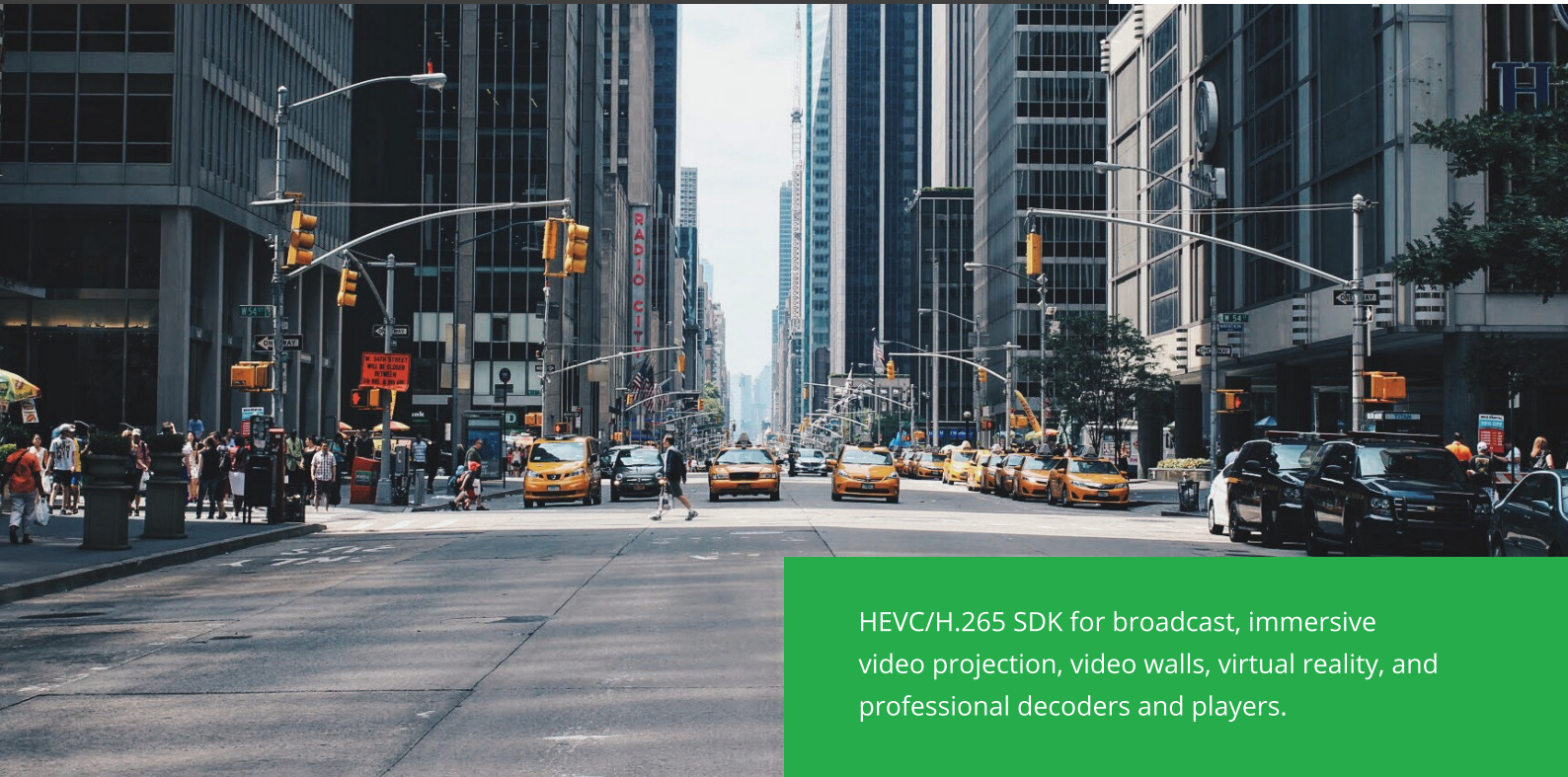


Spin Digital HEVC/H.265 SDK (Spin SDK) simplifies the creation of innovative video solutions enabling ultra-high quality 4K, 8K, and 16K video decoding, processing, and playback on commodity computing hardware.



spin sdk



HEVC/H.265 SDK for broadcast, immersive video projection, video walls, virtual reality, and professional decoders and players.

Spin Digital HEVC/H.265 SDK is ready for the next generation of high quality video systems, providing support for Ultra HD (UHD), High Dynamic Range (HDR), High Frame Rate (HFR), and Wide Color Gamut (WCG), and Virtual Reality (360° video).

Product Highlights

- Pure software solution
- Powerful and efficient API
- Unified API for Windows and Linux
- High quality video formats: 4:2:2, 4:4:4, up to 12-bit
- Real-time HEVC/H.265 decoding up to 16K
- 10-bit rendering and HDR support
- Flexible I/O with multiple GPU and SDI devices

HEVC/H.265 SDK Package

- C/C++ libraries
- API reference documentation (HTML, PDF)
- Application code examples
- Command line toolbox

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SPIN DIGITAL HEVC/H.265 DECODER

Support for the HEVC standard:

Main and Main 10 profiles – up to Level 6.2 Main tier

Range Extensions (HEVCv2) profiles

ARIB STD-B32 version 3.7

Resolutions: 4K, 8K, 16K

Frame rates: 4Kp240, 8Kp120, 16Kp60

Color formats: 4:2:0, 4:2:2, 4:4:4, RGB

Bit depths: 8-, 10-, 12-bit

Error resilience for non-compliant inputs

Advanced multithreading: wavefront, frame-level, frame decoupled

SIMD processing: SSE4.1, AVX2, AVX512

Pixel formats: planar, semi-planar, packed, bitpacked

BC4 texture compression



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SPIN DIGITAL VIDEO RENDER ENGINE

Video rendering using DirectX 12

Color spaces: BT.601, BT.709, DCI-P3, BT.2020, full and limited range

Input video formats:

Color formats: 4:2:0, 4:2:2, 4:4:4, RGB

Bit depths: 8-, 10-, 12-bit

Pixel formats: planar, semi-planar, packed, bitpacked

Input transfer functions: SDR, PQ (ST2084), HLG (BT.2100)

Render format: RGB, 10-bit

Support for cubemap 360° rendering

Seamless resolution and format switching

Output devices: GPU, SDI

Multi-device rendering: tiled, clone, multi-buffer, with genlock synchronization

SPIN DIGITAL VIDEO PROCESSING FILTERS

Optimized for CPU architectures: SIMD and multithreading

The filters can be used individually or combined

Auto filter mode: determines the optimum order of multiple filter operations

Format conversion: converts between chroma formats, bit depths, and pixel layouts

Resolution scaling: rescales the image using nearest, bilinear, bicubic, or lanczos resampling

Cropping/padding: selects a part of the video or add padding

Overlay filter: blends an overlay into each image

Orientation filter: changes orientation of video (flip, rotate, mirror)

Geometry conversion: converts between equirectangular, cubemap, or extracts viewport

Texture compression: compresses or decompresses BC4 encoded textures

PLATFORM SUPPORT

Processor X86_64

GPU Nvidia Quadro Maxwell and Pascal, AMD Radeon Pro

OS Windows 10: decoder, render, and filters

Windows 7/8.1: decoder and filters

Linux: decoder and filters

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