Dolby Digital Plus Pro Encoder
+ Dolby Digital Plus Pro Decoder

Immersive Broadcast

Innovations in OTA & OTT Content Delivery

Traditional & **next-gen broadcast** workflows

Works **on-premise, in-the-cloud** and with **hybrid** workflows

Deployment as **SDKs, applications** or **plugins**

FEATURES

- Contribution & distribution encoding up to 8K60
- Support for today's & future broadcast codecs like MPEG-2, AVC, HEVC, VVC, MPEG-H, E-AC-3, Dolby Atmos and AC-4
- LCEVC enhancement codec with MainConcept AVC, HEVC & VVC base layers for lower cost encoding and reduced bitrates
- Brazil SBTVD TV 2.5 & DTV+ (TV 3.0) standard compliant
- DVB & ATSC 3.0 ready
- High quality, higher efficiency and reduced bandwidth
- Extended HDR signaling, including Advanced HDR by Technicolor
- Powered by MainConcept EVA for AMD, NVIDIA & Intel QSV hardware encoding & decoding
- MPEG-DASH, Apple HLS, Zixi, SRT, NDI, RTMP, RTSP, HTTP, UDP etc.
- Close partnerships with OTT and TV broadcast solution providers

APPLICATIONS

+ Live Encoder

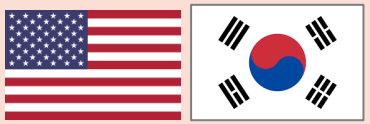
FFMPEG PLUGINS

+ AVC Broadcast encoder/decoder
+ HEVC encoder/decoder
+ Dolby Digital Plus encoder/decoder
+ MPEG-H encoder
+ xHE-AAC encoder

SOFTWARE DEVELOPMENT KITS

+ AVC, HEVC & VVC SDKs
+ LCEVC Encoder SDKs
+ Content Creation SDK

Broadcast TV Standards

				
Standard	**SBTVD**	**ATSC**	**ARIB**	**DVB**
Resolution	SD, HD, UHD	SD, HD, UHD, 8K**	SD, HD, UHD	SD, HD, UHD, 8K**
Video	VVC (+LCEVC) AVC (+LCEVC)	HEVC VVC	HEVC VVC*	HEVC VVC*
Audio	MPEG-H Dolby AC-4	MPEG-H Dolby AC-4	MPEG-H Dolby AC-4	MPEG-H AC-3
Enhancements	Advanced HDR by Technicolor (SL-HDR1) Dolby Vision HDR	HDR Advanced HDR by Technicolor**	HDR (HLG, PQ)	HDR Advanced HDR by Technicolor (SL-HDR2)*

* Proposed
** Future possible

Technology Partners

DID YOU KNOW?
MainConcept technology is used to process most of the world's professional video.

Production
Broadcast
Streaming
Gaming
Surveillance
Medical
Digital Signage
Ad-Tech

INGEST

- MP4/ISO BMFF
- MPEG PS/TS/SS
- MXF

- ASF/WMV

- 3GP
- DV/DIF
- F4V
- MJ2
- DCI

- RTP/RTSP
- RTMP
- ICECAST
- DASH/HLS
- SRT
- Zixi
- NDI
- ST 2110*

- AVCHD
- Sony XAVC
- Sony XAVC 2.0/XAVC HS
- Sony XDCAM
- Panasonic DVCPRO
- Panasonic AVC-ULTRA
- Canon XF-HEVC

- IMF RDD-45
- JPEG XS
- DVD/Blu-ray

DECODE

- AVC/H.264
- HEVC/H.265
- VVC/H.266
- MPEG-1/2
- JPEG 2000
- JPEG-XS
- DV/DVCPRO 25/50/HD
- Avid DNxHD/DNxHR
- Apple ProRes

- MJPEG
- MPEG-4 Part 2/H.263
- VC-1

- DXVA MPEG-2
- DXVA AVC/H.264
- DXVA HEVC/H.265
- AVC, HEVC Intel QSV
- AVC, HEVC NVIDIA NVDEC
- AVC, HEVC AMD AMF
- AVC, HEVC Adreno*
- JPEG XS NVIDIA CUDA

- AAC & HE-AAC
- AMR
- Dolby Digital
- MPEG Audio Layer I-III
- PCM
- WMA

PROCESS

- Color Space Converter
- Framerate Converter

- SCTE-35

- Smart Rendering AVC/H.264
- Smart Rendering MPEG-2

- Audio Converter

ENCODE

- AVC/H.264
- HEVC/H.265
- AV1
- VVC/H.266
- LCEVC/MPEG-5 Part 2
- MPEG-1/2
- JPEG 2000
- JPEG XS
- DV/DVCPRO 25/50/HD
- Avid DNxHD/DNxHR
- MV-HEVC
- MJPEG
- MPEG-4 Part 2/H.263
- VC-1

- AVC, HEVC, AV1 Intel QSV
- HEVC/H.265 GPU Acceleration
- AVC, HEVC, AV1 NVIDIA NVENC
- AVC, HEVC, AV1 AMD AMF
- AVC, HEVC Adreno*
- JPEG XS NVIDIA CUDA

- AAC & HE-AAC
- xHE-AAC
- MPEG-H
- AMR
- Dolby Digital
- DD+JOC (Atmos)*
- MPEG Audio Layer I-III
- PCM
- WMA

