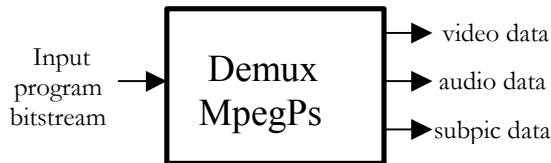


DemuxMpegPs is a TSSA compliant software library that takes in an MPEG stream and demultiplexes it into video, audio, subpicture and dynamic navigation data. It can run on all members of the 32-bit Trimedia Processor family.



DemuxMpegPs

Description

For the TriMedia based DVD player the DemuxMpegPs component accepts input data from the DiscRead component via data-in callback functions. On receiving the data, the DemuxMpegPs component splits the data into video, audio, subpicture and dynamic navigation data. The video, audio and subpicture data are passed on to the respective decoders using data-out functions. The dynamic navigation data is passed to the presentation engine through the progress callback function, supported by TSSA.

This TSSA component has one input and 3 outputs. Not all 3 outputs (video, audio or sub-picture) need to be connected when DemuxMpegPs is used. The DemuxMpegPs will just omit sending a particular data packet to any unused output pin.

Applications

- TriMedia based DVD player

Documentation

A detailed document describing the application program interface (API) and the internal behaviour of the component is available.

Features:

- The Demultiplexer supports MPEG1 system stream (as per ISO 11172) and MPEG2 program streams (as per ISO 13838). It also supports AC3, SDDS, DTS and PCM audio.
- Data taken in by the DemulxMpegPs is split into video, audio, subpicture and dynamic navigation data.
- The video, audio and subpicture data are sent to the downstream components using dataout callback functions.
- The dynamic navigation data is filled into three different data structures, one for the PCI information to be used by the renderer, one for the PCI information to be used by the Navigator and the other for the DSI information to be used by the Navigator. This dynamic navigation data is sent to the Presentation Engine using the progress callback function.

DemuxMpegPs

Technical Information

Memory Usage

| | |
|----------------------|-------------|
| Static Memory (text) | 33981 bytes |
| Static Memory (data) | 279 bytes |

Note that additional memory is required for buffering of input and output data. The amount is application dependent.

Processor Load

DemuxMpegPs consumes a maximum load of 10 megacycles/second on a system where the clock ratio of CPU:SDRAM is 1:1 and the input bit rate is 10.08 Mbps

Other Information

| | |
|-----------------------------|------------------|
| Supported Processors | TM-1100, TM-1300 |
| Version Number | 4.2 |
| Build with Compiler Version | TCS 2.1 final |

Related TriMedia TSSA Software Components

VdecMpeg, VrendVo

Example Programs

This library is shipped with an example program, exolDemucMpegPS, which demonstrates how to use the streaming interface of the DemuxMpegPs.

Copyright Philips Electronics N.V. 2003

All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent- or other industrial or intellectual property rights.

Release Date: August 2003

Let's make things better.



PHILIPS