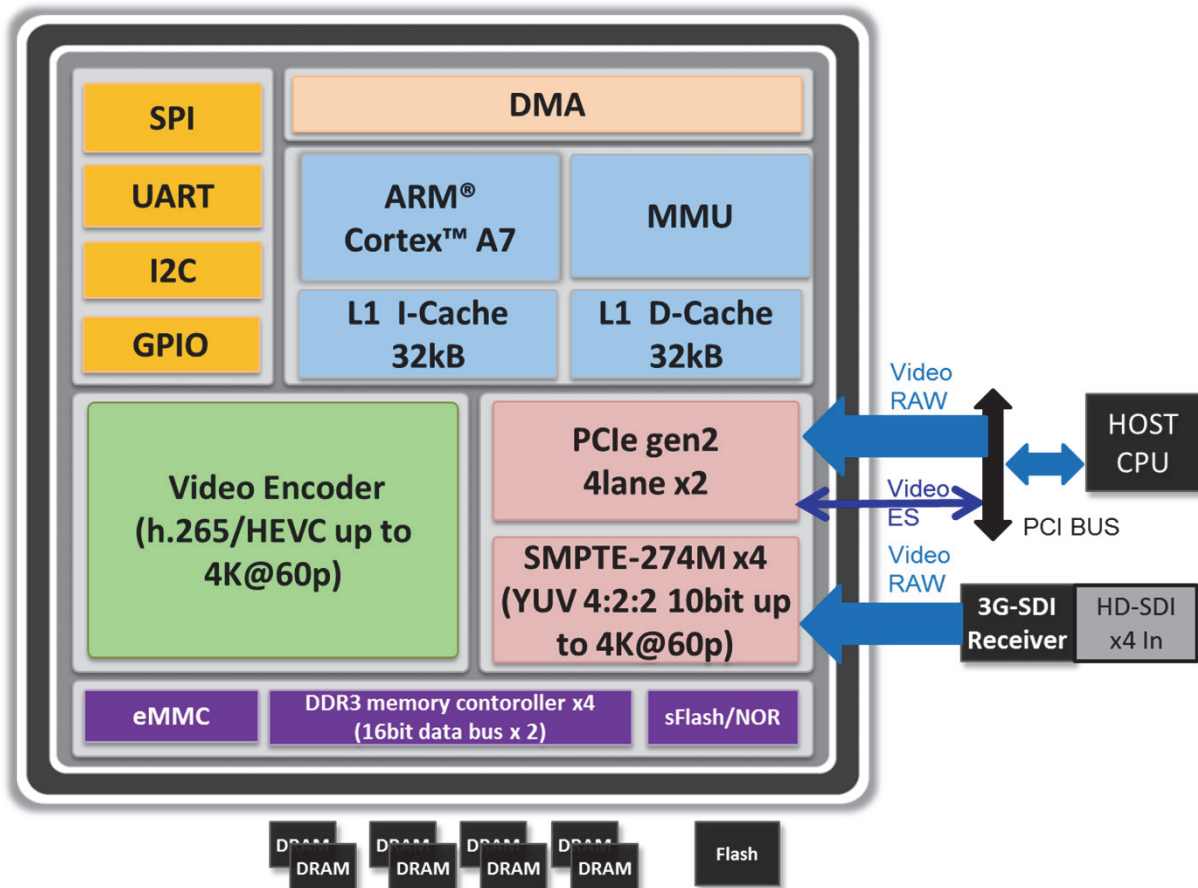
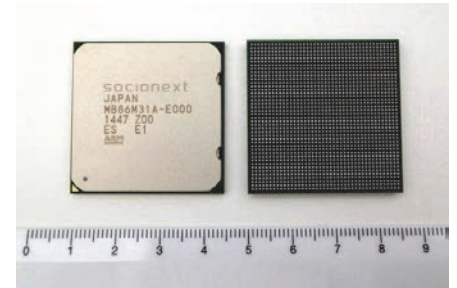


H.265/HEVC 4K60p Real-time encoder MB86M31

■ Overview

The MB86M31, code name "M31", provides H.265/HEVC 4K60p real-time encoding using a single chip. The M31 is slave device controlled by host CPU via the PCIe interface.



■ Features

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

■ Applications

- Broadcasting
- Video capture
- Medical

■ Specifications

Video	<ul style="list-style-type: none"> • Encoding 	<ul style="list-style-type: none"> -H.265/HEVC Main, Main 10, Main 4:2:2 10 profile -Multi channel encoding: 4K60p 1ch, 1080p60 4ch, 720p60 8ch, 480p 16ch
Interface	<ul style="list-style-type: none"> • Control • Peripheral • Video 	<ul style="list-style-type: none"> -PCIe Gen2.0 -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) -20bit parallel interface(4 channels) support YUV4:2:2 10bit up to 4K -Support embedded sync(CEA-861)
System	<ul style="list-style-type: none"> • CPU • Memory I/F • Boot Device 	<ul style="list-style-type: none"> -ARM Cortex-A7 400MHz single core -DDR3 SDRAM 1333Mbps (16bit x2, 4channels) -Serial flash, Nor Flash
Physical	<ul style="list-style-type: none"> • Power supply • Operating temperature • Package 	<ul style="list-style-type: none"> -Internal Logic: 1.2V, Analog: 1.2V / 3.3V, I/O: 1.5V / 1.8V -Ta = 0 to 70degree -FCBGA-1764 (35mm x 35mm, 0.8mm pitch)

■ Deliverables for system development

- Evaluation board
 - Offered as a PCIe card
 - Supports 4ch 3G-SDI input
- Software Development Kit
 - Includes Host CPU driver, sample application (Source code)
- Documentation
 - MB86M31 data sheet, evaluation board schematic, board design database
 - Host CPU driver, Sample application software, Control command document