FORMAT

- MP4/ISO BMFF
- MP4
- MPEG PS/TS/SS
- MXF

- ASF/WMV

- 3GP
- DV/DIF
- F4V
- MJ2
- DCI

- AVCHD
- Sony XAVC
- Sony XAVC 2.0/XAVC HS*
- Sony XDCAM
- Panasonic DVCPRO
- Panasonic AVC-ULTRA

DELIVER

- MPEG DASH
- Apple HLS
- CMAF
- SRT
- Zixi
- NDI*
- OTT Live/VOD
- WebDAV

- RTMP/RTMPS
- RTP/RTSP
- UDP
- ST 2110*

* Future products

SDKs and more

VVC, HEVC, AVC, LCEVC, MPEG-2, MV-HEVC, JPEG XS, WebAssembly, GStreamer

JPEG XS

Interoperable, lightweight image coding for broadcast studios & video networks

Real-time processing right from the start

Contribution format for **low latency** use-cases

Output as **complete image** or **split into packets**

FEATURES

- CPU with SIMD and GPU accelerated processing powered by NVIDIA
- Visually lossless and lightweight compression format
- Low latency processing
- Intra-frame codec for professional streaming workflows
- RGB/YCbCr (4:4.4, 4:2:2, 4:2:0) and CFA/RAW up to 16-bit
- MPEG-2 TS & MXF multiplexing & demultiplexing
- Suitable for both live and VoD use-cases
- Seamlessly compliant with existing ST 2110 IP frameworks
- Real-time playback
- Available for Windows & Linux x86

PACKAGES

\+ JPEG XS Encoder & Decoder SDK

VVC/H.266

Next-generation 4K and 8K delivery

Real-time right from the start

Extended resolution at same bitrate over existing channels

Ready for **broadcast** and **OTT distribution**

FEATURES

- Live & VOD 10-bit encoding in up to 8K
- HDR signaling
- SABET multi-layer encoding for OTT
- AutoLive to maintain stable encoding frame rate
- Multi-layer coding for ad tech and sign-language
- MPEG-2 TS & MP4 multiplexing
- MPEG-DASH output & MPD generation
- 4:2:0 10-bit real-time playback
- Multi-layer streaming of 8K, 4K, 1080p
- Wide range of standard & advanced encoder and decoder features

AVAILABLE NOW

+ VVC Encoder SDK
+ VVC Decoder SDK
+ VVC Encoder Plugin for FFmpeg
+ Live Encoder with VVC
+ Live Encoder with LCVVC + VVC

COMING SOON

+ LCEVC VVC Encoder SDK

HEVC/H.265

Vital cost savings with 20% higher efficiency than x265

Preferred **codec for OTT & Broadcast** workflows

Decode & Encode add-ons deliver even higher performance

Optimized for low-, adaptive, and high-bitrate **8K quality**

FEATURES

- Significant bitrate savings resulting in up to 20% CDN cost savings compared to open source
- 8K60 Hybrid GPU accelerated 10-bit live video encoding
- Industry-leading codec for professional 4:2:2 10-bit production formats
- HDR decoder with support for HLG/PQ and SDR conversion
- Extended HDR format signaling for DVB Video encoding
- Available for x86 and ARM chipsets
- Powered by MainConcept EVA featuring AMD, NVIDIA & Intel QSV hardware encoding & decoding
- Canon XF-HEVC, Sony XAVC H/HS, Nikon Z9, Panasonic G5 decoding
- State of the art codec enhancements like SABET, AutoLive or AutoMatch

PACKAGES

HEVC Encoder SDK

+ 4:2:2 support
+ Hybrid GPU acceleration
+ SABET
+ MV-HEVC encoding

HEVC Decoder SDK

+ WebASM

NEW CODEC

MV-HEVC

Multi-view content creation for Apple Vision Pro

Real-time processing for the **next-gen VR experience**

Extended resolution for **immersive multi-view** encoding

Seamless **playback** on the **Apple Vision Pro**

FEATURES

- Multi-view HEVC as an extension to the HEVC standard (ISO/IEC 23008-2)
- Fully compliant with Apple HEVC Stereo Video profile of Apple Immersive Video
- Encoding of stereoscopic views of a scene within a single video stream
- Ready-to-use MV-HEVC Main 10 encoding profile
- HDR signaling
- Backward compliance with regular HEVC/H.265 base layer
- MP4 multiplexing
- HLS output & playlist generation
- Cross-platform API for Windows, macOS & Linux for on-premise and cloud deployment

PACKAGES

\+ MV-HEVC Encoder SDK

AVC/H.264

The industry-leading codec for professional 4:2:2 10-bit production formats

2x faster than open source[1] & **20% faster** than previous generation[2]

2-pass encoding & support for **UHD** and **HDR**

AMD, NVIDIA & **Intel QSV** hardware encoding & decoding

FEATURES

- Precise bitrate adherence for encoding to on-demand video targets
- Standard compliant encoding & decoding of 4:2:2 10-bit formats
- HDR support for HLG and PQ/HDR-10 encoding
- Unrivaled range of encoding presets
- Professional camera support for Sony XAVC & Panasonic AVC-ULTRA
- Frame-accurate smart rendering for AVC-Intra and other pro formats
- Featuring MainConcept EVA, a single API for software and hardware (AMD, NVIDIA & Intel) encoding & decoding
- Full encoding profile XAVC XDF-01 for German broadcast production format compliance

