

MPEG Video Encoder Chipsets

Product Description

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

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

The SOC MPEG video encoder 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 output of the encoder chip can be either MPEG transport stream or UDP/IP over Ethernet packets (Internet ready). The encoder 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
- Output 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
- Video Input format: RGB or YUV or YCrCb
- Output format: Transport Stream, or UDP/IP over Ethernet;
- Latency: 0.25ms (Min.)
- Power Consumption: 800mw



Standard H.264 Video/Audio Encoder Chips

Product #	Specifications						
	Standard	Profile	Resolution	Chroma	Precision	Frame Rate	Audio
EC-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
EC-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
EC-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
EC-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
EC-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
EC-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
EC-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
EC-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 H.265 Video/Audio Encoder Chips

Product #	Specificatio						
	Standard	Profile	Resolution	Chroma	Precision	Frame Rate	Audio
EC-VA-H265-10b-30-1080-CS	H.265	Main 4:2:2 10	up to 1080i/p	4:2:0/4:2:2	up to 10bits	up to 30fps	AAC or MPEG2-L2
EC-VA-H265-12b-30-1080-CS	H.265	Main 4:2:2 12	up to 1080i/p	4:2:0/4:2:2	up to 12bits	up to 30fps	AAC or MPEG2-L2
EC-VA-H265-10b-60-1080-CS	H.265	Main 4:2:2 10	up to 1080i/p	4:2:0/4:2:2	up to 10bits	up to 60fps	AAC or MPEG2-L2
EC-VA-H265-12b-60-1080-CS	H.265	Main 4:2:2 12	up to 1080i/p	4:2:0/4:2:2	up to 12bits	up to 60fps	AAC or MPEG2-L2
EC-VA-H265-10b-30-4k-CS	H.265	Main 4:2:2 10	4k (UHD)	4:2:0/4:2:2	up to 10bits	up to 30fps	AAC or MPEG2-L2
EC-VA-H265-12b-30-4k-CS	H.265	Main 4:2:2 12	4k (UHD)	4:2:0/4:2:2	up to 12bits	up to 30fps	AAC or MPEG2-L2
EC-VA-H265-10b-60-4k-CS	H.265	Main 4:2:2 10	4k (UHD)	4:2:0/4:2:2	up to 10bits	up to 60fps	AAC or MPEG2-L2
EC-VA-H265-12b-60-4k-CS	H.265	Main 4:2:2 12	4k (UHD)	4:2:0/4:2:2	up to 12bits	up to 60fps	AAC or MPEG2-L2