# Project Configuration Report bootloader-SSS1024kMatterOtaBrd4186v440

## **Target Device:**

Target Part: EFR32MG24B210F1536IM48

Boards:

- Wireless Pro Kit Mainboard (BRD4002A Rev A03)
- EFR32xG24 2.4 GHz 10 dBm Radio Board (BRD4186C Rev A01)

## **Target SDK**

Gecko SDK Suite v4.4.0: Amazon 202012.00, Bluetooth 7.0.0, Bluetooth Mesh 6.0.0, EmberZNet 7.4.0.0, Flex 3.7.0.0, MCU 6.6.0.0, Micrium OS Kernel 5.14.00, OpenThread 2.4.0.0 (GitHub-7074a43e4), Platform 4.4.0.0, Silicon Labs Matter 2.2.0-1.2, USB 1.2.0.0, Wi-Fi SDK 3.1.1, Wi-SUN 1.8.0.0, Z-Wave SDK 7.21.0.0

SDK Version: 4.4.0

### **Extensions**

- WiSeConnect 3 3.1.1
- Silicon Labs Matter 2.2.0

## **Project Generators**

• Simplicity IDE Project

## **Installed Software Components:**

- Platform
  - Board
    - Mainboard

#### **BRD4002A**

Configurable: false

Radio Board

**BRD4186C** 

Configurable: false

- Bootloader
  - Core

#### **Bootloader Core**

Sources: btl\_main.c, btl\_core.c, btl\_bootload.c, btl\_internal\_flash.c, btl\_driver\_util.c,

btl\_reset.c, btl\_parse.c
Configurable: true

Configs: btl\_core\_cfg.h, btl\_core\_s\_cfg.h

#### **Image Parser**

Sources: btl\_gbl\_parser.c, btl\_gbl\_custom\_tags.c, btl\_gbl\_format.c,

btl\_gbl\_parser\_veneers.c, btl\_bootload.c

Configurable: false

#### Drivers

#### **Bootloader Delay Driver**

Sources: btl\_driver\_delay.c, btl\_driver\_delay\_veneers.c

Configurable: false

#### **Bootloader SPI Controller Driver**

Configurable: false

#### **Bootloader SPI Controller Eusart Driver**

Sources: btl\_driver\_spi\_controller\_eusart.c

Configurable: true

Configs: btl\_spi\_controller\_eusart\_driver\_cfg.h

#### Storage

#### **Common Storage (single storage slot only)**

Sources: btl\_storage\_bootloadinfo\_single.c, btl\_storage.c, btl\_storage\_library.c

Configurable: true

Configs: btl\_storage\_cfg.h

#### **SPI Flash Storage**

Sources: btl\_callbacks\_stub.c, btl\_storage\_spiflash.c

Configurable: true

Configs: btl\_spiflash\_storage\_cfg.h

#### Utils

#### Crypto

Sources: btl\_sha256.c, ecc.c, cryptoacc\_sha.c, se\_sha.c, btl\_security\_aes.c,

btl\_security\_sha256.c, crypto\_sha.c, btl\_security\_ecdsa.c

Configurable: false

#### **Cyclic Redundancy Check**

Sources: btl\_crc32\_veneers.c, btl\_crc16.c, btl\_crc32.c, btl\_crc16\_veneers.c