PACKAGES

AVC Encoder SDK

+ AVC Broadcast Encoder
+ SVR360[2]
+ Smart Rendering[2]

AVC Decoder SDK

+ AVC Broadcast Decoder

1. According to recent encoder test data comparing MainConcept AVC against x264
2. Compared to previous version of MainConcept AVC

MAINCONCEPT

MainConcept + LCEVC

Enhancing current and next-gen codecs

MPEG-5 LCEVC

Lower cost encoding and **reduced bitrates**

Enhances any base codec up to **45%** in **compression efficiency**

Playback even on **legacy devices**

FEATURES

- Standardized as MPEG-5 Part 2 LCEVC (Low Complexity Enhancement Video Coding)
- Enhancement codec
- Integrated with MainConcept AVC, HEVC and VVC video encoders
- SEI messages carried within base layer or as dual track
- Standards compliant base layer encoded at quarter resolution
- Enhancement layer is typically 15%-20% of the total bitrate
- Supports MPEG-DASH live streaming
- SBTVD TV 2.5 & DTV+ approved
- Available for Windows and Linux x86

AVAILABLE NOW

+ Live Encoder

COMING SOON

+ LCEVC AVC Encoder SDK
+ LCEVC HEVC Encoder SDK
+ LCEVC VVC Encoder SDK

V-NOVA FÓRUM SBTVD MAINCONCEPT

MPEG-2

Fast, flexible and feature-rich

2x faster than the prior generation

Supports **legacy formats** and **frameworks**

2-pass encoding, **4:2:2 10-bit** support

PRE-CONFIGURED ENCODING PROFILES

- MPEG-2 based digital TV formats like DVB and ATSC
- Professional camcorders like Ikegami GF and Sony XDCAM
- Real-time decoding of consumer, professional & broadcast MPEG-2 formats

STREAM TYPES & FORMATS

- **Elementary Stream**: Generic MPEG-1 and MPEG-2 Elementary Streams
- **Transport Stream**: Blu-ray Disc, HD DVD, DVB, ATSC, ATSCHI, DVHS, D10 & HD configs
- **Program Stream**: VCD, SVCD, DVD MPEG-1
- **System Stream**: Generic MPEG-1 System Streams
- **MP4**: Sony XDCAM EX
- **MXF**: Sony XDCAM HD, Sony XDCAM IMX, Ikegami GFCAM, D10

PACKAGES

+ MPEG-2 Encoder SDK
+ MPEG-2 Decoder SDK
+ MPEG-2 Smart Rendering SDK

GStreamer

A complete encoding and transcoding pipeline for OTT and broadcast workflows

Develop & deliver **live** and **on-demand** video content

Deliver content to **any device**

NVIDIA NVENC & **Intel Quick Sync Video** hardware encoding

BROADCAST DELIVERY

- Closed caption support
- PID for elementary stream
- Program names in SDT tables
- DVB subtitles support
- SCTE-35 messaging

Includes

+ HEVC/H.265 video encoder
+ AVC/H.264 video encoder
+ Fraunhofer AAC and MPEG audio encoders
+ MPEG-2 TS multiplexer

OTT CONTENT CREATION

- CMAF-DASH, MPEG-DASH and Apple HLS
- OTT ladder presets
- Multi-language track
- Intel QSV and NVIDIA NVENC
- Hybrid GPU for HEVC (optional)

Includes

+ HEVC/H.265 video encoder
+ AVC/H.264 video encoder
+ Fraunhofer AAC encoder
+ CMAF/DASH/HLS presets
+ Multiplexers and file generators

PRODUCTION FORMAT CREATION

- Professional production format presets up to 4:2:2 10-bit
- Sony XDCAM and XAVC
- Panasonic P2 AVC-ULTRA & AVC-Intra
- Generic MPEG-2 and AVC/H.264 encoding profiles

Includes

+ MPEG-2 video encoder
+ AVC/H.264 video encoder
+ PCM audio encoder
+ MXF and MP4 multiplexer

MainConcept Live Encoder

Live Encoder

Real-time multi-format video encoding for broadcast & streaming in up to 8K 10-bit

