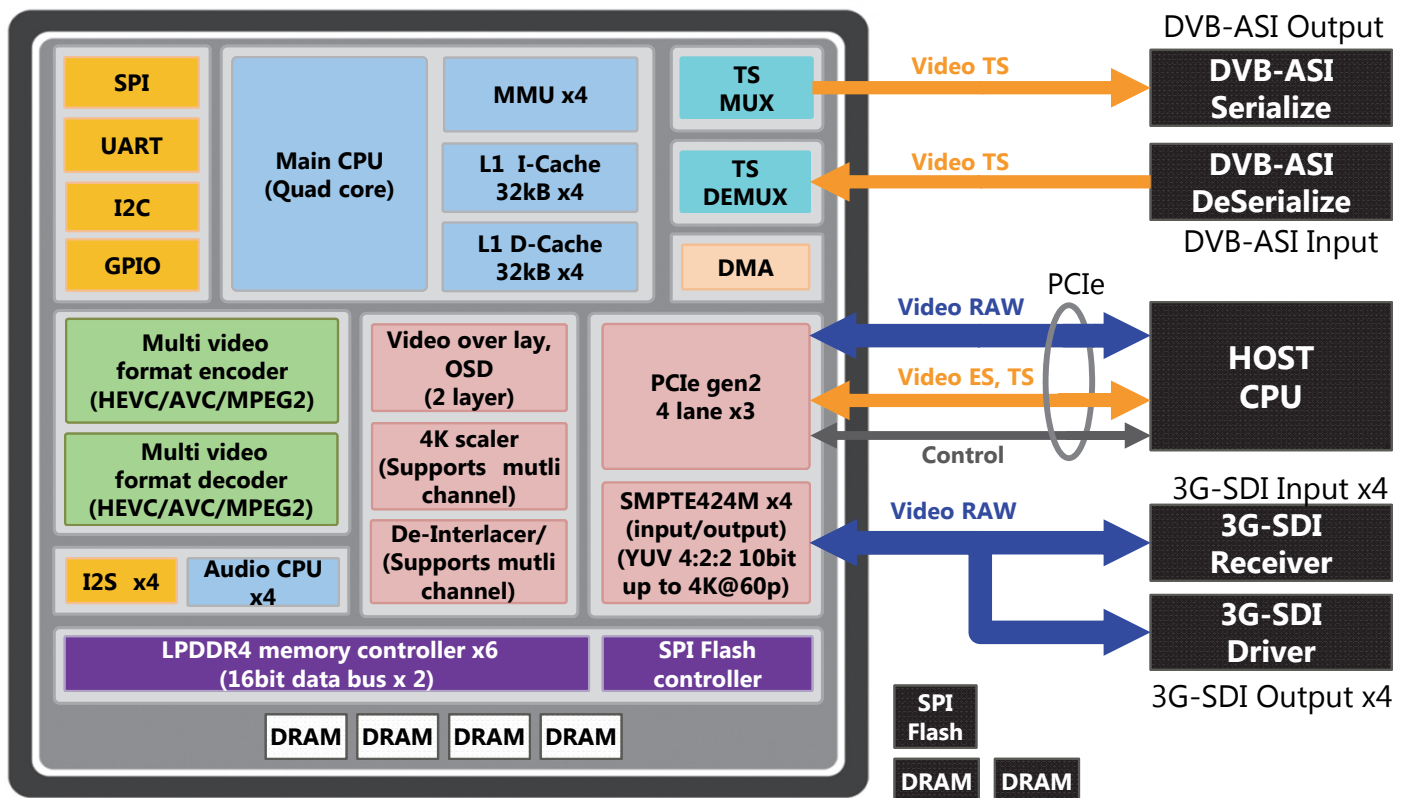
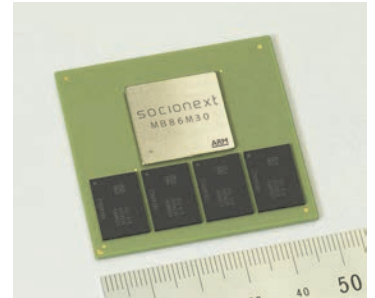


# 4K/60p HEVC Multi Format Codec MB86M30

## Overview

The Socionext MB86M30 or "M30" provides video and audio encoding, decoding, and transcoding of HEVC/H.265, AVC/H.264 and MPEG2 standards. The M30 is a slave device controlled by a host CPU via a PCIe interface.



## Features

- 4K/60p HEVC/H.265 or AVC/H.264 real-time encoding/decoding
- 4K/60p HEVC/H.265 encoding with 10ms ultra low latency (Optional)
- HEVC encoding algorithm supporting HDR (High Dynamic Range) video
- Low power consumption (6.3W at 4K/60p HEVC encoding) with four DRAMs embedded in package to increase system density

## Applications

- Broadcasting
- IP Video distribution
- Medical
- Signage

# ■ Specifications

<b>Video</b>	• Encoding	HEVC/H.265 4:2:2 10bit (up to 4096 x 2160p60) AVC/H.264 4:2:2 10bit (up to 2160p60) MPEG2 4:2:0 8bit (up to 1080i59.94, 1080p30)
	• Ultra Low Latency Encoding * <sup>1</sup>	HEVC/H.265 4:2:2 10bit (up to 4096 x 2160p60) Latency : 10ms
	• Decoding * <sup>2</sup>	HEVC/H.265 4:2:2 10bit (up to 4096 x 2160p60) AVC/H.264 4:2:2 10bit (up to 2160p60) MPEG2 4:2:0 8bit (up to 1080i59.94, 1080p30)
	• Transcoding * <sup>3</sup>	HEVC to HEVC, H.264 to HEVC, MPEG2 to HEVC, etc.
	• Pre-Processing	De-Interlacing, Scaling, Filtering, Video overlay
	• Multiple channel operation	Up to 4ch @HEVC/H.265 encoding, 1080p60
	• HDR ready	
<b>Audio</b>	• Encoding	• LPCM, AAC-LC, MPEG1-Layer2
	• Decoding	• LPCM, AAC-LC, MPEG1-Layer2
	• Pass through	
<b>Stream processing</b>	• TS MUX	• Up to 4ch
	• TS DEMUX	• Up to 4ch
<b>Interface</b>	• Control	PCIe 2.0
	• Stream	PCIe 2.0, TS-Serial Input x 4ch, TS-Serial Output x 4ch
	• Video	PCIe 2.0, Video Parallel Input x 4ch, Video Parallel Output x 4ch
	• Audio	I2S Input x 4 stereo pair, I2S Output x 4 stereo pair
<b>System</b>	• Internal Memory	LPDDR4-2400 8Gbits x 4pcs
	• External Memory	LPDDR4-2400 (16bit x 2ch) x 2pcs
	• Boot Device	SPI Flash
	• Package	FCBGA 47.5mm x 47.5mm

\*1: Ultra Low Latency Encoding is optional.

\*2: Decode function is verified with the stream generated by MB86M30. Regarding support status of other streams, please contact us.

\*3: Transcoding function is optional.