



LT8511A-M - HDMI-VGA Converter

1. General Description

LT8511A-M is an integrated solution of LT8511, it is a low cost high performance single port HDMI receiver which is compliant with HDMI 1.3. The RX can receive 1080p (8/10/12bit deep color, up to 2.25GHz data ratio) input. Besides it supports analog video output up to UXGA and 1080p with three high resolution DACs. The chip integrates Equalizer, HDMI core in a single chip. The chip integrates an 8bit MCU for the control of the converter. The integrated LT8511A-M provides a more robust solution and space & cost reduction as well.

2. Features

- On-chip HDMI receiver with Equalizer, supports 8/10/12bit deep color, up to 2.25GHz data ratio.
- On chip receiver core which is compliant with HDMI1.3 specification.
- Supports pixel clock rate up to 165MHz.
- Supports analog video output up to UXGA and 1080p with three on chip DAC.
- On-chip audio decoder which support 2-channel IIS audio outputs.
- Support audio mute.
- On chip YCC422 to YCC444 conversion.
- On chip YCC to RGB and RGB to YCC conversion in ITU-R BT.601 and 709 color space.
- Support separate sync output and SOG/SOY.
- Flexible interrupt registers with interrupt pin.
- Link on and Valid DE detection.
- Integrated MCU for control

3. Application Diagram

