

## Ittiam AAC Decoder

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### AAC-LC

MPEG-2/4 AAC-LC (Advanced Audio Coding - Low Complexity version) is a popular audio coding technique recommended by MPEG committee. The codec handles audio signals sampled in the range of 8 kHz to 96 kHz. It operates on a frame of 1024 samples. The bit-rate can vary in the range from 8 to 576 kbps / channel (depending on the sampling rate). Low Complexity version of AAC provides good compromise between the codec complexity and the audio quality.

### Features

Features supported:

- MPEG2 and MPEG4 AAC LC (Low complexity)
- Supports all sampling frequencies & bit rates for AAC only bit-streams.
- Channels: Mono/Stereo/Dual-Mono
- Robust against erroneous bit-streams
- Error concealment mechanism
- Tools Supported
  - TNS (Temporal Noise Shaping),
  - PNS (Perceptual Noise Shaping)
  - Intensity Stereo & Mid/Side Stereo
- Bit-streams: ADIF, ADTS, GA Header
- Compliance: ISO/IEC 13818 - 4, 14496 – 4 (MPEG AAC and PNS Conformance)
- The implementation has been tested on a variety bit-streams and audio files for robustness and quality.
- Optimized for low footprint & processing power.
- Supports a simple C callable API / TI XDMI API
- Multi-channel reentrant software.
- 16 bit WAV Output format support

Features not supported:

- More than 2 channels of audio.
- SBR & PS decoding
- Dependently switched CCE
- DRC

## Decoder Validation

The MPEG-4 AAC LC decoder implementation has been validated using the latest conformance tool given by MPEG-4. The decoders are also tested for robustness against bit-stream errors and quality tests based on Objective and Subjective evaluation.

### Notice

Ittiam Systems reserves the right to make changes to its products or discontinue any of its products or offerings without notice. Ittiam warrants the performance of its products to the specifications applicable at the time of sale in accordance with Ittiam's standard warranty.



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