

MPEG Video Decoder Chipsets

Product Description

SOC offers a series of Video Decoder chipsets, which include:

1. H.265/HEVC Decoder;
2. H.264/AVC Decoder;
3. MPEG-2 Decoder;
4. Multiple channel (multi-standard) Decoders;
5. H.264-to-H.265 Transcoder;
6. H.264-to-MPEG2 Transcoders;
7. MPEG2-to-H.264 Transcoders.

The SOC MPEG video Decoder chipsets are pre-configured “ASICs”, according to performance specifications, such as video resolution (SD, HD, and UHD/4k), video frame rate (30, 60, and 120fps), and precision (8 or 10 or 12 bit). The SOC MPEG encoder chipsets can be video only or both video and audio, with AAC and MPEG-2 Layer-2 and MP3 all supported.

The input of the decoder chip can be either MPEG transport stream or UDP/IP over Ethernet packets (Internet ready). The decoder chips can also be custom configured according to user requirements.

Specifications

- Standards: H.265/HEVC, H.264/AVC, or MPEG-2
- Profiles: High, Main, Main 12
- input bit rates: 1-100Mbps & above
- Video resolutions: Up to 1080i/p and 4k
- Frame Rate: Up to 120fps
- Chroma Formats: 4:2:2 or 4:2:0
- Precision: 8 bits or 10 bits or 12 bit
- Input format: Transport Stream, or UDP/IP over Ethernet;
- Video output format: RGB or YUV or YCrCb
- Latency: 0.25ms (Min.)
- Power Consumption: 800mw



Standard H.264 Video/Audio Decoder Chips

Product #	Specifications						
	Standard	Profile	Resolution	Chroma	Precision	Frame Rate	Audio
DC-VA-H264-8b-30-1080-CS	H.264	up to High	up to 1080i/p	4:2:0/4:2:2	8 bits	up to 30fps	AAC or MPEG2-L2
DC-VA-H264-10b-30-1080-CS	H.264	up to High	up to 1080i/p	4:2:0/4:2:2	up to 10bits	up to 30fps	AAC or MPEG2-L2
DC-VA-H264-8b-60-1080-CS	H.264	up to High	up to 1080i/p	4:2:0/4:2:2	8 bits	up to 60fps	AAC or MPEG2-L2
DC-VA-H264-10b-60-1080-CS	H.264	up to High	up to 1080i/p	4:2:0/4:2:2	up to 10 bits	up to 60fps	AAC or MPEG2-L2
DC-VA-H264-8b-30-4k-CS	H.264	up to High	4k (UHD)	4:2:0/4:2:2	8 bits	up to 30fps	AAC or MPEG2-L2
DC-VA-H264-10b-30-4k-CS	H.264	up to High	4k (UHD)	4:2:0/4:2:2	up to 10 bits	up to 30fps	AAC or MPEG2-L2
DC-VA-H264-8b-60-4k-CS	H.264	up to High	4k (UHD)	4:2:0/4:2:2	8 bits	up to 60fps	AAC or MPEG2-L2
DC-VA-H264-10b-60-4k-CS	H.264	up to High	4k (UHD)	4:2:0/4:2:2	up to 10 bits	up to 60fps	AAC or MPEG2-L2

Standard MPEG2 Video/Audio Decoder Chips

Product #	Specifications						
	Standard	Profile	Resolution	Chroma	Precision	Frame Rate	Audio
DC-VA-MPEG2-8b-30-1080-CS	H.265	up to High	up to 1080i/p	4:2:0/4:2:2	8bits	up to 30fps	AAC or MPEG2-L2
DC-VA-MPEG2-10b-30-1080-CS	H.265	up to High	up to 1080i/p	4:2:0/4:2:2	up to 10bits	up to 30fps	AAC or MPEG2-L2
DC-VA-MPEG2-8b-60-1080-CS	H.265	up to High	up to 1080i/p	4:2:0/4:2:2	8bits	up to 60fps	AAC or MPEG2-L2
DC-VA-MPEG2-10b-60-1080-CS	H.265	up to High	up to 1080i/p	4:2:0/4:2:2	up to 10bits	up to 60fps	AAC or MPEG2-L2