CC2538 Foundation Firmware v.1.0.1.0

Release Note

This document covers version 1.0.1.0 of the CC2538 Foundation Firmware.

Introduction

This is the CC2538 Foundation Firmware. This document is divided into the following sections:

- What's New
- Installation and Usage
- Compilers
- Examples
- Developer Notes
- Technical Support and Product Updates
- Release History

What's New

The following have been updated since the previous build. For older release history, see Release History.

- **driverlib**: Added workaround for CC2538 deep sleep issue.
- **driverlib:** CC2538 include files (hw_*.h) updated.
- **driverlib**: This is the last version where sdriverlib.lib is included. All functionality in sdriverlib.lib is included in driverlib.lib, please use driverlib.lib.
- **usblib**: USB CDC drivers have been added.
- **BSP + usblib**: Built on driverlib 1.3.1.

This release of the CC2538 Foundation Firmware contains the following components

Name	Revision	Description
docs	-	CC2538 driverlib, usblib and BSP documentation.
driverlib	1.3.1	Peripheral Driver Library source code. A pre-built version of the library and the vendor's project files may be found in the compiler vendor's subdirectory.
driverlib examples	-	driverlib examples source code.
BSP	1.3.1	SmartRF06 Battery Board and SmartRF06 Evaluation Board BSP source code. A pre-built version of the library and the vendor's project files may be found in the compiler vendor's subdirectory. The BSP depends on driverlib.
BSP examples	-	BSP examples source code.
usblib	1.0.1	USB firmware library source code. A pre-built version of the library and the vendor's project files may be found in the compiler vendor's subdirectory. usblib depends on driverlib.
usblib examples	-	Source code for CDC-ACM and HID device examples.

Installation and Usage

Extract zip content to any folder.

Compilers

The CC2538 Foundation Firmware object files are built using the follwing compilers

- IAR Embedded Workbench for ARM v.6.50.3
- Code Composer Studio v.5.3.0

Examples

The examples may be built with IAR.

- driverlib examples are located in driverlib/<device>/examples/<peripheral>
- BSP examples are located in bsp/<board>_<device>/drivers/examples/<peripheral>
- usblib examples are located in usblib/<device>/examples

Developer Notes

- All components in a project must use the same interrupt vector model.
  All object files in the CC2538 Foundation Firmware (for example driverlib.lib) are built using the compact CC2538 vector map, that is, the following symbol is defined:
  CC2538_USE_ALTERNATE_INTERRUPT_MAP
- To enable asserts for white box testing code developed with driverlib, make sure that the following symbol is defined: ENABLE_ASSERT
- When debugging in IAR, the following symbol should be defined to work around the CC2538 reset issue of the debug domain: DEBUG

Technical Support and Product Updates

- Get the latest version of the CC2538 Foundation Firmware from http://www.ti.com/tool/cc2538-sw.
- Get support from the TI E2E™ Community.

Release History

- Version 1.0.0.0
  - **driverlib**: UARTConfigSetExpClk() no longer calls UARTEnable(). The user application is expected to invoke the UARTEnable() to enable the UART module after UARTConfigSetExpClk().