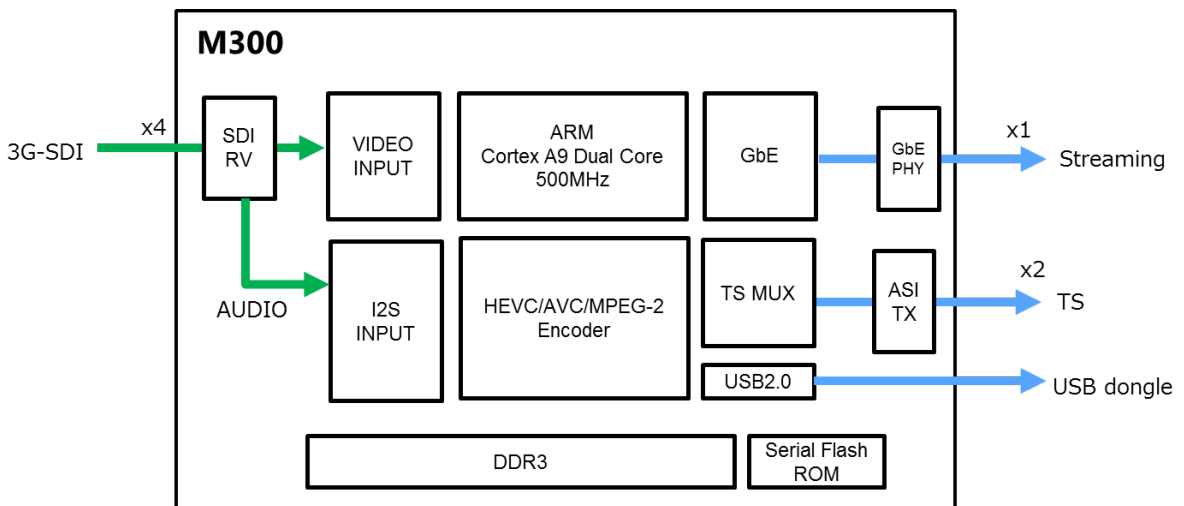
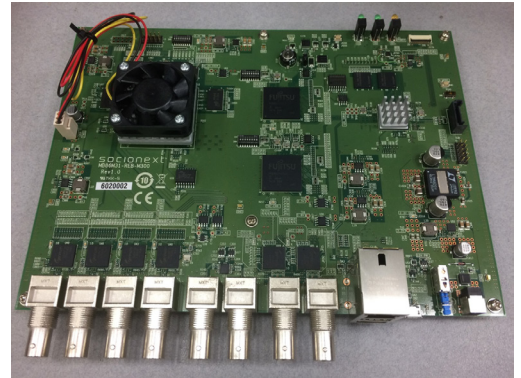


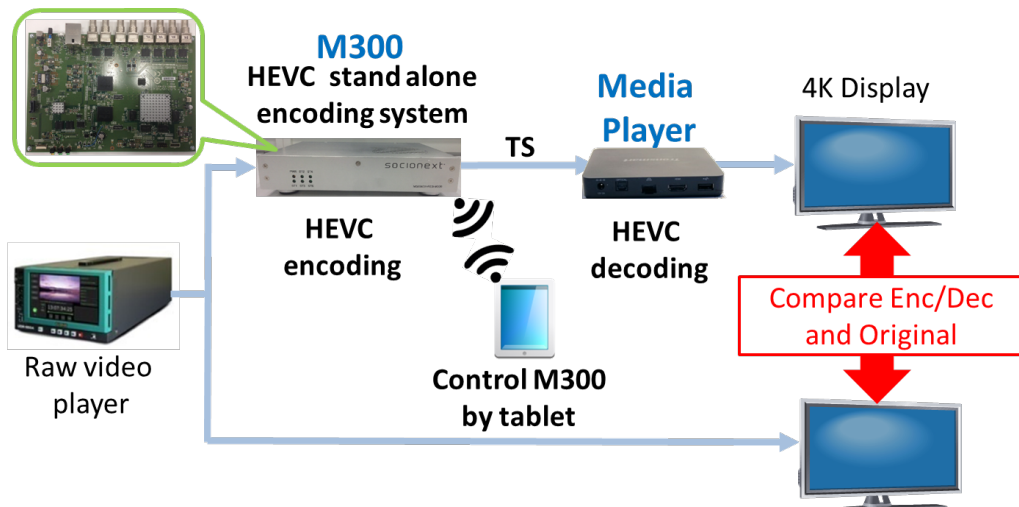
MB86M31 Reference Design Kit “MB86M31-REB-M300”

■ Overview

“M300” is Reference Design Kit of “MB86M31” supports audio encoding and TSMUX as well as H.265/HEVC 4K60p real-time encoding. M300 realize real-time operation from Video RAW input to MPEG2 TS output via Ethernet port, for easy evaluation of M31 video quality and stability.



■ Example of M300 usage



■ Specifications

Video	<ul style="list-style-type: none">• Encoding	-H.265/HEVC Main, Main 10, Main 4:2:2 10 profile -Multi channel encoding: 1080p60 2ch
Audio	<ul style="list-style-type: none">• Encoding	-MPEG-2/4 AAC-LC/HE-AAC -MPEG-1 Audio Layer2
Interface	<ul style="list-style-type: none">• Video• Audio• TS out• LAN port	-3G-SDI x4(UHD) x1ch, 3G-SDI/HD-SDI/SD-SHI x2ch(FHD/SD) -Embedded Audio(SDI) or I2S 2ch -TS out 2ch, DVB-ASI(BNC), TS format: MPEG2-TS -Gigabit Ethernet(RJ-45) streaming protocol: RTP/RTSP/HTTP(HLS/MPEG-DASH) Control interface: HTTP
System	<ul style="list-style-type: none">• Host CPU• Memory• Boot Device	-ARM Cortex-A9 Dual core 500MHz -DDR3 SDRAM 1600Mbps (8bit x2) -Serial flash ROM
Components	<ul style="list-style-type: none">• Main IC	-MB86M31ARBB-E001-GE1 (H.265/HEVC encoder) -MB86M25APBS-A003-GE1 (Audio encoder, TS MUXER) -MB86E631BBGL-GE1 (Host CPU)
Software	<ul style="list-style-type: none">• OS• Application SW	-Linux version 14.04 LTS (32bit) -Gstreamer(UDP/TCP/RTP/HLS/MPEG-DASH), Web server

■ Deliverables for system development

- For evaluation board
 - MB86M31-REB-M300 BOX, User manual
- For M300 Board support Package(M300 customization)
 - M86M31-REB-M300, User manual
 - Documentation
 - Setup manual, Sample software Guide line, Encode control Library API specification, E631 Linux BSP user Guide, M31 PCIe Driver specification, M25 USB Driver specification
 - M300 SW/FW
 - E631 Linux BSP, M31 PCIe driver, M25 USB driver, Encode control library, Sample streaming application, Web I/F application, Serial I/F application (Source code)
 - M31/M25 FW(Binary)
 - PC Linux Software
 - Sample Serial Control Tool, M300 Initial Writing Tool(Source code)

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