

Movidius MA1101

Low-Power, Video Editor & A/V Decoder for Mobile Phones

Product Description

Designed for low-power mobile platforms, Movidius' MA1101 enables highly-efficient 1080i MPEG-2 and H.264 decoding without external memory. The MA1101 provides all common demodulator and host interfaces for integrating ISDB-T into mobile phones.

The MA1101 also provides basic and advanced video editing functions for user generated content publishing to social networking sites. These editing functions include color effects, slow motion, digital zoom, stabilization, noise reduction and brightness/contrast adjustment.

By providing up/down scaling and re-sampling the MA1101 provides video enhancement capabilities to display content at the available screen resolution. Video noise reduction can improve the quality of low resolution video.

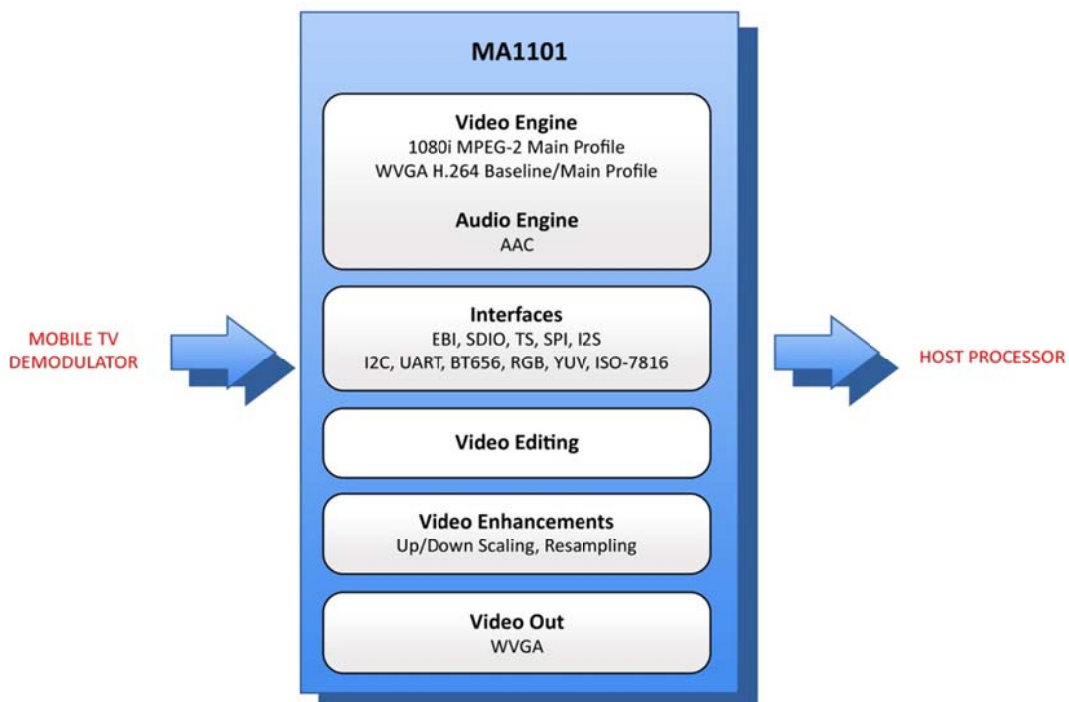
The MA1101's platform delivers advanced user-friendly features such as switch-over in areas of poor coverage.

Feature Headlines

- **Low-Power:** <300mW 1080i MPEG-2 decoding
- **Low-Power:** <100mW QVGA H.264 decoding
- **Small Package Size:** 8x8mm BGA
- **Memory:** No external memory required
- **Video Editing:** Stabilization, Zoom, Noise Reduction, Slow Motion, Color Transfer, Brightness, Luminance Enhancement
- **Full-Seg:** Built-in BCAS descrambler

Applications

- Mobile Phones – Feature and Smart
- Mobile Digital Terrestrial TV (DTT) Receivers: ISDB-T 1-Seg and Full seg
- Cellphone, PMP/PND & notebook PC devices
- Other Mobile Accessories (dongles, mini-cards)



