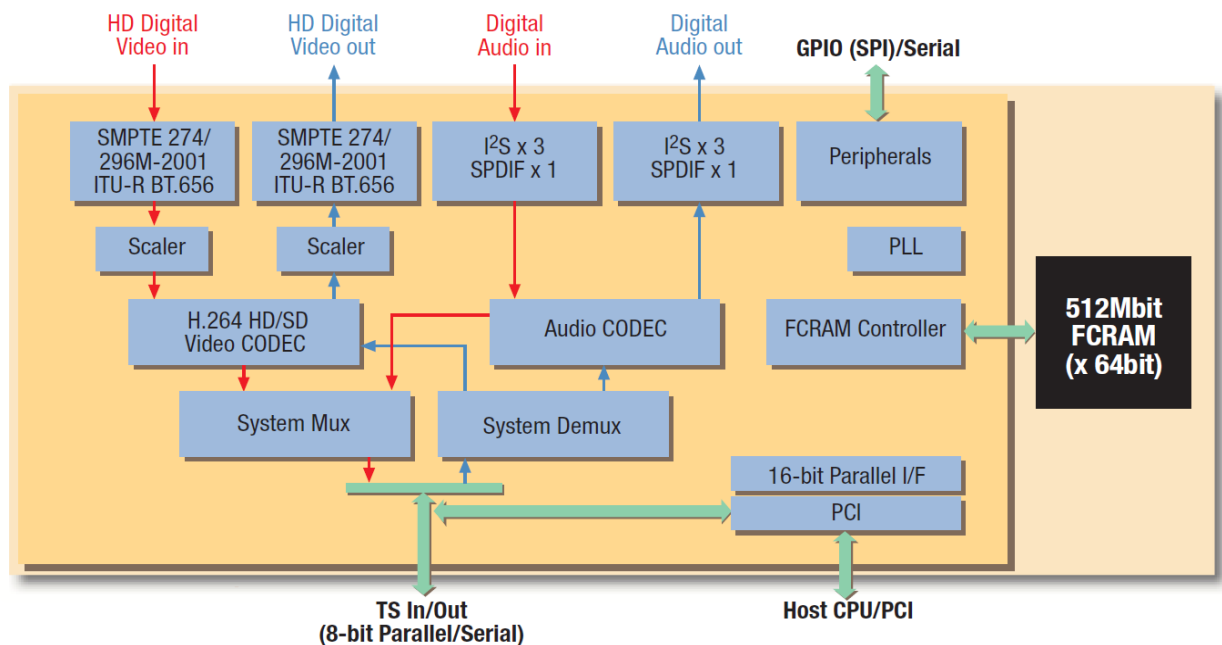


Ultra Low Power Full HD H.264 Codec MB86H46

■ Overview

“MB86H46” compresses and decompresses full HD (1920 x 1080 pixels) / 60p video in the H.264 format in real-time. The product features power consumption of only 700mW during Full HD encoding including the in-package memory.



■ Features

- Build-in H.264 codec up to 1080p60 and audio codec
- Low power consumption necessary for high density or power sensitive application
- Small form-factor, 15 x 15 mm package including the in-package memory

■ Applications

- Broadcasting
- Security
- Medical
- Video capture
- Video conference

■ Specifications

Video	<ul style="list-style-type: none"> • Profile • Resolution • Bit Rate • Interface 	<ul style="list-style-type: none"> • H.264 high profile / level 4.2*¹ Half-duplex Codec • 1920 x 1080 x 60p/50p, 1920 x 1080 x60i/50i/30p/24p, 1440 x 1080 x 60i/50i/30p/24p, 1280 x 720 x 60p/50p, 720 x 480 x 60i, 720 x 576 x 50i • Up/Down scaler embedded • 30Mbps (max.) • SMPTE 274M/SMPTE296M-2001, ITU-R BT.656, External sync mode (H/V/F + 16-bit data)
Audio	<ul style="list-style-type: none"> • Format • Channels • Interface 	<ul style="list-style-type: none"> • Dolby® Digital (AC-3)*², MPEG-2/4 AAC (LC profile), MPEG-1 Audio Layer 2, Linear PCM • Max. 5.1ch*³ • I2S, S/PDIF
System	<ul style="list-style-type: none"> • Format • Interface 	<ul style="list-style-type: none"> • ISO/IEC13818-1 + Amd3 (MPEG-2 TS), Video/Audio ES output • 8-bit parallel, Serial, PCI
Host Interface	General 16-bit parallel, Serial (UART), PCI	
Peripheral I/O	SPI	
Input Clock Frequency	27MHz	
Power Consumption (including memory)	700mW (typ., 1.2V, 1920x1080x60p at encoding) 500mW (typ., 1.2V, 1920x1080x60i at encoding)	
Package	FBGA 650pin 15mm square SiP (Ball pitch 0.5mm)	
Memory	512Mbit FCRAM* ⁴ x 1	

*1 Support up to a maximum of 30Mbps bit rate.

*2 Dolby is a registered trademark of Dolby Laboratories.

*3 Number of channels depend on audio format.

*4 FCRAM is a trademark of Fujitsu Semiconductor Limited.

The Products and product specifications described in this document are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements. All company names, brand names and trademarks herein are property of their respective owners.

Copyright 201 Socionext Europe
Edited: Connected Imaging BU

Socionext Europe GmbH

Pittlerstrasse 47
63225 Langen, Germany
Tel: +49-6103-3745-0
Fax: +49-6103-3745-122
<http://eu.socionext.com>