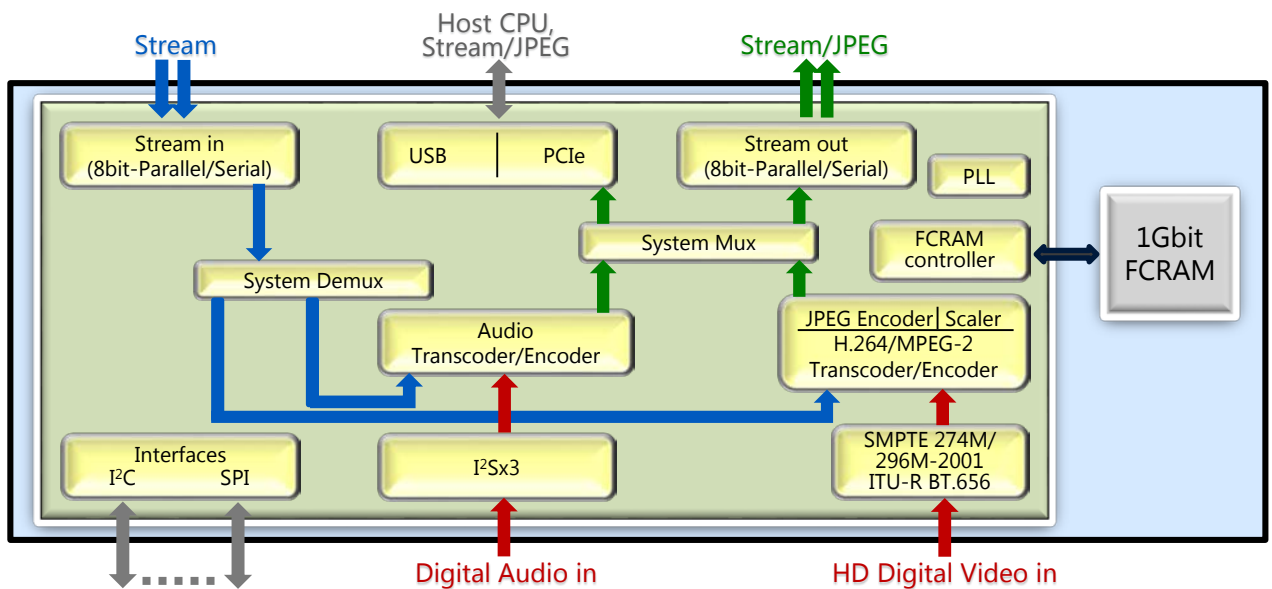


# H.264/MPEG-2 Full HD Transcoder MB86M25

## ■ Overview

“MB86M25” converts between Full HD (1920 x 1080 pixels) H.264 video data and MPEG-2 video data, as well as transcoding between audio formats while featuring a low power consumption.

MB86M25 also transcodes from H.264 video to H.264 video with higher-compression ratio to reduce the size of video data.



## ■ Features

- Build-in H.264/MPEG-2 transcoding functions, audio transcoding functions
- Industry-leading low power consumption that is just 1.2W when using the H.264 transcoding function, even including the memory
- Embedded 1 Gbit of memory (FCRAM) in the package

## ■ Applications

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

# ■ Specifications

<b>Function</b>	<ul style="list-style-type: none"> <li>• Transcode</li> <li>• Encode</li> <li>• Thumbnail</li> </ul>	<ul style="list-style-type: none"> <li>• Video MPEG-2 HD/SD ⇒ H.264 HD/SD + H.264 SD or lower H.264 HD/SD ⇒ H.264 HD/SD + H.264 SD or lower MPEG-2 HD/SD ⇒ MPEG-2 SD H.264 HD/SD ⇒ MPEG-2 SD</li> <li>• Audio Single Audio Transcode, Double Audio Re-multiplexing support</li> <li>• PSI / Private PES Re-Multiplexing</li> <li>• Video VBS*1 ⇒ H.264HD/SD + H.264 SD or lower, VBS ⇒ MPEG-2SD</li> <li>• Audio ABS*2 ⇒ MPEG-1 Audio Layer2, etc.</li> <li>• JPEG Encode</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>• Profile</li> <li>• Interface</li> </ul>	<ul style="list-style-type: none"> <li>• H.264 High profile, H.264 Main profile, H.264 Baseline profile, MPEG-2 Video Main profile</li> <li>• SMPTE 274M/SMPTE296M-2001, ITU-R BT.656</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)*3, MPEG-2/4 AAC-LC/HE-AAC, MPEG-1 Audio Layer2</li> <li>• Max. 5.1ch*4</li> <li>• I2S</li> </ul>
<b>JPEG</b>	<ul style="list-style-type: none"> <li>• Resolution</li> </ul>	<ul style="list-style-type: none"> <li>• QVGA</li> </ul>
<b>Stream</b>	<ul style="list-style-type: none"> <li>• Format</li> <li>• Interface</li> </ul>	<ul style="list-style-type: none"> <li>• MPEG-2 TS, MP4</li> <li>• USB2.0, PCI Express, Stream(8bit parallel, Serial) [2input, 3output]</li> </ul>
<b>Host Interface</b>		USB2.0, PCI Express, Serial(UART)
<b>Peripheral I/O</b>		I2C, SPI
<b>Input Clock Frequency</b>		27MHz
<b>Power Consumption (including memory)</b>		1.2W (typ., 1.2V, H.264 HD to H.264 HD Transcoding)
<b>Package</b>		FBGA 490pin 21mm square SiP (Ball pitch 0.8 mm)
<b>Memory</b>		1Gbit FCRAM*5 ×1

\*1 Video Baseband Signal

\*2 Audio Baseband Signal

\*3 Dolby is a registered trademark of Dolby Laboratories.

\*4 Number of channels depend on audio format.

\*5 FCRAM is a trademark of Fujitsu Semiconductor Limited.