

DA14585 Codeless Software Release Notes for version 6.380.8.4.0

Table of contents

1.0 Introduction.....	2
1.1 SCOPE.....	2
1.2 TERMS AND ABBREVIATIONS.....	2
1.3 RELEASE DATA	2
1.4 LICENSE	2
1.5 HISTORY	2
2.0 Release Description.....	3
2.1 MAJOR CHANGES	3
2.2 ISSUES OR LIMITATIONS.....	4
2.3 CHANGES IN SDK CODE.....	5
2.4 MAJOR RELEASE FILES.....	5
3.0 Release History.....	6
3.1 CODELESS DA14585 1.0.1.001	6

1.0 Introduction

1.1 Scope

This document describes the release of the DA14585 Codeless reference design software from Dialog Semiconductor.

1.2 Terms and abbreviations

BLE Bluetooth Low Energy

SDK Software Development Kit

SUOTA Software Update over The Air

UART Universal asynchronous receiver transmitter

1.3 Release Data

PROJECT	DA14585 Codeless
RELEASE DATE	13 Sept 2018
VERSION NR.	6.380.8.4.0 (based on SDK version 6.0.8)
RELEASE TYPE ¹	FULL (GA)
RELEASE MASTER	Aris Stathakis

1.4 License

1.5 History

VERSION	RELEASE MASTER	DATE
6.380.8.4.0	Aris Stathakis	13 Sept 2018
(6.380.8.4.0)	Rebranded to Renesas	03 Feb 2022

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

2.0 Release Description

2.1 Major Changes

#	DESCRIPTION
OVERVIEW	<p>This is a release of the DA14585 based Codeless reference design. Codeless AT Commands platform for DA14585 allows control over a local UART connected device as well as a remote device via BLE with a comprehensive set of AT commands enabling a developer to make a fast peripheral or central application (or both).</p> <p>Three AT command sources exist:</p> <ul style="list-style-type: none"> - Local command source: Currently only UART 57600N1 is supported. - Remote command source: BLE connected peer, implementing codeless service. - Command sequencer: Command scripts can be executed by the command sequencer. <p>Set of supported AT commands:</p> <ul style="list-style-type: none"> - AT - ATI - ATE - ATZ - ATF - ATR - AT+TMRSTART - AT+TMRSTOP - AT+CORSOR - AT+RANDOM - AT+BATT - AT+BDADDR - AT+SLEEP - AT+IOCFG - AT+IO - AT+ADC - AT+I2CSCAN - AT+I2CCFG - AT+I2CREAD - AT+I2CWRITE - AT+PRINT - AT+MEM - AT+PIN - AT+CMDSTORE - AT+CMDPLAY - AT+ADVSTOP - AT+ADVSTART - AT+ADVDATA - AT+ADVRESP - AT+CENRAL - AT+PERIPHERAL - AT+GAPSTATUS - AT+GAPSCAN - AT+GAPCONNECT - AT+GAPDISCONNECT <p>A more detailed overview of Codeless command set and capabilities can be found at the Codeless tutorial webpage at Dialog support site.</p>

NEW FEATURES	
1	Queuing of UART message to support parallel command paths (local, remote and sequencer).
2	Create generic AT command parser, new local command sources can be easily added.
3	AT commands jump table.
4	Error reporting mechanism and ATF command to turn on/off.
5	ATR command to trigger platform reset.
6	Python lib for interacting with codeless devices over UART and BLE.
FIXES / IMPROVEMENTS	
1	Delayed wake up process has been changed. UART buffers are flushed before command parsing is started. Extra logic has been added to parser in order to have predictable command parsing after wake up.
2	Handling of failed I2C read operations. An error is returned if i2c read operation is not successful
3	On startup codeless device is peripheral role and starts advertising.
4	Change command interpreter logic to detect for incoming reply to support parallel command paths.
5	Fix sleep activate timer cancelation.
6	Port to latest SDK version.
7	Restructure project source (common src files for 580/585).
8	Add project readme.
9	Add memory handling/ protection for requests that will overflow stack - Not yet supported for DA14580.
10	AT+IOCFG command has an extra optional argument that can set a GPIO output pin immediately after configuration. i.e AT+IOCFG=10,4,1 will set GPIO P1_0 as output and high.
11	Restructure project for smaller binary size.
Documentation	
	Codeless tutorial, https://support.dialog-semiconductor.com/resource/codeless-tutorial-html , Dialog Semiconductor.

2.2 Issues or Limitations

#	OPEN ISSUES & LIMITATIONS
1	ahtoi undefined behavior: when arguments are passed that a numerical value is needed the input is not checked or sanitized. If i.e instead of a decimal value a string is passed such as the case for command AT+MEM=aaaaaa then this will be translated to AT+MEM=0
2	Active role changing: After the following sequence, <ul style="list-style-type: none"> - Connect as peripheral/central - Disconnect - Change role - Connect as central/peripheral Device will generate a hardfault when sending data.
3	I2C 10 bit addressing is not supported.
4	Max command slots is 99 (2 digits).

2.3 Changes in SDK code

#	CHANGES
1	Update licensing.txt
2	Add callback app_on_pairing_failed in app_callbacks structure.
3	Call app_on_pairing_failed when GAPC_PAIRING_FAILED arrives.
4	Add svc1_long_val_att_info_rsp and svc1_rest_att_info_rsp in custom server 1.
5	Add USER_APP_CMD_RECEIVED in enumeration of messages for CUSTS1.

2.4 MAJOR Release Files

#	File Name	Description
1	CodeLess_v_6.380.8.4.0.zip	RELEASE FILE
2	DA1458x-Codeless-SW-Release-Notes-v_6.380.8.4.0.pdf	RELEASE NOTES
3	codeless_585_v6.380.8.4.0.hex	RELEASE FILE

3.0 Release History

Rebranded to Renesas.

3.1 Codeless DA14585 1.0.1.001

This was the first release of Codeless. No release notes have been prepared for this version. More info can be found at dialog support site: <https://support.dialog-semiconductor.com/connectivity/reference-design/smartbond%E2%84%A2-codeless-commands>

Appendix I: Versioning Rules

Each software version number string consists of 4 numbers. MAJOR.BRANCH.MINOR.BUILD

Versioning rules:

#MAJOR: It is increased by 1 only if the project undergoes a major modification, e.g. major ROM changes. It practically changes only when the project sources undergo major restructuring affecting most of the repository. It is initialized at 1.

#BRANCH: Should be 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 1 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 1 at every repository update and thus indicates the total number of changes since repository initialization. The BUILD number is initialized at 1.