

# SPIRIT HEVC/H.265 Codec

**Same bandwidth, double the data:** SPIRIT HEVC/H.265 codec implements the High Efficiency Video Coding video compression standard. It provides high-quality video encoding and decoding and significantly reduces the need for bandwidth in real-time video transmission applications. In comparison to AVC/H.264, HEVC doubles compression ratio while keeping the same level of video quality, or provides substantially increased video at the same bit rate.

SPIRIT HEVC/H.265 is deeply optimized for real-time image compression on PC platforms and can be ported to other platforms.

## **Features**

- ITU-T H.265 Main, Main 10, Main 12 and Main Still Picture profiles (including intra-only) standard fully compliant
- Picture formats supported: YUV420, YUV422, YUV444
- 8 bits or 10 bits per sample
- Supported resolutions up to 8192×4320, including 8K UHD
- Intra and non-intra slices supported
- Deblocking loop filter
- Sample Adaptive Offset loop filter
- Subpixel motion compensation
- Adaptive Motion Vector Prediction
- Dynamic allocation of key frame insertion
- Supported most of the features of AVC/H.264 including all rate control modes (Constant QP, Constant Rate Factor, Average Bit Rate, 2-pass or multi-pass and Video Buffering Verifier rate control)
- Visual quality algorithms include CU-Tree, adaptive quantization, b-pyramid, weighted prediction and psycho-visual optimizations (psy-rd and psy-rdoq)
- Fully lossless mode is supported
- RTP packet generation and decoding of RTP packet flow are supported in compliance with the draft-schierl-payload-rtp-h265-03.txt (Parameters set is transmitted in-band).

#### Benefits

- High performance video coding and decoding
- 50% bandwidth savings
- Low resource consumption
- Wide range of picture formats
- Easy-to-integrate

### **Key Features**

- Low CPU usage
- Small footprint
- Simple API
- ITU-T standards compliant

### **Applications**

- Video over IP
- OTT applications
- STB
- Telepresence
- HDTV and Mobile TV
- Video surveillance and security
- Video-streaming services
- Video-on-demand

## Availability

SPIRIT HEVC/H.265 is available as a C library which makes possible the integration on:

- 32- and 64-bit
- PC Intel

#### CONTACTS

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