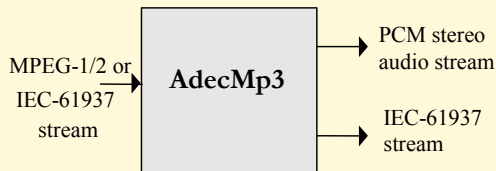


**AdecMp3** decodes audio bitstreams encoded as MPEG-1 and MPEG-2, layers 1, 2, and 3. The decoder is optimized to handle layer 3 bitstreams on processors based on the TriMedia 32-bit architecture.



### Features

- DVP compliant,
- designed according to the MPEG-1 audio standard ISO11172-3 and the MPEG-2 audio standard ISO13818-3,
- auxiliary output for connecting to headphones, VCRs, or external decoders through IEC-61937 output formatting,
- supports MPEG 2.5 files.

# AdecMp3

### Description

The AdecMp3 component is designed for use in systems that decode MP3 format audio streams. MP3 streams are described by ISO standard 11172-3. MP3 format bitstreams include MPEG 1 and MPEG 2 layer 3 at bit rates ranging from 16kb/s to 384kb/s. AdecMp3 can also decode layer 1 and layer 2 (stereo) bitstreams.

AdecMp3 accepts as input MPEG audio elementary streams or IEC61937 (MPEG-1 encoded into the S/PDIF transport format). It outputs stereo 16-bit linear PCM audio samples. The optional second output produces a copy of the input formatted into an IEC-61937 stream. This makes AdecMp3 fully compliant with the API of the Adec family of audio decoder components. The library is optimized for the TriMedia 32-bit Architecture.

### Applications

- MP3 player,
- Internet/Multimedia system,
- MP3 Jukeboxes,
- Open Divx.

### Documentation

Detailed documentation of the AdecMp3 component is available

# AdecMp3

## Technical Information

### Memory Usage

<b>Static</b>	192 kByte
<b>Dynamic</b> (excluding pSOS task stack size)	75 kByte

Additional memory is required for buffering of input and output data. The amount is highly application-dependent.

### Processor Load (MIPS) on an example MPEG-1 bitstream

The processor load has been measured on a TM-1300 with 1:1 CPU:SDRAM speed ratio. All input files are MPEG-1 Layer 3 files.

Sample rate/bit rate	64kb/s	128kb/s	256kb/s	320kb/s
32khz	6.6	13.2	14.4	14.7
44.1khz	7.7	12.8	16.1	16.8
48khz	8	13.8	17.3	17.7

### Other Information

<b>Supported Processors</b>	TM-1100, TM-1300, pnx8500, pnx8525
<b>Version Number</b>	1.0
<b>Patent/License Issues</b>	MP3 license issues are documented at <a href="http://www.mp3license.com">www.mp3license.com</a>
<b>Built with Compiler Version</b>	V5.7.1 of tcs2.2-dvp0003WinNT

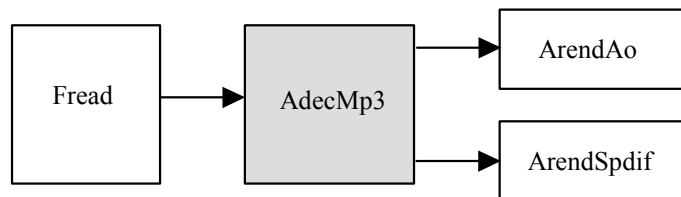
### Related TriMedia TSSA Software Components

AdecAc3, AdecMpeg, AdigAi, ArendAo, ArendSpdif

### Example Program

This library is shipped with the example program exolAdecMP3, which implements a real time music player using the streaming interface of the AdecMp3 library. MPEG data is read from a file by the Fread component and sent to the decoder. AdecMp3 can send the decoded PCM samples to the ArendAo and the ArendSpdif component.

#### exolAdecMp3



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