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## MPEG 1 Audio Encode - Decode Software Solution for Video / Audio Applications

### Features

- Implements the ISO / IEC 11172 - 3 MPEG 1 Audio Standard
- Supports fixed bit rates
- Supports the three sampling frequencies, 44.1, 48 and 32 khz
- Supports CRCC
- Software available in library form
- Easy integration with OEM's software

### Applications

- Decoding for Video CD players
- Digital Broadcast
- Digital Studio
- Set Top Decoders
- Solid State Audio Recorder

### Product Description

The MPEG 1 Audio Encode-Decode Software solution is implemented on a single Analog Devices ADSP- 2181 Digital Signal Processor

The three sampling frequencies - 3 Audio standards - 44.1 KHz, 48 Khz and 32 KHz are supported. Layer I and Layer II as well as the fixed bit rates and modes have been implemented. It performs compression/ decompression of audio in real time.

The MPEG I Encode program accepts PCM audio in a memory buffer and generates the compressed data stream in another buffer. Similarly the MPEG 1 Audio Decode program accepts compressed data in a memory buffer and generates PCM audio in another buffer.

The software is available in a library form and OEM users can integrate the solution with their code very easily.

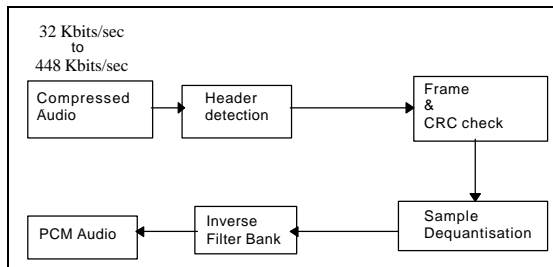


Figure 1 -MPEG 1 Audio Decode Block

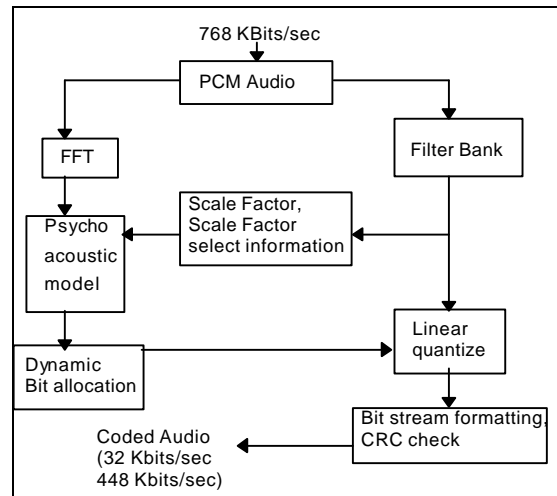


Figure 2 - MPEG 1 Audio Encode Block

***Technical Specifications***

<b>Standard supported</b>	ISO / IEC 11172 -3
<b>Processor</b>	Single ADSP 2181
<b>Encode MIPS</b>	30
<b>Decode MIPS</b>	16.5
<b>Program memory</b>	14k
<b>Data memory</b>	14k
<b>User Integration</b>	Library module that can be integrated by user
<b>Demonstration of Solution</b>	ISA bus add-on card with demo application

***Development Partner***

The MPEG 1 Audio Encode-Decode Solution was developed by Indchem Research and Development Labs. Ltd., and Analog Devices.

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