Configurable: false

#### **Debug**

Sources: btl\_debug\_veneers.c, btl\_debug.c, btl\_debug\_swo.c

Configurable: true

Configs: btl\_debug\_cfg.h

#### **Token Management**

Sources: btl\_security\_tokens.c

Configurable: false

#### - Device

## • EFR32MG24

#### EFR32MG24B210F1536IM48

Sources: startup\_efr32mg24.c, system\_efr32mg24.c

Configurable: true Configs: device.yaml

#### - Driver

• Debug SWO

## **SWO Debug**

Sources: sl\_debug\_swo.c

Configurable: true

Configs: sl\_debug\_swo\_config.h

## Pins:

| Pin# | Pin  | Function     | Custom Pin | Software Component                      |
|------|------|--------------|------------|---|
|      | Name |              | Name       |   |
| 26   | PA00 |              |            |   |
| 27   | PA01 |              |            |   |
| 28   | PA02 |              |            |   |
| 29   | PA03 | GPIO_SWV     |            | Debug                                   |
| 30   | PA04 |              |            |   |
| 31   | PA05 |              |            |   |
| 32   | PA06 |              |            |   |
| 33   | PA07 |              |            |   |
| 34   | PA08 |              |            |   |
| 35   | PA09 |              |            |   |
| 23   | PB00 |              |            |   |
| 22   | PB01 |              |            |   |
| 21   | PB02 |              |            |   |
| 20   | PB03 |              |            |   |
| 19   | PB04 |              |            |   |
| 18   | PB05 |              |            |   |
| 1    | PC00 |              |            |   |
| 2    | PC01 | EUSART1_TX   |            | Bootloader SPI Controller Eusart Driver |
| 3    | PC02 | EUSART1_RX   |            | Bootloader SPI Controller Eusart Driver |
| 4    | PC03 | EUSART1_SCLK |            | Bootloader SPI Controller Eusart Driver |
| 5    | PC04 | EUSART1_CS   |            | Bootloader SPI Controller Eusart Driver |
| 6    | PC05 |              |            |   |
| 7    | PC06 |              |            |   |
| 8    | PC07 |              |            |   |
| 9    | PC08 |              |            |   |
| 10   | PC09 |              |            |   |
| 48   | PD00 |              |            |   |
| 47   | PD01 |              |            |   |
| 46   | PD02 |              |            |   |
| 45   | PD03 |              |            |   |

| 44 | PD04 |  |  |
|----|------|--|--|
| 43 | PD05 |  |  |

## Peripherals:

| Peripheral           | Software Component               | Custom Peripheral Name |
|----------------------|----------------------------------|------------------------|
| ACMP0                |                                  |                        |
| ACMP1                |                                  |                        |
| CMU                  |                                  |                        |
| EUSART0              | Bootloader SPI Controller Eusart |                        |
|                      | Driver                           |                        |
| EUSART1              | Bootloader SPI Controller Eusart |                        |
|                      | Driver                           |                        |
| GPIO                 | SWO Debug                        |                        |
| HFXO0                |                                  |                        |
| I2C0                 |                                  |                        |
| I2C1                 |                                  |                        |
| IADC0                |                                  |                        |
| KEYSCAN              |                                  |                        |
| LETIMER0             |                                  |                        |
| LFXO                 |                                  |                        |
| MODEM                |                                  |                        |
| PCNT0                |                                  |                        |
| PRS Channel ASYNCH0  |                                  |                        |
| PRS Channel ASYNCH1  |                                  |                        |
| PRS Channel ASYNCH10 |                                  |                        |
| PRS Channel ASYNCH11 |                                  |                        |
| PRS Channel ASYNCH12 |                                  |                        |
| PRS Channel ASYNCH13 |                                  |                        |
| PRS Channel ASYNCH14 |                                  |                        |
| PRS Channel ASYNCH15 |                                  |                        |
| PRS Channel ASYNCH2  |                                  |                        |
| PRS Channel ASYNCH3  |                                  |                        |
| PRS Channel ASYNCH4  |                                  |                        |
| PRS Channel ASYNCH5  |                                  |                        |
| PRS Channel ASYNCH6  |                                  |                        |
| PRS Channel ASYNCH7  |                                  |                        |
| PRS Channel ASYNCH8  |                                  |                        |
| PRS Channel ASYNCH9  |                                  |                        |
| PRS Channel SYNCH0   |                                  |                        |
| PRS Channel SYNCH1   |                                  |                        |
| PRS Channel SYNCH2   |                                  |                        |
| PRS Channel SYNCH3   |                                  |                        |
| PTI                  |                                  |                        |
| TIMER0               |                                  |                        |
| TIMER1               |                                  |                        |
| TIMER2               |                                  |                        |
| TIMER3               |                                  |                        |
| TIMER4               |                                  |                        |
| USART0               |                                  |                        |

| VDAC0 |  |
|-------|--|
| VDAC1 |  |