All-in-one **Contribution** and **Distribution** live encoder

Deployment via intuitive **web UI** or powerful **REST API**

Works **on-premise, in-the-cloud** and with **hybrid** workflows

FEATURES

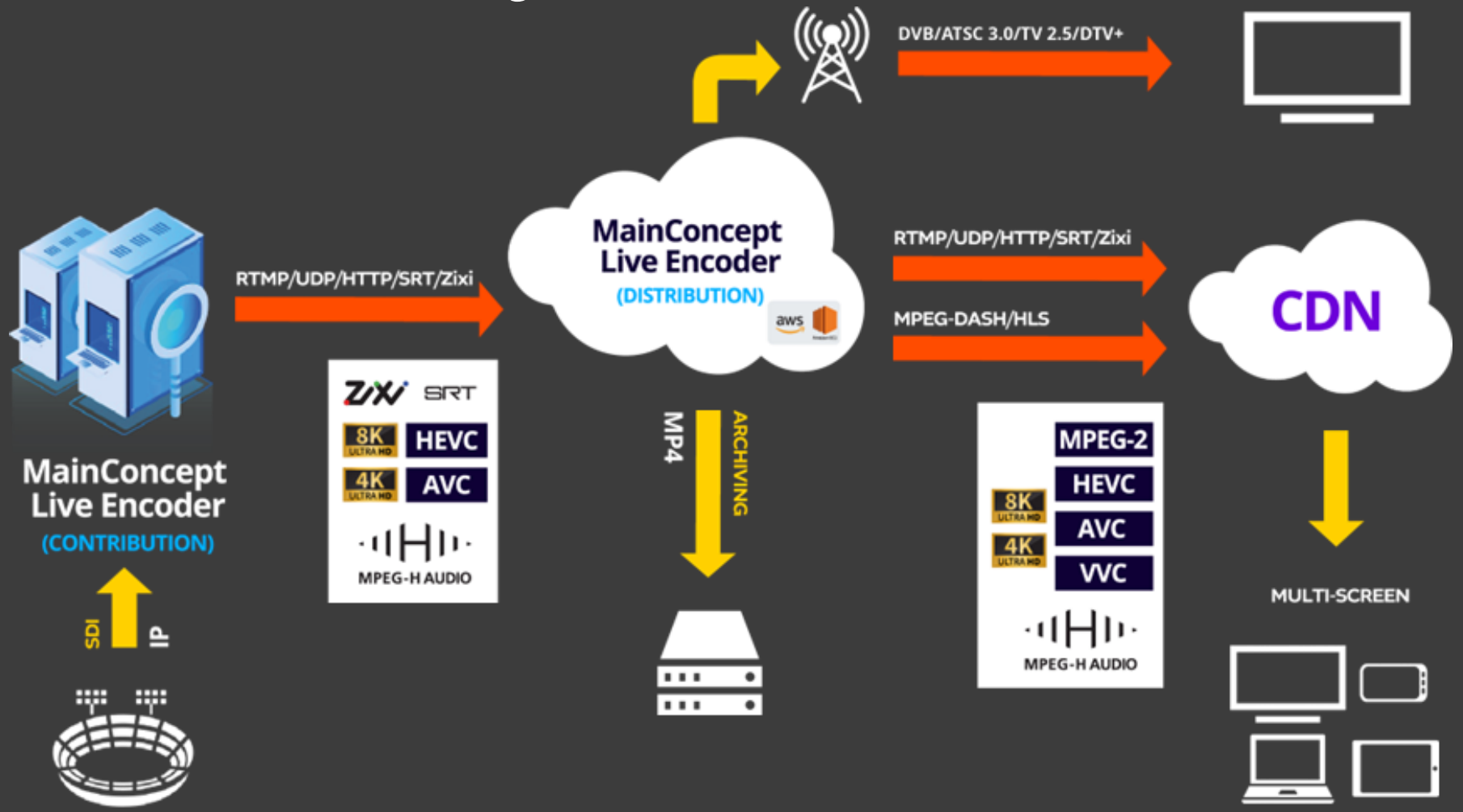
- Common SDI and IP input sources, incl. real-time preview
- Intel & NVIDIA powered AVC & HEVC hardware encoding & decoding
- MPEG-2, AVC, HEVC & VVC software encoding modes plus LCEVC support
- GPU accelerated HEVC 8K60p encoding on NVIDIA RTX boards
- Object-based MPEG-H 3D audio creation
- MPEG-DASH, Apple HLS, Zixi, SRT, RTMP, RTSP, HTTP, etc. output
- TS over UDP/HTTP output, incl. Program / Service Name, ID, Provider support
- Integrated CDN support for Akamai & Amazon CloudFront
- Redundancy & failover management
- Available for Windows and Linux

COMING SOON

+ DD+JOC (Atmos) audio encoding
+ Dolby Digital decode & encode
+ NDI output
+ Accelerated AV1 live encoding
+ Full AWS, Google Cloud and Microsoft Azure deployment
+ CMAF-DASH low latency encoding and packaging
+ ST 2110 ingest & output

