

## Zero Power HDMI® Transmitter

A *CoolHD™* family product

### Features

- HDMI 1.3 compatible transmitter
- Optional HDCP 1.2 function with internal keys
- Supports Link rates up to 165Mpixels/sec
- Zero power HDMI transmitter technology
- Flexible video pixel input 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 YC Mux (ITU.601 and 656)
  - YCbCr-to-RGB color space conversion
  - 4:2:2 to 4:4:4 up-sample
  - Backward compatible with DVI 1.1
- Advanced digital audio interface
  - 8-channel I<sup>2</sup>S support Dolby Digital, and DVD-Audio
  - S/PDIF supports PCM, Dolby Digital, DTS digital audio transmission
  - IEC 60958 or IEC 61937 compatible
  - Up to 6 channels 1-bit super audio support
  - Programmable I<sup>2</sup>S channel mapping
  - 2:1 and 4:1 down-sampling to handle 96 KHz and 192 KHz audio stream
- Software-controlled power management
- Programmable output swing

- Packages offered:
  - 48 pins QFN
  - 80 pins LQFP
  - 81 balls BGA

ANX7150, a *CoolHD™* family product, it is a revolutionary breakthrough technology that makes a zero power HDMI transmitter a reality. *CoolHD™* technology solves the problem by recovering power from the HDMI link that is normally wasted as heat and using it to power the HDMI transmitter. This technology is transforming the mobile and handheld markets.

ANX7150 can be ordered with an optional HDCP 1.2 function (including internal keys) to support content protection.

Built-in video pattern generator and audio tone generator are included for system self-test.

Power requirement is 1.8V and 3.3V.

For package and HDCP options, refer to the

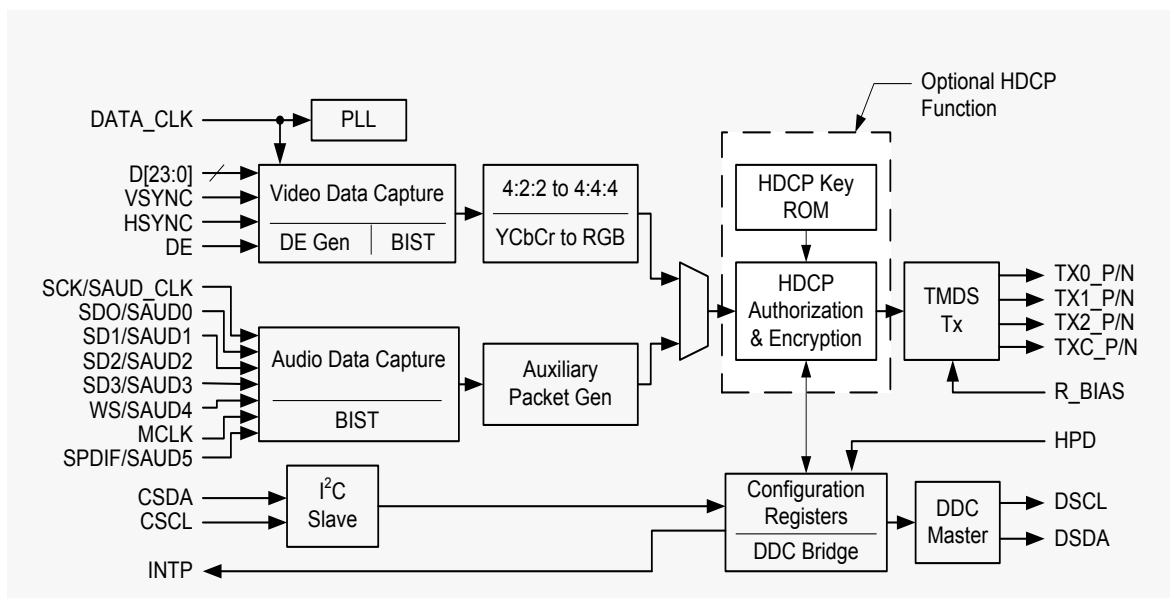


Figure 1: ANX7150 Block Diagram

## Parts Ordering Information

Part No.	Description	Availability
ANX7150F	No HDCP function 48 pin, 6 x 6 mm, QFN package	Now
ANX7150FH	HDCP function enabled 48 pin, 6 x 6 mm, QFN package	Now
ANX7150L	No HDCP function 80 pin, 10 x 10mm, LQFP package	Now
ANX7150LH	HDCP function enabled 80 pin, 10 x 10mm, LQFP package	Now
ANX7150B	No HDCP function 81 ball, 4.2 x 4.2mm, BGA package	Now
ANX7150BH	HDCP function enabled 81 ball, 4.2 x 4.2mm, BGA package	Now
ANX7150V	No HDCP function 81 ball, 7 x 7mm, TFBGA package	TBD
ANX7150VH	HDCP function enabled 81 ball, 7 x 7mm, TFBGA package	TBD

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