S/PDIF library

A software defined S/PDIF library that allows you to trasnmit or receive S/PDIF data via xCORE ports. S/PDIF is a digital data streaming interface. The components in the libary are controlled via C using the XMOS multicore extensions (xC) and provides both a S/PDIF receiver and transmitter.

Features

- Supports stereo S/PDIF receive up to sample rates up to 96KHz
- Supports stereo S/PDIF transmit up to 192KHz

Typical Resource Usage

This following table shows typical resource usage in some different configurations. Exact resource usage will depend on the particular use of the library by the application.

Configuration	Pins	Ports	Clocks	Ram	Logical cores
Transmit	1	1 (1-bit)	1	~3.8K	1
Receive	1	1 (1-bit)	1	~3.9K	1

Software version and dependencies

This document pertains to version 2.0.2 of this library. It is known to work on version 14.2.1 of the xTIMEcomposer tools suite, it may work on other versions.

The library does not have any dependencies (i.e. it does not rely on any other libraries).

Related application notes

The following application notes use this library:

- AN00231 - SPDIF Receive to I2S output using Asynchronous Sample Rate Conversion