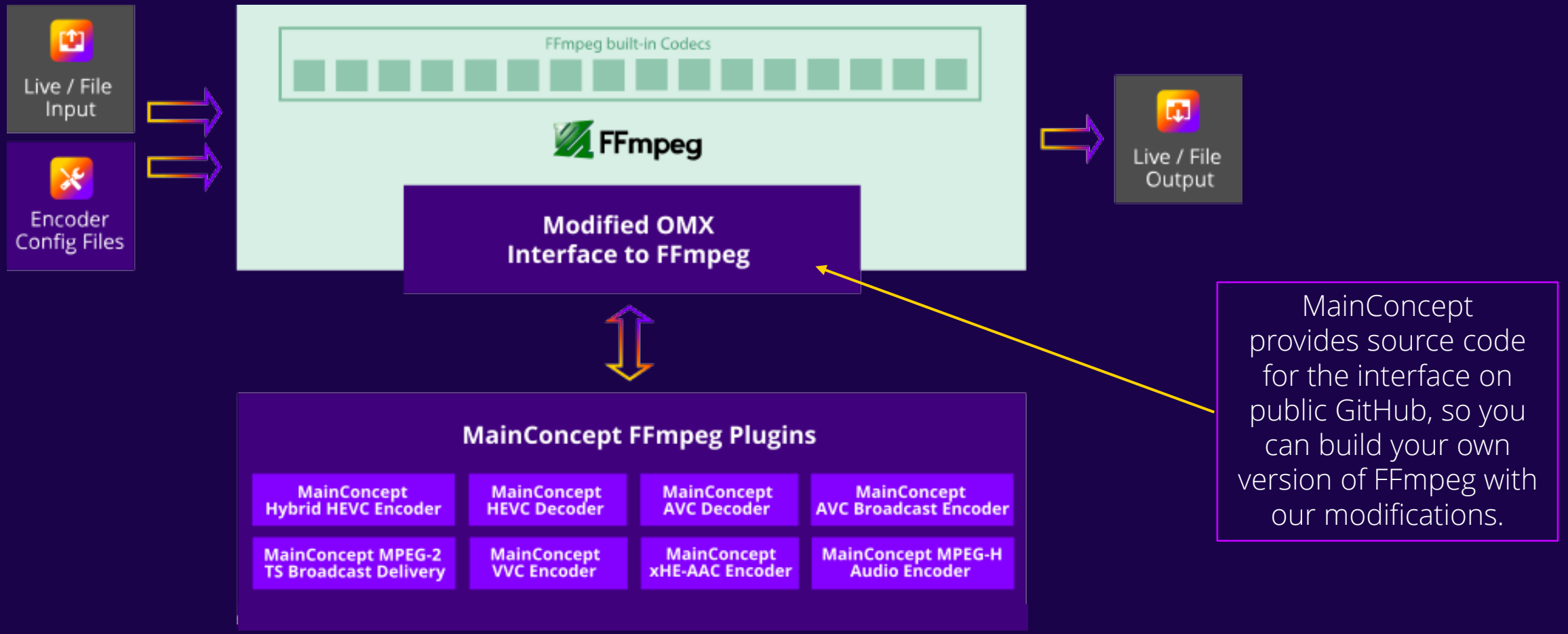
Live Encoder Workflow

Contribution & Distribution Encoding



FFmpeg Plugins

MainConcept FFmpeg Plugins — Architecture



MainConcept FFmpeg Plugins

The world's best codecs available in FFmpeg 4.4, 6.0 & 7.0

Video Encoding

Hybrid HEVC Encoding

- Leading HEVC codec outperforming x265
- MPEG-DASH, HLS, Main, Main 10, 4:2:0, 4:2:2
- GPU-accelerated encoding modes for up to 8K 10-bit live
- Options for Intel Quick Sync Video, AMD AMF & NVIDIA NVENC

MPEG-2 Production Format Encoding

- Use MainConcept's industry leading MPEG-2 software encoder and MXF Multiplexer natively in FFmpeg
- Pre-configured profiles for professional Sony XDCAM HD and XDCAM IMX camcorder content creation
- Ready-to-use encoder presets for Sony XDCAM EX, DVB, ATSC, DVD, HDV, D10, etc.

Video Encoding

AVC Broadcast Encoding COMING SOON

- 4:2:2 10-bit and level 6.2 (8K)
- Verified presets for Sony XAVC & Panasonic P2 AVC-ULTRA
- XAVC XDF-01 production format for German broadcast **NEW**
- MPEG-DASH & Apple HLS
- Options for Intel Quick Sync Video, AMD AMF & NVIDIA NVENC
- 2-pass encoding for best VOD quality

VVC Encoding

- VVC/H.266, next-generation codec for OTT and Broadcast
- Live and VOD workflows
- VVC/H.266 Main 10 profile, 8-bit and 10-bit, 4:2:0 up to 8K

Video Decoding

HEVC Decoding

- Decode and transcode workflows in superior quality and speed
- Main, Main 10, Main 12, Main 4:2:2 (& 10), Main 4:4:4 10 & 12 profiles
- Interlaced decoding support, including deinterlacing
- Hardware acceleration by AMD AMF, Intel Quick Sync Video & NVIDIA NVDEC

AVC Decoding

- Decode and transcode workflows in superior quality and speed
- Baseline, Main, High, High 4:2:2/4:4:4 profiles, 8-bit/ 10-bit/12-bit
- Hardware acceleration by AMD AMF, Intel Quick Sync Video & NVIDIA NVDEC

MainConcept FFmpeg Plugins

The world's best codecs available in FFmpeg 4.4, 6.0 & 7.0

AudioProcessing

MPEG-H Encoding

- Integration of Fraunhofer's MPEG-H software encoder in FFmpeg
- Immersive, object-based MPEG-H 3D audio
- Live encoding workflows
- Baseline and Low Complexity Profiles
- Automatic Fallback mode in case of Control Track loss or interruption
- Standard adopted by ATSC, DVB, TTA, SBTVD and ATSC 3.0 (South Korea) TV standards

xHE-AAC Encoding

- Integration of Fraunhofer's xHE-AAC software encoder in FFmpeg
- xHE-AAC, legacy LC AAC, HE-AAC v1 and HE- AAC v2 audio formats
- VOD and live encoding workflows
- Bitrates of 12-500 kb/s for stereo
- Loudness and dynamic range control

