



# ANX8770-8775™ HDMI™ - Dual Port Deep-Color Receiver

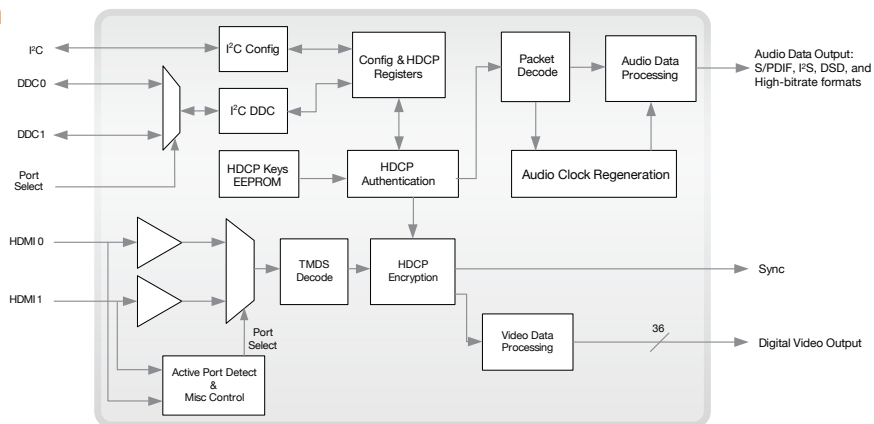
## ANX8770-8775™ HDMI™ - Dual Port Deep-Color Receiver

The ANX8770/ANX8775 are advanced multimedia receivers compliant with HDMI Specification 1.3. They support 24, 30 or 36 bit deep color video modes and allow support for up to 36bpp in SDR (single data rate) mode. The ANX8770/ANX8775 also supports High bit-rate compressed audio modes (DSD for SACD). The ANX8770/ANX8775 receive two HDMI data streams and decode the selected input into digital audio and video data outputs. The receivers incorporate Analogix' proprietary WideEye™ architecture supporting 6.25Gbps SerDes products for telecom and datacom applications. The ANX8770/ANX8775 embed the HDCP keys and key selection vectors to reduce manufacturing complexity and system cost.

### Features

- Dual-Port HDMI 1.3 compliant receivers
  - Deep color support, up to 36 bits-per-pixel
  - High bitrate (HBR) audio modes
- TMDS clock rate up to 250MHz
  - Supports 36bpp at 165Mpixel/sec
- ANX8775 includes down stream repeater support
- ANX8770 provides a cost optimized solution (no downstream repeater support)
- The ANX8770 and ANX8775 are pinout compatible with the Silicon Image Sil9125 and Sil9135.
- Supports full 36-pin-wide video data path
  - 24, 30, or 36bpp supported in SDR mode (single edge clock)
  - DDR modes (dual edge clock) also supported for restricted pin interface
- Digital low pass filter for anti-aliasing during up & down sampling between 4:4:4/4:2:2
- YCbCr from/to RGB color conversion
- Analogix WideEye™ architecture for signal conditioning and equalization
  - Supports cable lengths over 20m
- Supports advanced high bitrate audio modes
  - One Bit Audio for SACD with sampling rates of 44.1kHz and 88.2kHz
  - High-Bitrate compressed audio via four I<sup>2</sup>S interfaces
  - Superior audio clock regeneration
- Programmable channel mapping for HDMI, Video Output, and Audio interfaces
- Integrated HDCP 1.2 decryption engine and preprogrammed keys
- Includes backward compatible support for HDCP 1.1/1.0 and DVI 1.0
- Programmable power management
- Deep Sleep mode for low power
- 144-pin LQFP package

### Block Diagram



### Worldwide Locations

Analogix is positioned to support customers worldwide with headquarters in Santa Clara, CA and design engineering and product support in Beijing, China. Analogix also has sales support offices in Taiwan and Japan. For more information: [www.analogix.com](http://www.analogix.com)