LT8618EX --- Product Brief

Low Power HDMI Transmitter

Features

- HDMI 1.4 compliant transmitter with HDCP
- Support pixel rates above 340Mpix/second
- Support One Bit Audio (DSD, SACD)
- Low power consumption of 180mW at 1080P
- Less than 2mA standby power
- Pin compatible with SiI9030 ÈANX9030 and CAT6612
- Firmware programmable output swing and pre-emphasis
- Fully hardware-controlled or optional software-controlled HDCP operations
- Pre-programmed HDCP key sets or external EEPROM stored key sets
- Integrated CEC controller
- Integrated EDID shadow RAM and embedded EDID
- 5V-tolerant DDC interfaces
- Flexible video interface supports DVD and HD MPEG decoders
- 24-bit RGB/YCbCr 4:4:4
- 16/20/24-bit YCbCr 4:2:2
- 8/10/12-bit YCbCr 4:2:2 (ITU.601 and 656)
- 12-bit, dual-edge clocking input modes
- YCbCr-to-RGB color space conversion
- Input clock divider (0.5x, 2x, 4x)
- High-End digital audio interface
- 4 x I2S inputs accept Dolby Digital, DVD-Audio input (2-ch. 192 kHz, 8-ch. 192 kHz)
- S/PDIF input supports PCM, Dolby Digital, DTS digital audio transmission (32-96 kHz Fs sample rate)
- IEC60958 or IEC61937 compatible
- Flexible, programmable I2S channel mapping
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- 2:1 and 4:1 Down-sampling to handle 96 kHz and 192 kHz audio streams
- Fully integrated HDCP authentication hardware
- Master I2C interface for DDC connection simplifies board layout and lowers cost
- Flexible power management

Description

The LT8618EX is Lontium's low power version HDMI transmitter based on ClearEdge • Technology. It supports the 24-bit color depth HDMI 1.4 (High Definition Multimedia Interface) specification. They are fully backwoard compatible with Lontium's first generation HDMI transmitter LT8618, and also pin compatible with Silicon Image SiI9030 and Analogix ANX9030 transmitters. LT8618EX is a high performance, low power part that are specifically designed for HD-Digital cameras, HD-Digital Video Cameras, HD-PMP/MP4 Players, Cell phones, etc. The normal operation power is less than 100mA playing 24bit 1080P content, and the standby power is less than 2mA.

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