AudioProcessing

Dolby Digital Plus Pro Encoding NEW

- AC-3 and E-AC-3 encoding support in FFmpeg
- Officially approved by Dolby
- Output bit rates from 0.032 to 6.144 Mbit/s
- Sample rate 48000 Hz
- Encoding of up to 7.1 audio channels

Dolby Digital Plus Pro Decoding NEW

- AC-3 and E-AC-3 decoding support in FFmpeg
- Officially approved by Dolby
- Sample rates 32000, 44100 or 48000 Hz
- Decoding of up to 7.1 audio channels

MPEG-2 TS

Broadcast Delivery

- Multiplexing support for broadcast delivery formats
- Ready-to-use multiplexer profiles for ATSC and DVB
- SPTS and MPTS format support
- Up to four video and four audio tracks
- Ready-to-use multiplexer profiles for ATSC and DVB
- AVC/H.264, HEVC/H.265 and MPEG-2 video

Unique Codec Features

AutoLive Encoding, AutoMatch Encoding, SABET, Proxy Decoding

AutoLive Encoding

Guaranteed stable frame rate and no dropped frames

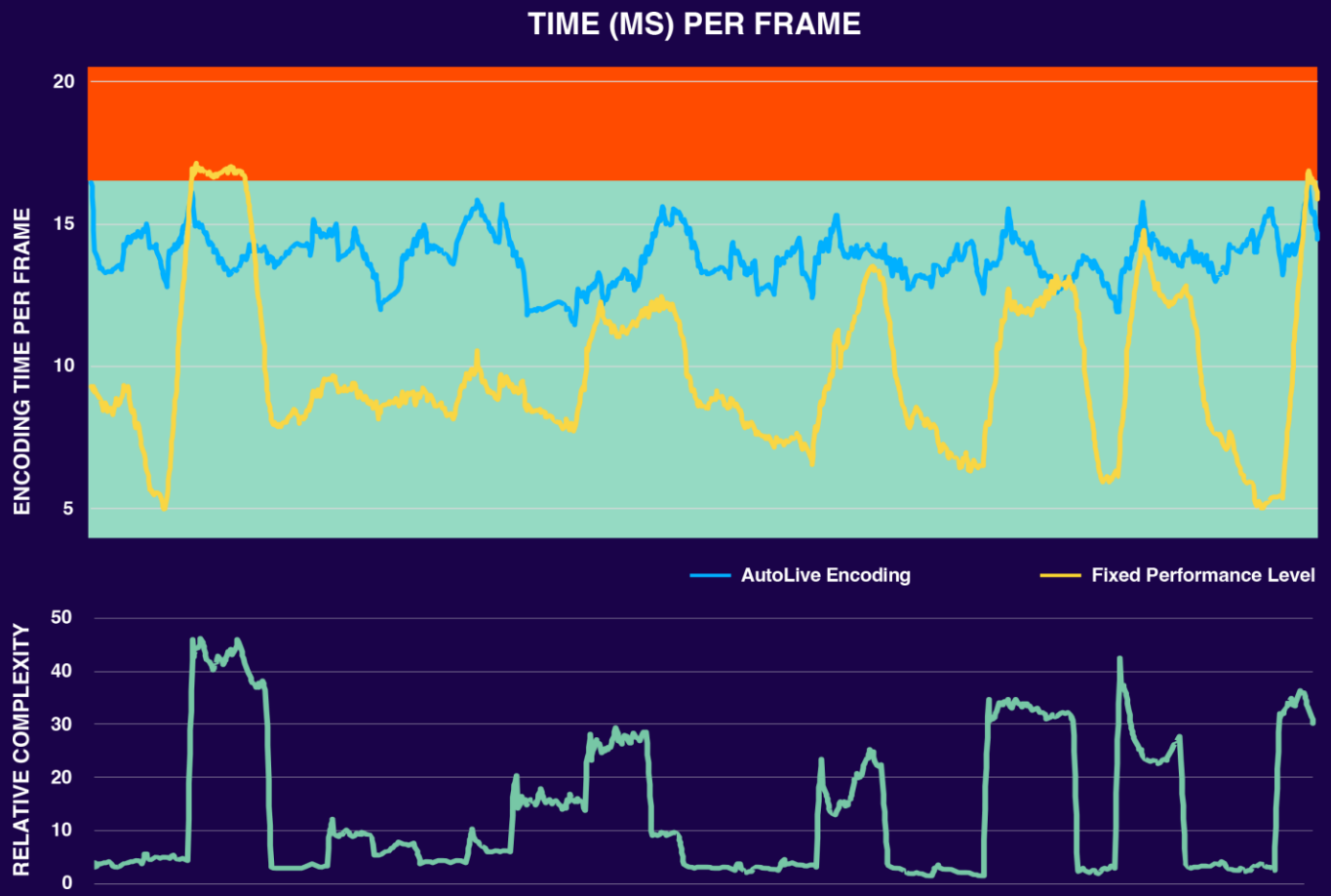


Image complexity changes over time. Complex scenes take more effort to encode. Live encoding MUST ensure constant encoding speed.

AutoLive Encoding adjusts the performance level on EACH FRAME to ensure constant encoding time as well as boost the quality on simple scenes.

