
Getting started with AcousticEC, real-time acoustic echo cancellation middleware

Introduction

The AcousticEC software implements a real-time echo cancellation routine based on the SPEEX implementation of the MDF algorithm. The ancillary features of the SPEEX suite, namely the preprocess options and the automatic gain control, have also been included. Parameters can be modified at runtime for immediate adaptation to the varying environmental conditions.

The AcousticEC library is integrated both in source code and in binary format in the [FP-AUD-AEC1](#) software package, providing examples that run on [X-NUCLEO-CCA01M1](#) and [X-NUCLEO-CCA02M2](#) expansion boards when connected to a [NUCLEO-F446RE](#) or a [NUCLEO-F746ZG](#) development board.

AcousticEC is also part of [FP-AUD-SMARTMIC1](#) function pack.

The software is based on [STM32Cube](#) technology and can be easily ported to any microcontroller with an FPU.

1 Licensing information

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2 AcousticEC software library

The AcousticEC software provides a real-time echo cancellation routine based on the [SPEEX](#) implementation of the MDF algorithm.

3 Library profiling

Profiling helps to evaluate the library resource consumption in terms of MIPS, RAM, and Flash. You can find detailed information in the AcousticEC_Package.chm compiled HTML file located in the Documentation folder.

Revision history

Table 1. Document revision history

Date	Version	Changes
18-May-2017	1	Initial release.
27-Oct-2021	2	Updated Introduction. Minor text changes.

Contents

1	Licensing information	2
2	AcousticEC software library	3
3	Library profiling	4
	Revision history	5
	List of tables	7

List of tables

Table 1. Document revision history 5

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