Processor SDK Audio Dolby IP

Release Notes

TEXAS
INSTRUMENTS

Contents

Processor Audio SDK 1.1.0.1 Dolby IP

Overview

This document provides information on the features, functions, delivery package, compile tools, and licensing incorporated in the following release of software: PASDK 1.1.0.1 Dolby IP. 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 Dolby IP	PASDK_1.1.0.1/1.1

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.

- Passing 100% Dolby Harmony v1.3 CIDK tests at Dolby Labs.

- Passing 100% Dolby Harmony v1.3 SIDK tests at Dolby Labs.

- Added support for reading THD BSI (Bit Stream Information) via alpha commands

Known Issues

See (doc. 1) for known issues for PASDK.

The following is a list of all known issues for Dolby IP:

- OAR initialization in case of sampling rate or speaker layout change for new stream requires high MHz, which can cause initial mute intervals in audio output for the stream.

- MIPs intensive THD streams (e.g. THD 192 kHz FBA_mips_long_5.mlp) can cause audio drops in full 6-channel presentation mode because of MHz overload on the ARM. Such streams will decode without any audio drops for 2-channel presentation mode.

- DDP incorrectly indicates non-Atmos mode for Atmos streams when configured in certain downmix modes.

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 two self-extracting executables. The PASDK package installer: **processor_sdk_audio-K2G-01.01.00.01-Windows-x86-Install.exe**. And Dolby IP package installer: **processor_sdk_audio-K2G_DolbyAtmosAVR-01.01.00.01-Windows-x86-Install.exe**. PASDK is released as source code, Dolby IP is in a binary format.

Directory Structure

The following directories and/or components are included in the PASDK package installation directory (default processor_audio_sdk_1_01_00_01)

- 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 packages customized for PASDK]
    - libarch_k2g_1_0_1_0\   [Library Architecture and Framework]
- scripts\   [Build scripts]
- tools\   [Alpha communication tools]
- pasdk_fd_k2g_01_01_00_01.zip [FD package]

The following directories and/or components are included in the Dolby IP package installation directory (default PASDK_K2G_DolbyAtmosAVR_1_01_00_01).

- release\dhip_package   [Dolby IP root]

The packages contained in the dhip_package directory should be unzipped and placed in the PASDK package installation directory as below. This is further described in ([doc. 1](#)).

- dolby_ip\dh-ip\   [Dolby IP root]
    - asp\   [ASP IP (bmda, car, oar) header files]
    - build\   [ARM and DSP Dolby IP libraries]
    - dec\   [Decoder IP (ddp, mat-thd) header files]

- DOC\   [documentation]

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 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.

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	DA8x Performance Audio User's Guide	Pasdk/paf/pa/docs/pa-ug_da8xx.pdf
7	DA8x New Alpha Commands in PAF v.6.0 Providing Support for Dolby ATMOS	Pasdk/paf/pa/docs/AlphaCommands-Atmos.pdf
8	K2G Dolby Atmos for Audio-Visual Receiver Products 1.3 Manifest	K2GDolbyAtmosforAVR1.3manifest.html
9	K2G Processor SDK Audio Manifest	K2G Processor SDK Audio _01.01.00.01_manifest.html