
Processor SDK Audio

Release Notes

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Processor SDK Audio for Beta-1

Overview

This document provides information on the features, functions, delivery package, compile tools, and licensing incorporated in the following release of software: Beta-1. It includes a list of the known issues that are present at the time of this release.

Label and Version Information for the Release

This release supports the following software and hardware versions.

Software Label Information

Table 1 lists the software label and code versions applicable to this release.

Table 1 Labels and Versions Supported by this Release

Release	Label/Version Information
PASDK	PASDK_1.0.0.3/1.0

Hardware Support

This release is supported on the following hardware platform:

- Mistral K2G Rev. D EVM (SPRW274).
- Mistral K2G EVM Audio Daughter Card Rev. B (SPRW279).
- MDS HSR41P HDMI Repeater module Rev. A.
- MDS DA10X Interface board (IFB) Rev. A.

Operating System Support

This release is supported on the following operating system version:

- SYS/BIOS 6.45.01.29

New and Updated Features

This release provides support for the following new and updated features.

New Features

The following new features are supported in this release.

- Correct handling of sampleProcess in OARI & CAR.
- Added PFP (Profile Point) in-system benchmarking to DSP & ARM, with PFP alpha command interface on DSP (see pafsys_a.h for supported alpha commands). PFP allows in-system cycle count measurements which exclude cycle count incurred from SYS/BIOS context switching.
- Passing 100% Dolby Harmony v1.3 CIDK tests at TI. Verification nearly complete at Dolby Labs.
- Passing 84% Dolby Harmony v1.3 SIDK tests at TI.

Known Issues

The following is a list of all known issues:

- For all decoders there are random minor audio quality issues
- Audio sometimes mutes after sending a few streams over HDMI
- MAT/THD inputs with sampling rate over 48kHz do not work
- Dynamic IOS Switching works for many use cases, but it is not completely debugged/reliable

Licensing

See the provided Software Manifest for licensing information (see Table 5 at the end of this documentation).

Delivery Package

The delivery package from Texas Instruments will be delivered as a self-extracting executable. The PASDK package installer: **processor_audio_sdk-DA10x-01.00.00.03-Windows-x86-Install.exe**. PASDK is released as source code.

Directory Structure

The following directories and/or components are included in the processor_audio_sdk_1_00_00_03 package directory.

- docs\ [documentation]

- pasdk\ [PASDK]
 - common\ [Common code between DSP and ARM apps]
 - paf\ [PASDK OS dev]
 - shared\ [DSP and ARM shared IPC and memory configurations]
 - test_arm\ [ARM application]
 - test_dsp\ [DSP application]
- psdk_cust\ [TI PrSDK packages customized for PASDK]
 - ipc_3_43_00_00_eng\ [Customized IPC release 3.43]
 - libarch_k2g_1_0_1_0\ [Library Architecture and Framework]
 - pdk_k2g_1_0_1_2_eng\ [Enhanced PDK K2G release 1.0.1]
- scripts\ [Build scripts]
- tools\ [Alpha communication tools]
- pasdk_fd_da10x_01_00_00_03.zip [FD package]

Required Compile Tools

Specific tools and patches must be used to compile and/or deploy Texas Instruments software. Texas Instruments cannot guarantee product performance when other tools are used.

Tools Supplied by Texas Instruments

- Code Composer Studio 6.1.2.00015 for Windows
- C6000 v8 Compiler Tools: 8.1.0

Tools Not supplied by Texas Instruments

- GNU ARM Tools 4.8.0.2014q3-20140805

Installation Instructions

See the PASDK Setup Guide (doc. 1) for installation instructions and implementation guidelines.

Customer Documentation List

Table 2 lists the documents that are accessible in the package.

Table 2 Product Documentation included with this Release

Document #	Document Title	File Name
1	PASDK Setup Guide	docs/PASDK_setup_guide.pdf

Document #	Document Title	File Name
2	ASP Example	docs/DA10x_UG_AspExample.pdf
3	TI_PA Filter Library/Framework (FIL)	docs/pa-asp-fil.pdf
4	Creating new ASP algorithms using FIL	docs/pa-fil-fe.pdf
6	Pre-Release DA10x Processor Audio SDK Manifest	DA10x Processor Audio SDK_01.00.00.03_manifest.html