AV8100 - FULL HD HDMI AND ANALOG TV-OUT COMBO FOR PORTABLE APPLICATIONS

Enjoy and share high-resolution video and still images

The AV8100 is a highly-integrated HDMI transmitter supporting full HD video, 3D content, still images and 7.1 audio surround through HDMI connectors in a range of resolutions from 480i/p to 1080p. With support for Analog TV-OUT through a S-Video connector it offers a second type of connection for great flexibility.

The combination of extremely small size and ultra-low power consumption make it suitable for any portable application with less than 50mW for a High Definition video transmission. High-definition video and audio are transmitted from a MIPI DSI host to the HDMI connector. The device is compatible with the HDMI standard covering functions such as HPD, CEC and it includes HDCP for copyright protection
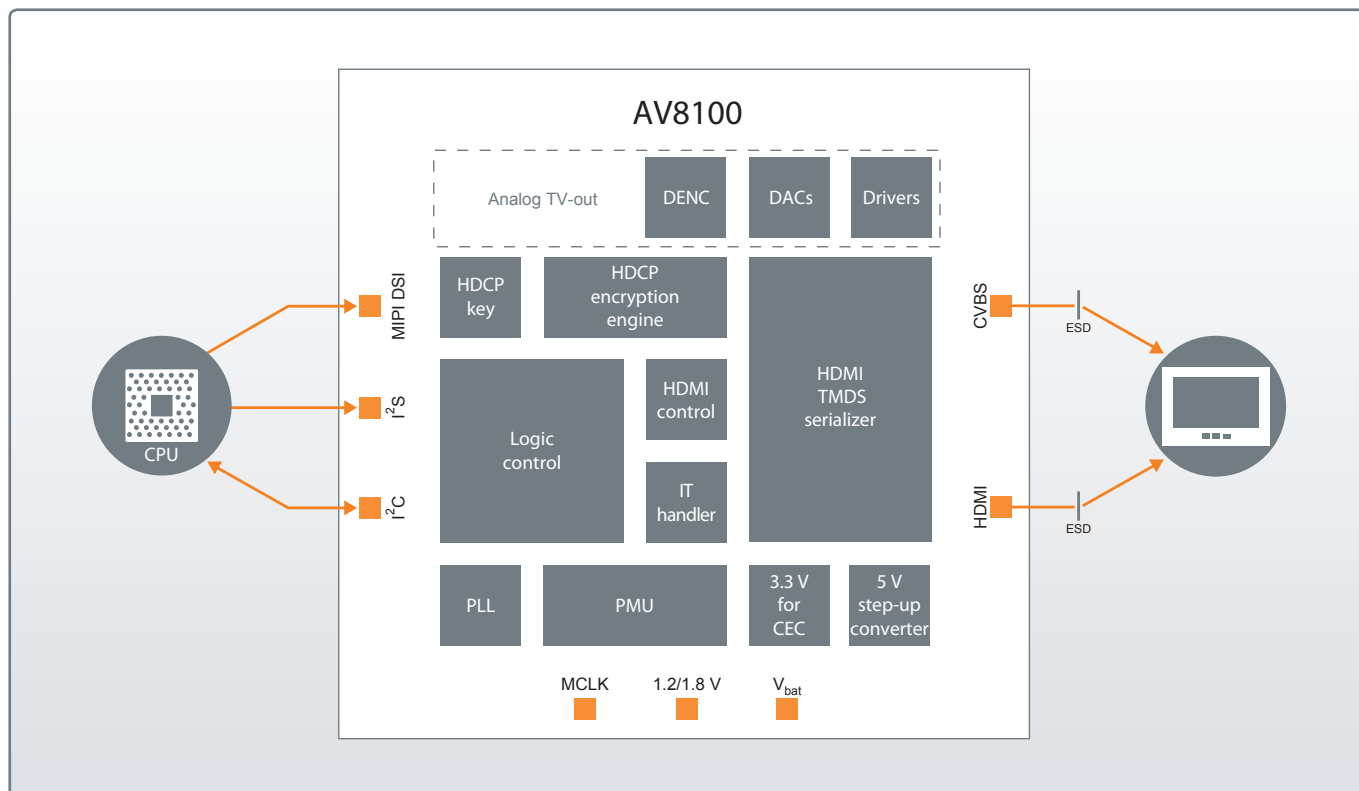
KEY FEATURES

- MIPI DSI host interface
  - DPHY up to 800 Mbp/s
  - Chip control mode available
- HDMI v1.4 interface supports:
  - Stereoscopic 3D formats
  - 1.5 GHz data transfer
  - HDMI 1.4 Type D connector
  - HDMI 1.3 Type C connector
- RGB, YCbCr, xvYCC supported
- Supports all HDTV resolutions from 480i/p to 1080p
- Supports PAL and NTSC for worldwide compatibility
- Audio Interface:
  - I²S: Stereo up to 192 kHz
  - 7+1 Audio surround up to 192 kHz
- HDCP to prevent copying of digital content (video and audio) over HDMI
- CEC support for remote control functions
- Video cable plug detect
- Analog TVout Video
  - Supports RGB, YCbCr, xvYCC
  - Analog output (10 bits DAC) with CVBS (Composite) output
  - Macrovision
  - TV plug insertion detection
- Fast mode I²C control interface
  - 5 V tolerant I²C and HPD I/Os
- Integrated Power Management
  - Integrated 5 V cable supply

KEY BENEFITS

- Brings HD resolution to any mobile application
- Full HD video resolution (1080p)
- Simple implementation – requires no specific power supplies or additional devices
- Flexible connection thanks to analog output
- Ultra-low power
- Optimized e-BOM and footprint thanks to integrated PMU

TARGETED APPLICATIONS

- Mobile Phones
- Smartphones
- Netbooks
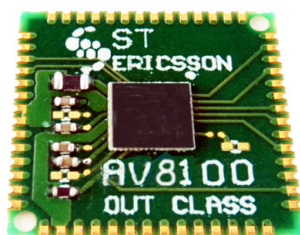- Portable applications

ST ERICSSON

AV8100 block diagram

A COMPLETE SOLUTION

ST-Ericsson provides a complete package including firmware, drivers, and evaluation board for integration of HDMI subsystem in portable applications.

SUPPORT AND SERVICES

Pre-certification, software development support, and PCB layout are available to ensure efficiency and short time to market.

AV8100

LET'S CREATE IT

Order code: AV8100FL_1

ST ERICSSON