

DisplayPort 1.1a Transmitter IP Core

The DisplayPort Transmitter IP core is fully compliant with DisplayPort 1.1a with HDCP content protection specifications. The IP core provides all the signal requirements for the DisplayPort source device receptacle. For HDMI mode it requires the use of an external DisplayPort-to-HDMI converter.

Analogix DisplayPort Transmitter IP core contain the 36-bit video data and clock are video inputs, the SPDIF and I2S inputs are taken as audio input, the video data capture & video BIST block is separated as video_capture and video_bist module.

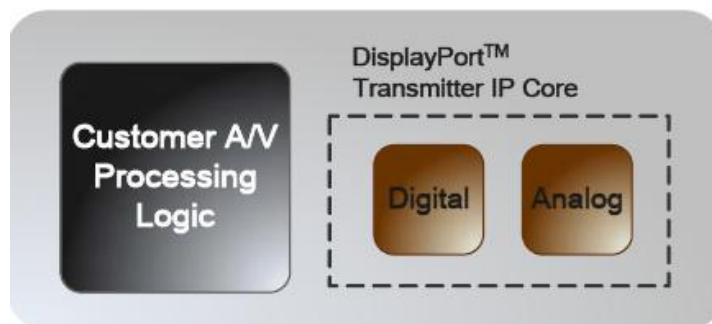
Applications

- PC Motherboards
- PC Graphic Cards
- Notebook PCs
- Blu-Ray Disc Players

Related IP Cores

- HDMI 1.2/1.3/1.4 Transmitter/Receiver
- DisplayPortTM Receiver
- SERDES (6.25Gbps or less)
- Ethernet PHY

Typical Application Diagram



ASIC System-on-chip with Integrated
DisplayPortTM Transmitter IP Core

Features

Highlights

- Compliant with DisplayPort 1.1a Specification
- Main link containing 4 physical lanes of 2.7/1.62 Gbps/lane
- APB 3.0 bus interface for IP configuration/status register access

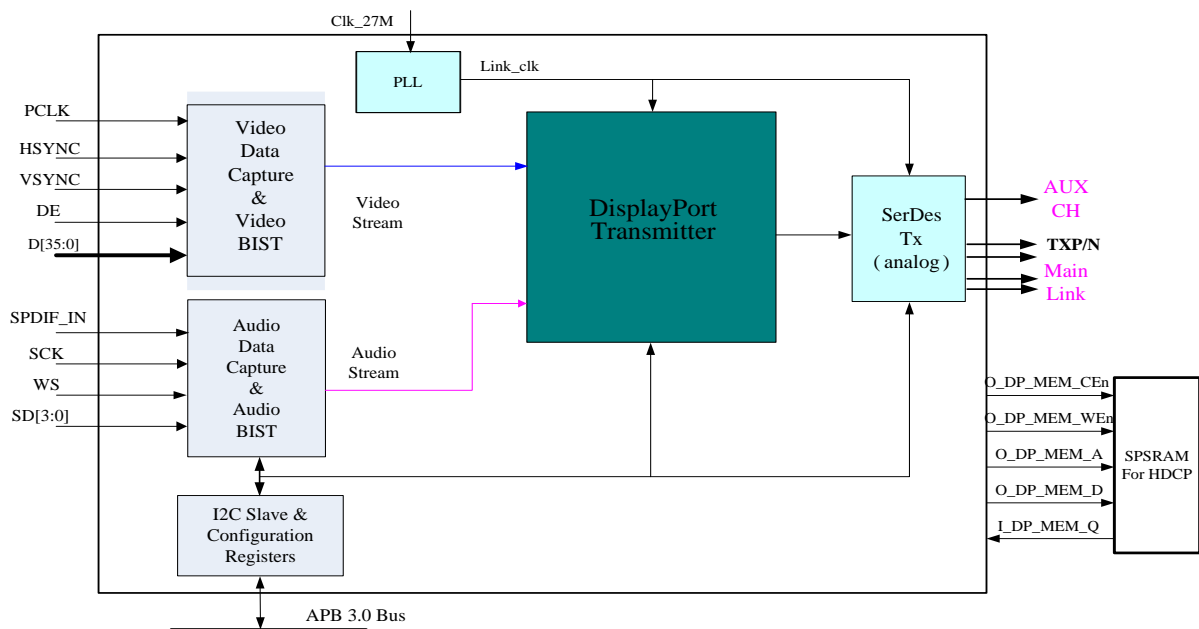
Digital Audio Interface

- S/PDIF and I2S input supports PCM, Dolby Digital, DTS digital audio transmission
- IEC60958 or IEC61937 compatible
- Audio sampling rates from 32kHz to 192kHz

Video Interface

- EIA/CEA-861D video timing and info-frame structure
- VESA DMT and CVT timing standards
- Deep color support up to 36bpp
- Built-in Self Test (BIST)

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.