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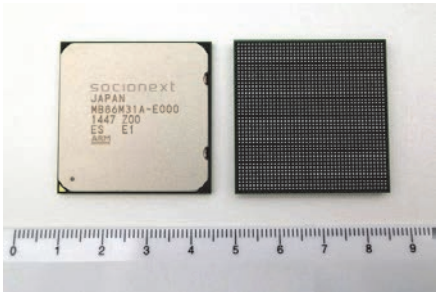
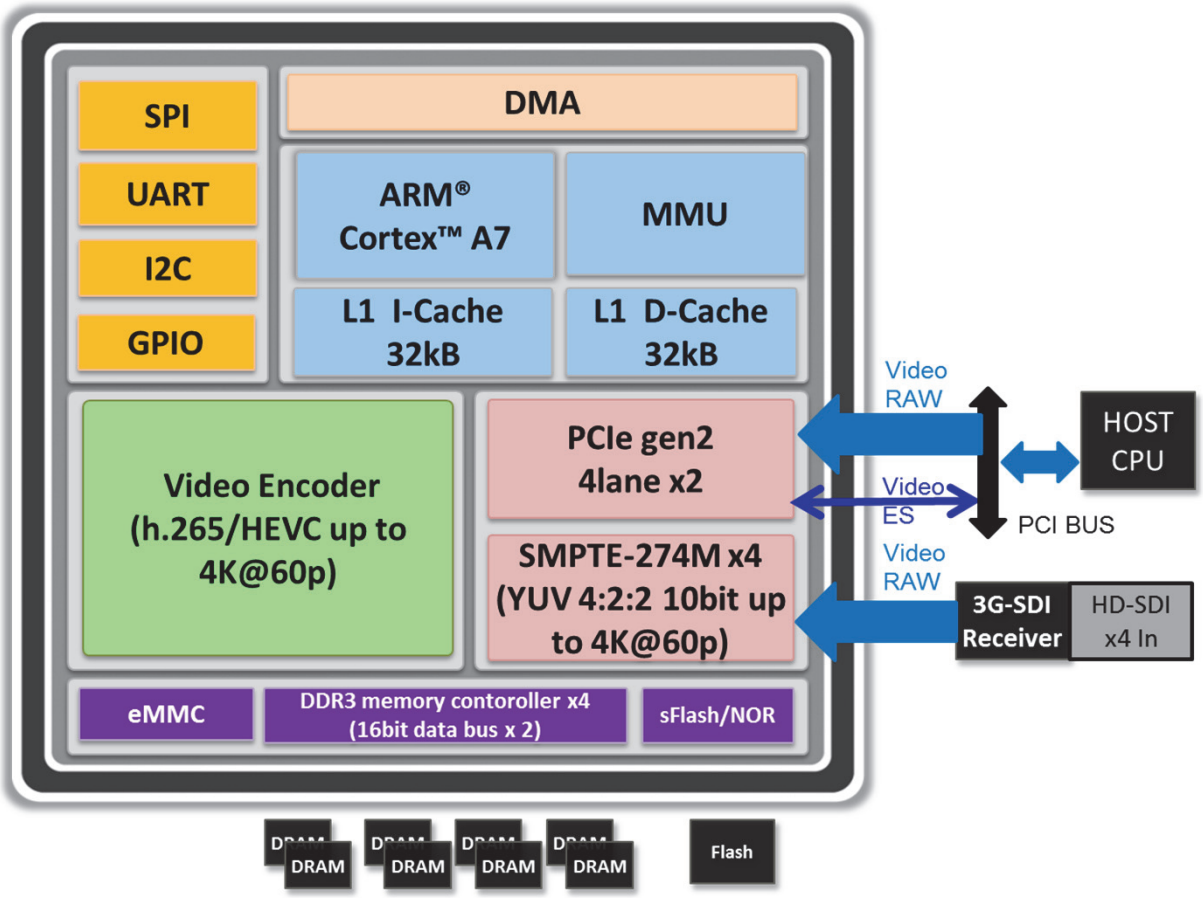
H.265/HEVC 4K60p Real-time encoder MB86M31

Overview

"MB86M31" provides H.265/HEVC 4K60p real-time encoding by single chip. The MB86M31 is slave type device controlled by host CPU via PCIe interface.





Features

- HW base H.265/HEVC 4K60p real-time video encoder
- Support Main 4:2:2 10 profile necessary for broadcasting applications
- Support multi-channel video encoding: 1080p60 4ch, 720p60 8ch, 480p 16ch
- Low power consumption

Applications

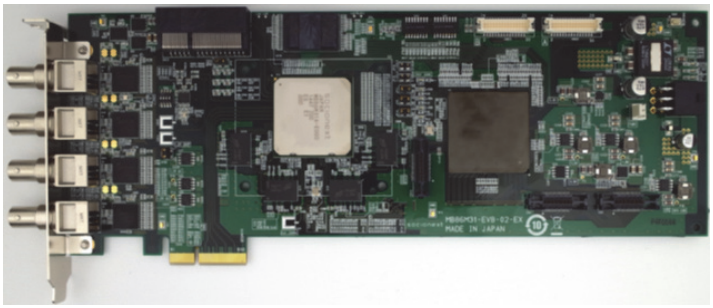
- Broadcasting
- Video capture
- Medical

■Specifications

Video	• Encoding	-H.265/HEVC Main, Main 10, Main 4:2:2 10 profile -Multi channel encoding: 4K60p 1ch, 1080p60 4ch, 720p60 8ch, 480p 16ch
Interface	• Control	-PCIe Gen2.0
	• Peripheral	-PCIe Gen 2.0 (4 lanes x2, 5.0 GT/s, Max payload size 1024 Bytes, Lane reversal supported) -UART(4 channels) -I2C(2 channels) -SPI(1 channel) -GPIO(64 pin)
	• Video	-20bit parallel interface(4 channels) support YUV4:2:2 10bit up to 4K -Support embedded sync(CEA-861)
System	• CPU	-ARM Cortex-A7 400MHz single core
	• Memory I/F	-DDR3 SDRAM 1333Mbps (16bit x2, 4channels)
	• Boot Device	-Serial flash, Nor Flash
Physical	• Power supply	-Internal Logic: 1.2V, Analog: 1.2V / 3.3V, I/O: 1.5V / 1.8V
	• Operating temperature	-Ta = 0 to 70degree
	• Package	-FCBGA-1764 (35mm x 35mm, 0.8mm pitch)

■Deliverables for system development

- Evaluation board
  - PCIe card form
  - Support 4ch 3G-SDI input



- Software Development Kit
  - Including Host CPU driver, sample application(Source code)
- Documentation
  - MB86M31 datasheet, evaluation board schematic, board design database
  - Host CPU driver, Sample application software, Control command document

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