Available for HEVC & VVC

AutoMatch Encoding

Encode identical streams for pre-recorded video

FACT

Content owners have a large library of pre-encoded assets

CHALLENGE

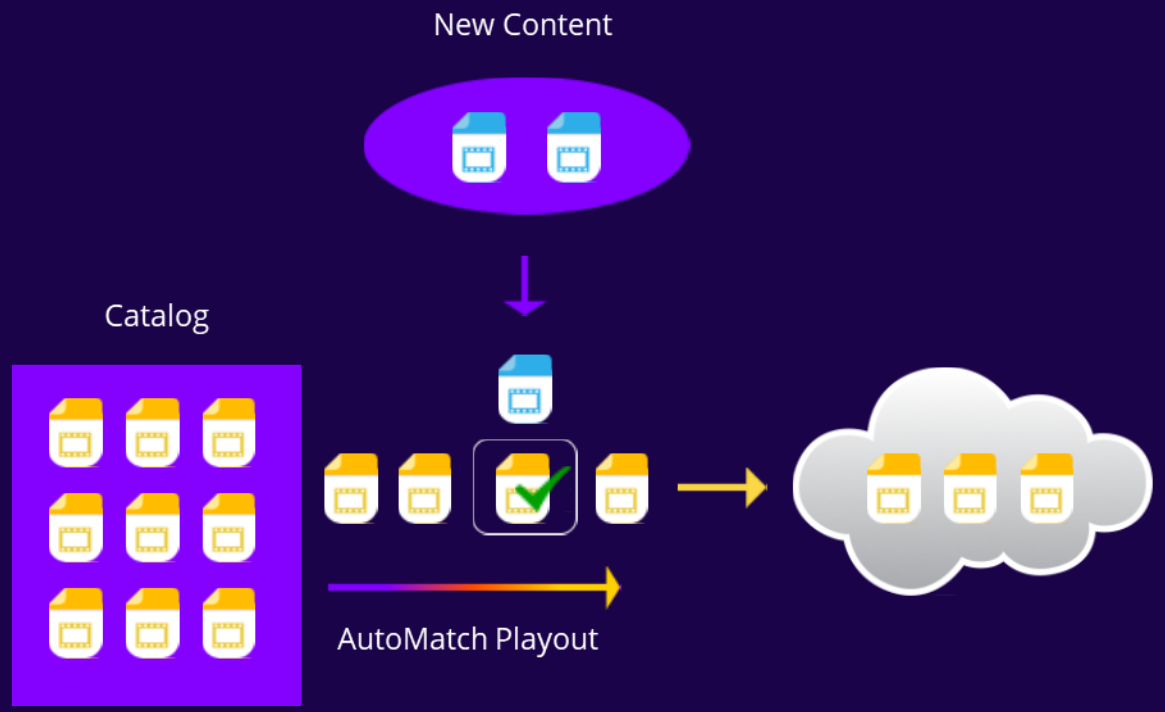
Add new material to it and “mix-and-match” new and old for seamless playback

