
Processor SDK Audio

Release Notes

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Texas Instruments, Incorporated
20450 Century Boulevard
Germantown, MD 20874 USA

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Processor Audio SDK 1.0.0.6

Overview

This document provides information on the features, functions, delivery package, compile tools, and licensing incorporated in the following release of software: PASDK 1.0.0.6. 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_1.0.0.6/1.0

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 6.46.05.55

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.

- Completely updated framework to use PrSDK-RTOS 4.0.0.4 components:
 - (1) Updated to XDC Tools 3.32.01.22, SYSBIOS 6.46.05.55, and UIA 2.00.06.52.
 - (2) Updated to IPC 3.46.00.02.
- Integrated framework updates for AAC decoding.
- Integrated framework updates for DSD decoding.
- Integrated framework updates for writeDECCCommandRestart.
- Integrated framework updates for proper operation of readENCSSampleRate and readENCFrameLength.
- Update build system to allow rebuild of software from mounted virtual drive.
- Passing 100% Dolby Harmony v1.3 SIDK tests at TI. Verification in progress at Dolby Labs.

Known Issues

The following is a list of all known issues:

- For all decoders there are random minor audio quality issues.
- Dynamic IOS Switching works for many use cases, but it is not completely debugged/reliable.
- The DCS7 framework component for alpha communication needs to be updated for SPI in EDMA mode, 16-bit word transfers.
- DCS7 needs to be updated to use the PDK 1.0.6 I2C slave mode API.
- The framework is unable to handle SRC interpolation use cases.

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**

_sdk_audio-DA10x-01.00.00.6Windows-x86-Install.exe. PASDK is released as source code.

Directory Structure

The following directories and/or components are included in the processor_sdk_audio_1_00_00_06 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]
 - libarch_k2g_1_0_1_0\ [Library Architecture and Framework]
- scripts\ [Build scripts]
- tools\ [Alpha communication tools]
- pasdk_fd_da10x_01_00_00_06.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
- Code Composer Studio 7.1.0.00016 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.

Note PASDK 1.0.0.6 requires installation of both CCS 6.1.2.00015 and CCS 7.1.0.00016. This is a temporary measure, which will be addressed in a future update release.

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
2	PASDK Getting Started Guide	docs/PASDK_getting_started_guide.pdf
3	ASP Example	docs/K2G_UG_AspExample.pdf
4	TI_PA Filter Library/Framework (FIL)	docs/pa-asp-fil.pdf
5	Creating new ASP algorithms using FIL	docs/pa-fil-fe.pdf
6	PASDK - Reference Audio I/O Interfaces: Guidelines to port on custom hardware	docs/PASDK_Audio_IO_Porting_Guide.pdf
7	DA8x Performance Audio User's Guide	Pasdk/paf/pa/docs/pa-ug_da8xx.pdf
8	DA8x New Alpha Commands in PAF v.6.o Providing Support for Dolby ATMOS	Pasdk/paf/pa/docs/AlphaCommands-Atmos.pdf
9	K2G Processor SDK Audio Manifest	K2G Processor SDK Audio_01.00.00.06_manifest.html