

AAC Software Audio Codec

www.streaming-networks.com

Optimized for Philips Nexperia™ media processors (with TriMedia VLIW processor core)



ISO compliant

Meeting ISO standards

High Quality Audio

High Quality stereo audio using cutting edge design

Customizable

Bitrates from 8 kbps to 128 kbps and sampling rates from 8 kHz to 48 kHz to meet all sorts of needs

OVERVIEW

The fully ISO-compliant Streaming Networks AAC software audio codec brings high-performance audio encoding and decoding to embedded systems that require a low memory footprint. Optimized for use with the Philips Nexperia family of media processors (with TriMedia VLIW processor cores), the software codec is flexible, scalable, cost-effective, and easy-to-use.

It can be used in time-shift applications where encoding and decoding of MPEG-4 audio and video executes on a single Nexperia processor. Low frequency noise also makes the codec an excellent choice for security and surveillance applications.

HIGH QUALITY AUDIO

The codec's low-complexity profile delivers CD-quality music. For even higher quality, there is a long-term prediction option in the main profile for improved source encoding. The codec can burn audio CDs four times faster than real time, and can use a prediction option to pack more songs onto a single CD.

STANDARDS COMPLIANT

The codec works with MPEG-2 and MPEG-4 formats and delivers performance superior to MP3 at equal bit rates. The encoder converts standard analog audio signals into digital format, compressing it in real time. The result is an audio elementary stream ready for independent use or for multiplexing with video. The output bit stream is MPEG-2/MPEG-4 AAC-LC ISO/IEC14496-3 and ISO/IEC 13818-3 compliant.

The audio input accepts "Linear PCM" format from a live source or a file in 16-bit audio for mono and stereo. 5.1 channels are also supported by the codec. The codec supports bit rates of 8, 16, 32, 64, and 128 kbps per channel and supports sample rates of 8, 16, 22.050, 32, 44.1, and 48 kHz.

SUPPORT TOOLS

Support tools include filter bank, temporal noise shaping, perception model, rate distortion control, noiseless coding, long-term prediction, intensity stereo and mid/side matrixing.

RELIABILITY

A well-documented, easy-to-use application programming interface (API) is included with the codec. The API lets developers control library behavior and provides all the functionality for audio capture, encode/decode, and rendering

KEY FEATURES

- Fully ISO-compliant AAC software audio codec for
 - Embedded systems with low memory footprint
 - Philips Nexperia family of media processors (with TriMedia VLIW processor cores).
- Supports MPEG-2 and MPEG-4 formats
- Performance superior to MP3 at equal bit rates
- Low-complexity profile
 - CD-quality music
 - Burns audio CDs at 4x real time
 - Prediction options for enhanced quality and increased CD capacity
- Audio input: "Linear PCM" format from live source or file
- Output bitstream
 - Elementary stream-ready for independent use or for multiplexing with video
 - Fully compliant with MPEG-2/MPEG-4 AAC-LC ISO/IEC14496-3 and ISO/IEC 13818-3
- Range of support tools
- Well-documented API

Contact Streaming Networks for more information:

Telephone: +1 (408) 727-3904

Email: info@streaming-networks.com

Web: www.streaming-networks.com

