



lib_spdif: S/PDIF library (README)

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vendor

XMOS

version

6.2.1

scope

General Use

description

S/PDIF transmitter and receiver

category

Audio

keywords

S/PDIF

devices

xcore.ai, xcore-200

1 Summary

S/PDIF (Sony/Philips Digital Interface) is a standard for transmitting digital audio signals over relatively short distances between devices. It was developed by Sony and Philips and is used to carry high-quality digital audio without the need for analog conversion, maintaining the integrity of the audio signal.

S/PDIF can carry two channels of uncompressed PCM (Pulse Code Modulation) audio or over Optical (TOSLINK) or Coaxial transmission mediums.

lib_spdif provides software defined S/PDIF implementation that allows transmission and reception of S/PDIF data via *xcore* ports.

2 Features

- ▶ Supports stereo S/PDIF receive for sample rates up to 192KHz
- ▶ Supports stereo S/PDIF transmit for sample rates up to 192KHz
- ▶ Fully compliant to the IEC60958 specification



3 Known issues

- ▶ Transmitter has no way of setting user or validity bits (#55)

4 Development repo

- ▶ [lib_spdif](#)

5 Required tools

- ▶ XMOS XTC Tools: 15.3.0

6 Required libraries (dependencies)

- ▶ None

7 Related application notes

The following application notes use this library:

- ▶ [AN02003: SPDIF/ADAT/I²S Receive to I²S Slave Bridge with ASRC](#)

8 Support

This package is supported by XMOS Ltd. Issues can be raised against the software at: <http://www.xmos.com/support>



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