

Spin Digital VVC Media Player

VVC/H.266 software media player for 4K-UHD and 8K-UHD video with NGA audio, enabling next-generation applications in broadcast, immersive media, and large screen visualization.

Product Highlights

- VVC decoding up to 8Kp120 on a single PC
 - Support for VVC Multilayer profile (spatial scalability)
 - Advanced renderer with SDI and GPU outputs
 - 8K HDR with HDMI 2.1 interface
 - Color conversion and tone mapping
 - TS-over-IP live streaming: UDP, RTP, SRT, RIST, Zixi
 - HTTP streaming: HLS, DASH
 - Next Generation Audio (NGA): MPEG-H Audio
-

VIDEO DECODING

High-performance VVC software decoder

Profiles: Main 10, Multilayer Main 10

Resolutions (pixels):

1920x1080 (1080p), 3840x2160 (4K), 7680x4320 (8K)

Custom resolutions

Frame rates (fps): 23.98, 24, 25, 29.97, 30, 50, 59.94, 60, 100, 119.88, 120

Color format: 4:2:0

Bit depths: 8-bit, 10-bit

Scalability: temporal, spatial, quality (SNR)

VIDEO RENDERING

High-performance render engine:

GPU rendering based on DirectX 12

CPU rendering for professional SDI output

Bit depths: 8-bit, 10-bit

Color spaces: BT.601, BT.709, DCI-P3, BT.2020

Transfer functions:

SDR: BT.1886 (BT.709), sRGB

HDR: HDR10 (ST2084), HLG (STD-B67)

Color conversion: color format, color space, color range, transfer function

Tone mapping: HDR to HDR/SDR

Flexible image overlays

Multi-device configurations: single large surface (tiled), clone, alternate

Rendering devices:

GPU: NVIDIA, AMD, Intel

3G-SDI: AJA Corvid 88

12G-SDI: AJA Kona 5, AJA Corvid 44 12G, Blackmagic DeckLink 8K Pro

8K playback over HDMI/DP:

8Kp60 (1 GPU): 1x HDMI 2.1, 2x DisplayPort 1.4, 4x DisplayPort 1.2

8K playback over 12G-SDI:

8Kp60: Two-Sample Interleave (2SI) and Square Division (SQD) modes

8Kp120: 2x 8Kp60 in alternate rendering mode

AUDIO DECODING

Codecs: AAC, Opus, MPEG-H Audio

Channels: 2.0, 5.1, 7.1, 5.1.2, 5.1.4, 7.1.2, 7.1.4, 22.2, binaural

AUDIO RENDERING

Windows audio (WASAPI)

ASIO

SDI: up to 4x 16 channels



FILE INPUT FORMATS

ES, MP4, TS, HLS, DASH

Live: TSolP (UDP, RTP, SRT, RIST, Zixi), HLS, DASH

STREAMING FORMATS

Low-latency TS-over-IP: UDP, RTP, SRT, RIST, Zixi

HTTP live streaming: HLS, DASH

RECOMMEND SYSTEMS FOR HIGH-END PLAYBACK

8K 60 Hz

Use case	Format	Platform
Distribution	8Kp60	CPU: Intel Core i9-13900K (8+16 cores)
GPU output	4:2:0 10-bit	Memory: 16 GB (2x 8 GB, DDR5-5600)
		GPU: NVIDIA GeForce RTX 3060, or Intel Arc A770
Distribution	8Kp60	CPU: Intel Xeon Gold 6330 (28 cores)
SDI output	4:2:0 10-bit	Memory: 64 GB (8x 8 GB, DDR4-3200)
		12G-SDI: AJA Kona 5, Corvid 44 12G, or Blackmagic DeckLink 8K Pro

8K 120 Hz

Use case	Format	Platform
High frame rate	8Kp120 4:2:0 10-bit	CPU: 2x Intel Xeon Gold 6338 (2x 32 cores)
		Memory: 128 GB (16x 8 GB, DDR4-3200)
		12G-SDI: 2x AJA Kona 5, 2x AJA Corvid 44, or 2x Blackmagic DeckLink 8K Pro



PACKAGE


Media player application

Reference applications:

Command-line VVC player

Command-line VVC decoder to YUV file

Product documentation



spin player
vvc

OPERATING SYSTEMS

Windows: Windows 10/11 64-bit:

VVC decoding

GPU and SDI rendering

Linux: Red Hat 8/9 and Ubuntu 20.04/22.04 (with X11 installed):

VVC decoding

SDI rendering



spin digital