MA1101 Feature List

Video Decoding

- H.264 Baseline or Main Profile up to WVGA @ 30fps
- H.264 Baseline Profile QVGA 15fps for 1-Seg
- MPEG-2 Main Profile up to 1080i for Full Seg
- Built-in Multi-2 BCAS Descrambler

Video Enhancement

- High Quality Up- and Down- Sampling to WVGA
- Video Noise Removal

Video Editing

- Video Stabilization, Super Resolution Zoom to any Non Center Location, High Quality Slow Motion
- Color Effects: Sepia, Grayscale, Negative, Edges, X-Ray, Color Themes etc.
- Saturation, Brightness, Contrast, Sharpness Enhancement
- Clip Add/Trim/Add Effect,, Video Transitions, Image/Text Overlay, Audio Soundtrack, Titles & Credits
- Creative and Fun: Cartoon, Newspaper, Blur, Edges, Emboss

Low Power

- MPEG-2 1080i decoding @ <300mW
- H.264 QVGA decoding @ <100mW

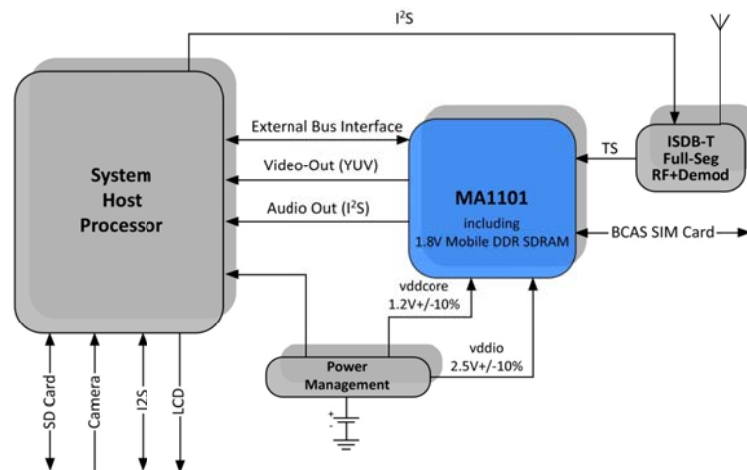
Highly Integrated System Interfaces

- 8/16/32-bit host parallel bus (master and slave)
- Parallel (8-bit) and Serial Transport Stream (TS) Input
- ISO-7816 interface to BCAS SIM card I2S with 2 stereo inputs & 2 stereo outputs
- Up to WVGA video output resolution
- Standard Video Output Formats: ITU-R BT656
- SDIO, Master/Slave SPI and I2C, UART
- Configurable bidirectional GPIO ports

Package & Supplies

- BGA, 8x8mm
- 1.2V Core voltage / 2.5V IO voltage / 1.8V DDR
- 3.3V/2.5V/1.8V LVTTTL-compatible interface Ios

MA1101 Typical Application Diagram



The Movidius MA1101 is part of the Movidius Myriad Platform

Visit <http://www.movidius.com> for more details

Contact Information

Europe / US

Movidius,
19 Mountjoy Square,
Dublin 1,
Ireland.
Tel: +353 1 855 9592

Email: info@movidius.com

Asia

Movidius,
2107, Tower 2, Lippo Centre,
89 Queensway, Admiralty,
Hong Kong, China.
Tel: +852 2530 9873

Web: www.movidius.com

Movidius is a fabless semiconductor company whose technology delivers unique multimedia capabilities including High Definition 3D Video. Typical user applications include creating, editing, sharing, viewing and real-time improvement of multimedia content. Movidius Myriad and Myriad 3D technologies are specifically designed for low power mobile phone and consumer electronics, enabling manufacturers to create highly differentiated products and enhanced user experiences.

Movidius, headquartered in Dublin, has offices in Belfast and Hong Kong, with a substantial software development center in Romania. Movidius is venture backed, with investors including: Celtic House Venture Partners, Capital-E, Emertec Gestion, AIB Seed Capital Fund & Enterprise Ireland.