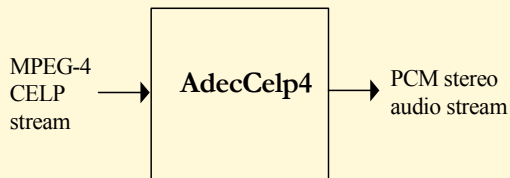


The AdeuCelp4 component decodes bitstreams encoded in 'MPEG4-CELP' format. The decoder is optimized to handle bitstreams on the 32-bit TriMedia processors.



AdeuCelp4

Description

The AdeuCelp4 component is designed for use in systems that decode MPEG-4 CELP format audio streams. MPEG-4 CELP streams are described by ISO/IEC JTC 1/SC 29/WG 11 N2503-Sub3 and ISO/IEC 14496-3, International Standard, at bit rates ranging from 3.85kb/s to 24kb/s for mono. The decoder matches the MPEG-4 High Quality Audio profile base layer.

The component accepts as input MPEG-4 CELP audio elementary streams. It outputs stereo PCM audio samples where left channel and right channel are the same. The library is optimized for the TriMedia processors.

Applications

- MPEG-4 Player
- Internet/Multimedia system

Documentation

Detailed documentation of the tmAdeuCel4 component is available (Specifications, Architecture Implementation, Test Reports).

Features

- DVP compliant
- Fully compliant with the MPEG-4 CELP audio standards ISO 14496-3
- Optimized for the TriMedia processors

AdecCelp4

Technical Information

Memory Usage

Static

data size	text size	total code size
66521	243137	309658

Dynamic

allocated memory	peak allocation	stack size	stack load	total size
13100	13100	51231	12776	64331

Note that additional memory is required for buffering of input and output data. The amount is highly application dependent. See ipbrief_exolMpeg4.doc for typical values.

Processor Load (MIPS)

Minimum CPU load	7.20
Maximum CPU load	14.00
Average CPU load	9.61
Mono2Stereo load penalty	1.37

Description of the Trimedia board:

Type	kenobi
CPU	TM1300
CPU clock	166.67 Mhz
Memory	32 MB SDRAM
SDRAM/CPU clock ratio	1:1

Configuration of the host PC:

Type	NA
CPU	Pentium II
CPU clock	NA
Memory	NA
OS	Windows NT 4.0 SP5

Other Information

Supported Processors	TM1300, pnx8500, pnx8525
Version number	1.8
Build with Compiler Version	V5.6.8 of tcs2.20090Solaris

Related TSSA Software Components

AdecAac4

Example Programs

This library is shipped with an example program that demonstrates the use of the component. The main use is in the exolMpeg4 application. See exolMpeg4 Application Readme for details.

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