

Small & Low Power 4K/60p HEVC Codec SC2M50

■ Overview

The SC2M50 provides video encoding and decoding that support HEVC/H.265 standard. It is a slave type codec IC controlled by host CPU via PCIe interface.



■ Features

- 4K/60p HEVC/H.265 real-time encoding/decoding
- HEVC encoding algorithm supporting HDR(High Dynamic Range) Video
- Low power consumption(3.5W at 4K/60p HEVC encoding) enables battery powered system

■ Applications

- IP video distribution
- Medical
- Wireless video transmission
- Signage

■ Specifications

Video encoding	HEVC Main, Main10, Format Range Extensions (4:2:2 / 4:2:0, 8/10bit, up to 4K 60p)
Video decoding	HEVC Main, Main10, Format Range Extensions (4:2:2 / 4:2:0, 8/10bit, up to 4K 60p)
Audio encoding	MPEG1 Audio Layer2 MPEG2 AAC-LC SMPTE302M (LPCM)
Audio decoding	MPEG1 Audio Layer2 MPEG2 AAC-LC SMPTE302M (LPCM)
Stream input / output	TS input x 1 TS output x 1
Video input / output	20bit Parallel I/F input x 4, output x 4 YUV 4:2:2 10bit up to 4K 60p SMPTE-435(Square Division), SMPTE ST2036-3 (2-Sample Interleave Division), SMPTE 424M (3G-SDI), SMPTE 274M, SMPTE 292M (HD-SDI), SMPTE 259M-C (SD-SDI)
Audio input / output	I ² S x 2
Peripheral interface	PCI express Gen 2.0 (4 lanes, Max payload size 512 byte) USB 2.0 Device x 1 UART x 4 I ² C x 3 SPI x 2 GPIO x 64
Memory interface	Serial flash interface HSSPI x 1 LPDDR4 2400Mbps 16bits x 6 (maximum)
Image processing	Video overlay (option)
Technology	28nm Process / 1,361 pin FCBGA 25mm x 25mm
Power Consumption	3.5W (Typical)