



# SW320023-1HPM - PIC32 AAC Decoder Library for Harmony

**Part Number: SW320023-1HPM**

Status: Mature Product

## Summary

The AAC algorithm is designed for 80MHz or greater PIC32 MCUs, and supports both PIC32MX and PIC32MZ devices. This code requires 62MIPS peak 34MIPS average performance, 61KB Flash and 12KB RAM without frame buffer memory for operation on the MCU. Supported in MPLAB Harmony v2 only.

Users remain responsible for licensing for their products through Via Licensing.

PIC32 Advanced Audio Coding (AAC) Decoder library provides easy to use APIs for decoding an audio stream encoded using Advanced Audio Coding (AAC) encoding. The PIC32 AAC Decoder library supports the following:

Sample Rates:

8, 11.025, 12, 16, 22.05, 24, 32, 44.1, 48, 64, 88.2 and 96KHz

Bit Rates:

32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256, 320, 384 kbps and VBR

# Product Features

Microchip offers AAC Decoder library both in non-modifiable binary code and source code formats that enables usage on high performance PIC32MX devices. The decoder is a low complexity decoder AAC – LC with support for parsing ADTS headers only.

- The ADTS header Audio Data Transport Stream (ADTS) is a format, used by MPEG TS or Shoutcast to stream audio
- Not all \*.aac audio files will play using this decoder, since not all follow the same header or AAC – LC format for encoding
- Music with ID3 tags does not decode
- AAC\_LTP is not supported
- Only music with AAC-LC v4 format WITHOUT ID3 tags is supported

## Additional Resource

### Additional Information

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PIC32 AAC Decoder Library for Harmony includes:

- Harmony Configuration Installer – Requires Harmony Software Framework
- Supports PIC32MX and PIC32MZ MCU
- Requires 62MIPS (peak) 34MIPS (Average) 61KB Flash and 12KB Ram on PIC32MX devices
- Harmony Installer support for Windows, Mac and Linux OS

This software is only compatible with Harmony v1.03 and later.

For more information on this software package please visit [www.microchip.com/pic32harmonypremiumaudio](http://www.microchip.com/pic32harmonypremiumaudio)