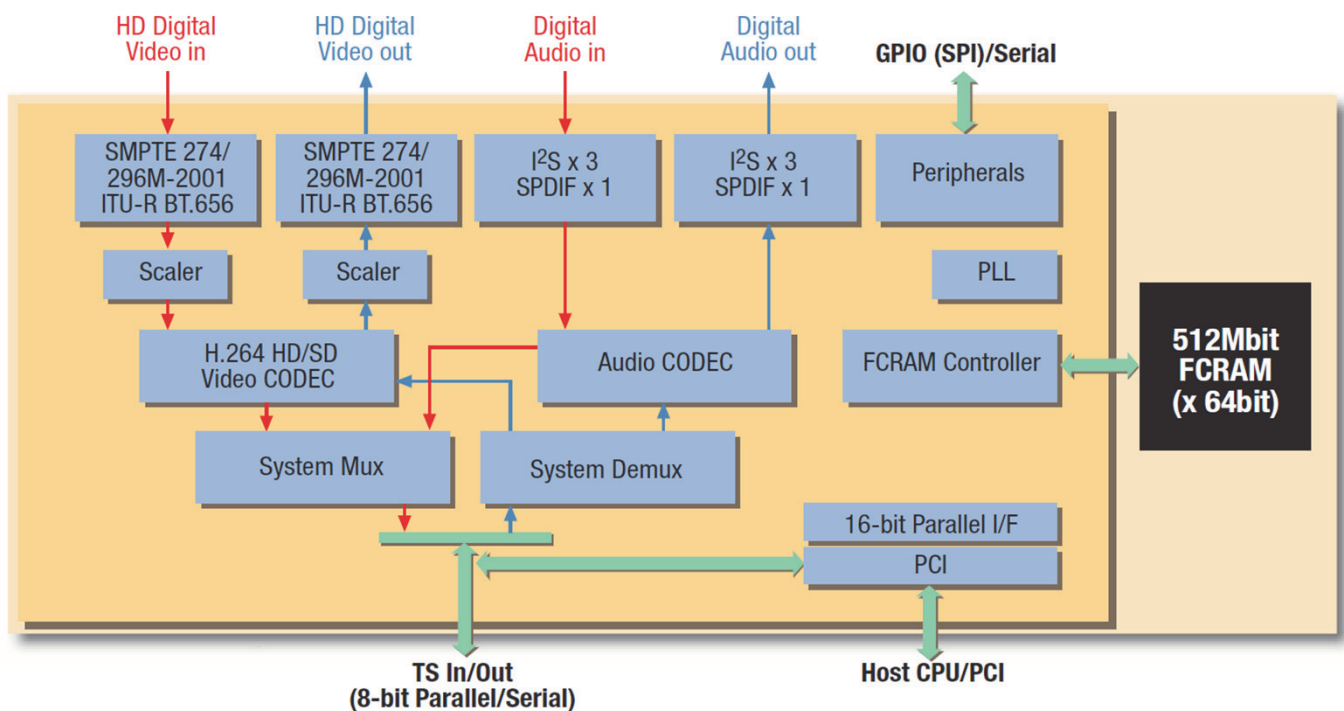


# Ultra Low Power Full HD H.264 Codec MB86H46

## ■ 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

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