SOLUTION

Have the encoder match the exact settings of existing material automatically

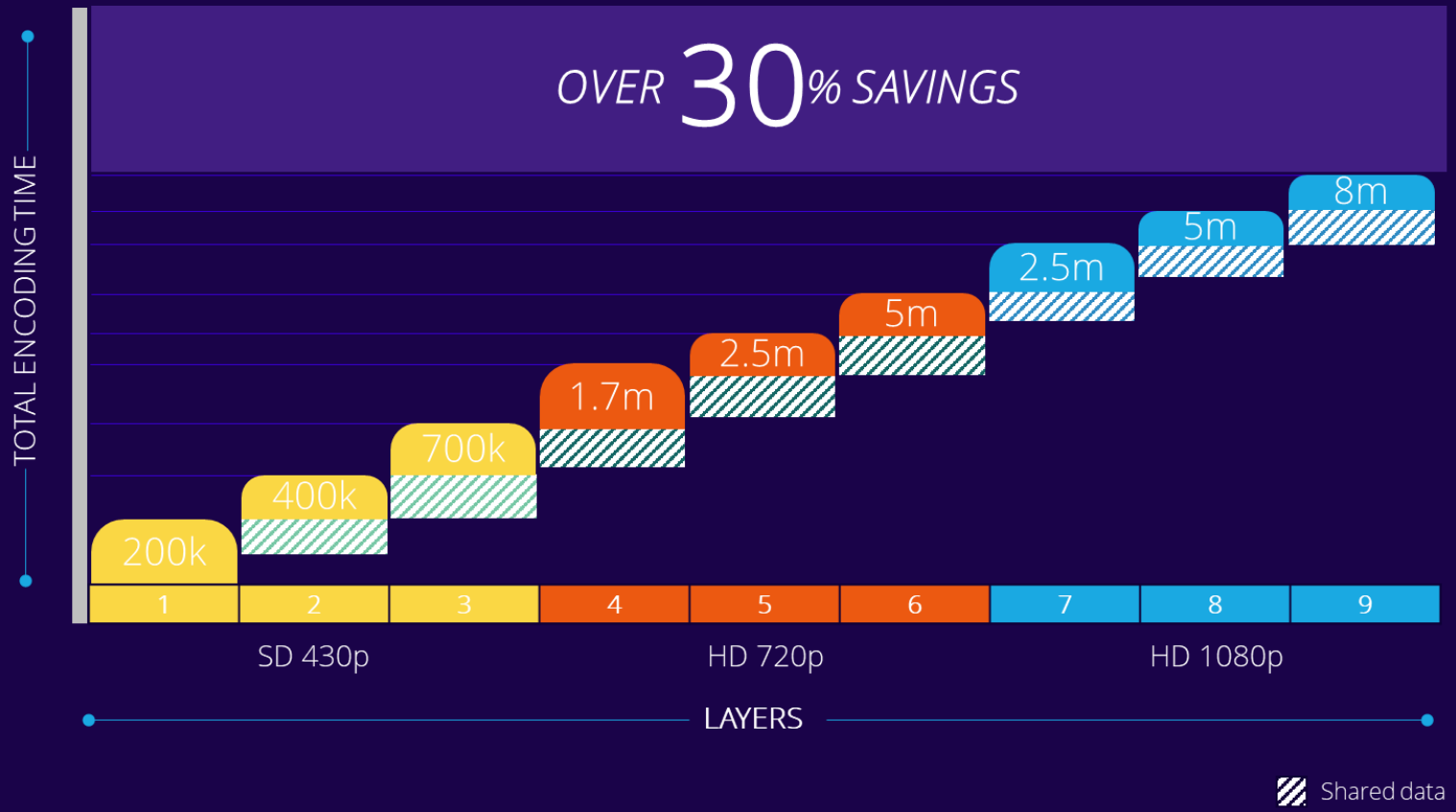
Identical VPS/SPS/PPS

Seamless playback



SABET™

Smart Adaptive Bitrate Encoding Technology



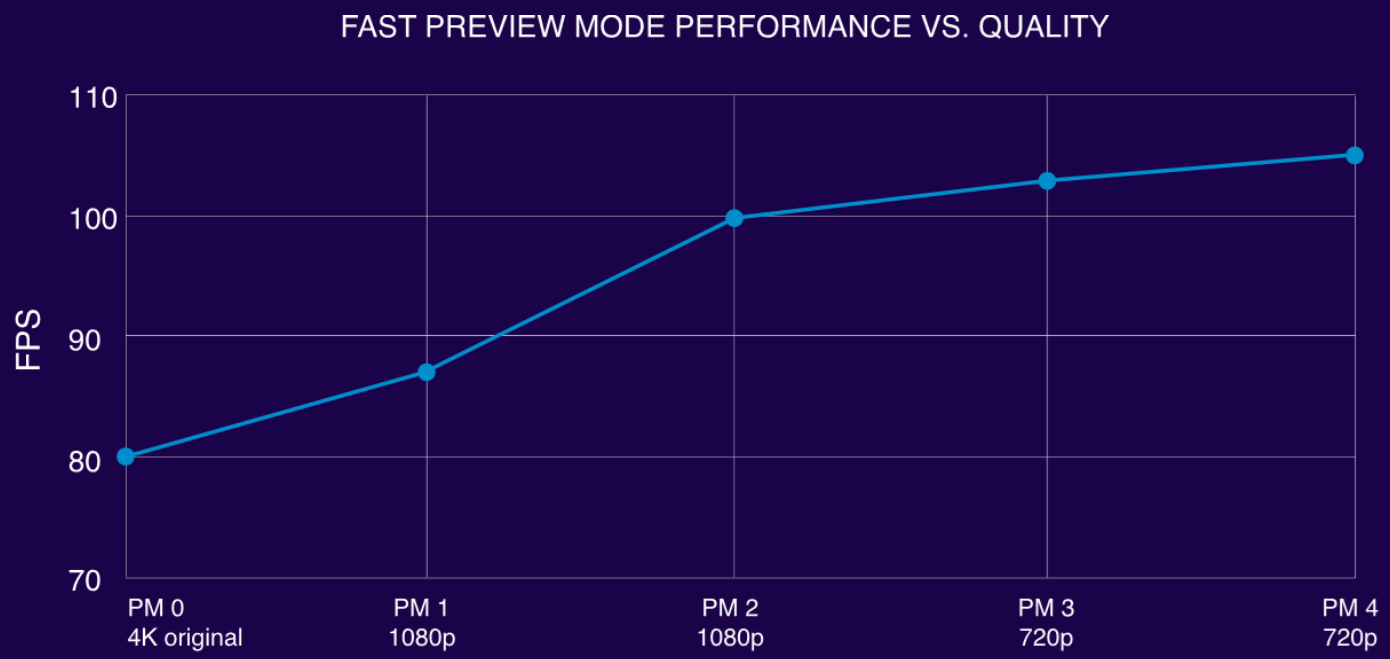
Efficient multi-layer encoding for OTT streaming

- Full ABR in a single instance
- Shares processing data across up to 12 different profiles
- Significant encoding time reduction
- Available for HEVC & VVC

Proxy Decoding

Accelerated HEVC proxy decoding for fast preview

- Fast decoding of UHD video for lower resolution preview
- Suitable for video editing, monitoring and surveillance workflows
- Compliant with professional HEVC production formats like Sony XAVC HS, Canon XF-HEVC, Nikon Z9, etc.
- Enhanced decoding speed with minimal quality loss
- Decoding modes of 4K content show a performance gain and processing reduction time of over 30%



THANK YOU

More questions?
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