

## SPiRiT VP8 Codec

SPiRiT VP8 codec implements open and royalty free video compression standard owned by Google. It provides high-quality video encoding and decoding for real-time video transmission applications. VP8 fits in low bandwidth requirements cause the codec was specifically designed to operate mainly in a quality range from “watchable video” (~30dB in the PSNR metric) to “visually lossless” (~45dB). In comparison to AVC/H.264, VP8 offers about the same level of video quality at the same bit rate. VP8 handles the image format used by the vast majority of web videos and can be determined as “web video format codec”.

SPiRiT VP8 is deeply optimized for real-time image compression on PC and ARM platforms and can be ported to other platforms.

### Features

- RFC 6386 standard compliant
- Standard (SQCIF, QCIF, CIF, 4CIF, 16CIF) and custom picture sizes up to 16383 x 16383 pixels are supported
- Multi-core processing
- YUV 4:2:0 image format
- 8 bit per channel color depth
- Macro-block based coding (16x16 luma plus two 8x8 chroma)
- Flexible reference frames
- Efficient intra- and inter- prediction
- 4x4 DCT, WHT
- 1/4 (1/8) pixel accuracy motion compensated prediction
- High performance sub-pixel interpolation
- 128 level linear quantizer
- Adaptive in-loop deblocking filtering
- Context-based entropy coding
- RTP packet generation and decoding of RTP packet flow are supported in compliance with the draft-ietf-payload-vp8-09

### Benefits

- High performance video coding and decoding
- 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
- Web video services and apps
- STB
- Telepresence
- Mobile TV
- Video surveillance and security
- Video-on-demand

### Availability

SPiRiT VP8 is available as a C library which makes possible the integration on:

- 32- and 64-bit
- PC Intel
- ARM

### CONTACTS

[www.spiritdsp.com](http://www.spiritdsp.com)  
[sales@spiritdsp.com](mailto:sales@spiritdsp.com)

RU & EU: +7-499-995-23-85  
 USA: +1-916-955-4507  
 Japan: +81-3-6361-8086

India: +91-9833-894005  
 China: +86-136-0192-2495  
 Taiwan: +886-2-2888-1010 ext. 100

Korea: +82-17-232-3878  
 Singapore: +65-9380-4061  
 Vietnam: +84-24-3772-7766