Release Notes

DA1470x SDK

SW-B-026

Abstract

This document contains the release notes for Dialog Semiconductor's DA1470x SDK, version 10.2.4.44

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1 Terms and Definitions

GA	General access
LA	Limited access
XiP	Execute in Place
GPU	Graphics Processing Unit
BT-LE	Bluetooth LE
ADC	Analog to Digital Converter
DMA	Direct Memory Access
VAD	Voice Activity Detection
UART	Asynchronous Serial Receive/Transmit Port
SPI	Serial Peripheral Interface
I2C	Inter-Integrated Circuit interface
QSPI	Quad SPI
GPIO	General Purpose Input/output
RTC	Real Time Clock
BOD	Brown Out Detection
M33, M0+	Processing Cores
RAM	Random Access Memory

2 Release Data

Table 1: Information Table

Software	DA1470x SDK
Software Release Date	10-Jun-2022
Software Version Number	10.2.4.44
Software Release Type (Note 1)	FULL (GA)

Note 1 Releases can be of the following types: FULL (GA), FULL (LA), RELEASE CANDIDATE, ENGINEERING, PATCH or BINARY

3 License

Licenses covering this DA1470x SDK release are listed in the licensing.txt file in doc folder.

4 Release Description

4.1 Overview

This is a FULL release of DA1470x SDK, which enables application development for DA1470x-based products.

The release runs on trimmed (T3) silicon.

4.2 Features of 10.2.4.44

Table 2: 10.2.4.44 New Features

Feature Number	Description
061.0	GPU Driver
063.1	Introduce new partition layout for DA1470x
063.4	Add sys_boot functionality (repair corrupted Product Header)
064.0	BT-LE 5.2 Protocol
066.1	BLE Profiles support
067.0	BT-LE Host & Controller
069.1	OS Agnostic support
073.0	SD ADC Driver
077.0	DMA Drivers
078.0	VAD Driver
079.1	Support charger functionality
081.0	Display Controller Driver
087.0	UART Driver & Adapter
088.0	SPI Driver & Adapter
089.0	SPI3 48MHz support
090.2	I3C Driver & Adapter
091.0	I2C Driver & Adapter
092.1	Audio Driver & System Manager
093.0	GPADC Driver & Adapter
094.0	Support XiP from QSPI & Octa-SPI Flash
095.1	External NOR Flash support
096.0	Support external QSPI RAM
097.1	LED driver
099.1	USB Interface
100.0	Support GPIO configuration
101.0	Control Power Rails & Power Domains
102.0	Support Active & Sleep modes
103.0	Radio Driver

Feature Number	Description
103.1	Apply recommended settings for DA1470x
104.0	Applications running on M33
105.0	Sensor Node Framework
106.0	BT-LE Controller running on M0+
108.0	Clock management
109.0	Timers Driver
110.0	Support RTC
112.0	Support Crypto HW
113.0	Boot from Flash & RAM
114.0	Support memory Controller
115.0	Reset support
116.1	Add support for DA1470x device variants
117.3	Add support for using parts of RAM9/RAM10 CMAC memory cells in the main processor application
119.0	Support BOD
120.1	`st_fw` for DA1470x
121.1	Extend `collect_debug_info` for DA1470x
121.2	Add support for concurrent debug logging via UART-retargeted printf's from M33, SNC
122.0	Flash Programming
125.1	Add TRNG and DRBG capabilities
174.0	Proximity Reporter Example
193.1	Software Upgrade Support
199.0	eMMC driver
288.0	Add support for Macronix MX25U6432 flash memory
291.0	Support RCHS accuracy calibration
297.0	Support configurable DMA priorities for peripherals (I2C, I3C, SPI, UART, USB, Audio)
301.0	FreeRTOS v10.4.4
302.0	Add support for Adesto AT25SL128 storage flash memory
328.0	Add SNC template projects

4.3 Fixes and Improvements since previous version

Note 1 Since this was the 1st release, no fixes or improvements compared to previous releases are relevant.

4.4 Known Limitations of 10.2.4.44

An active list of known limitation is maintained online:

http://lpccs-docs.renesas.com/sdk10_2_kll/index.html

Appendix A : Software Versioning Rules

This describes the software version numbers and does not apply to documentation version numbers (as found in the footer of this document).

Each software version number string consists of four numbers: MAJOR. BRANCH. MINOR. and BUILD.

#MAJOR: It is increased (by one only) if the project undergoes a major modification, for example major ROM changes. It usually changes only when the project sources undergo major restructuring affecting most of the repository. It is initialized at 1.

#BRANCH: Used in the case of concurrent projects that for special reasons need to be spun off the major repository. It corresponds to different versions of the repository code that have to be supported concurrently. In this case each branch number corresponds to a different GIT branch. The basic project has BRANCH id 0.

#MINOR: Odd numbers indicate Engineering (or Patch or Binary) versions, even numbers indicate Full release versions or Release Candidates of Full versions. Each Full release increases this number by one. After the Full release, the number is increased by one again. Therefore, Project releases correspond to release numbers like 2.0.1.xxx, 2.0.2.xxx. etc. The #MINOR number is initialized at 1.

#BUILD: The # BUILD number increases by one at every repository update and thus indicates the total number of changes since repository initialization. The BUILD number is initialized at 1.

Document Revision History

This section summarizes the changes made to this document and not to the Software that this document describes.

Revision	Date	Description
1	10-Jun-2022	Initial version 10.2.4.44

Document Status Definitions

Status	Definition
DRAFT	The content of this document is under review and subject to formal approval, which may result in modifications or additions.
APPROVED or unmarked	The content of this document has been approved for publication.

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