

# Project Configuration Report

## rail\_soc\_range\_test

### Target Device:

**Target Part: EFR32ZG23B010F512IM48**

Boards:

- Wireless Pro Kit Mainboard (BRD4002A Rev A06)
- EFR32ZG23 868-915 MHz 14 dBm Radio Board (BRD4204D)

### Target SDK

Gecko SDK Suite v4.5.0: Amazon 202012.00, Bluetooth 7.4.0, Bluetooth Mesh 6.1.5, EmberZNet 7.5.1.0, Flex 3.7.7.0, MCU 6.6.7.0, Micrium OS Kernel 5.14.00, OpenThread 2.4.7.0 (GitHub-fb0446f53), Platform 4.4.7.0, USB 1.2.4.0, Z-Wave SDK 7.21.7.0  
SDK Version: 4.5.0

### Project Generators

- Simplicity IDE Project

### Installed Software Components:

- Application

- Utility

- Assert**

- Configurable: true

- Configs: app\_assert\_config.h

- Log**

- Sources: app\_log.c

- Configurable: true

- Configs: app\_log\_config.h

- Flex

- Common

- Utility

- Flex - LCD Images**

- Configurable: false

- RAIL

- Core

- Flex - Range Test CLI**

- Sources: range\_test\_cli.c

- Configurable: false

- Flex - Range Test Core**

- Sources: app\_measurement.c, app\_init.c, app\_menu.c, app\_process.c, app\_button.c, app\_graphics.c

Configurable: false

- Utility

- Flex - RAIL Packaging Assistant**

- Sources: sl\_flex\_rail\_package\_assistant.c, sl\_flex\_rail\_package\_assistant\_cli.c

- Configurable: true

- Configs: sl\_flex\_rail\_package\_assistant\_config.h

- Flex - RAIL Standard packet assembler**

- Sources: sl\_flex\_packet\_asm.c

- Configurable: false

- Simple RAIL Stub**

- Configurable: false

- Platform

- Board

- Mainboard

- BRD4002A**

- Configurable: false

- Radio Board

- BRD4204D**

- Configurable: false

- Device

- EFR32ZG23

- EFR32ZG23B010F512IM48**

- Sources: startup\_efr32zg23.c, system\_efr32zg23.c

- Configurable: true

- Configs: device.yaml

- Driver

- GLIB Graphics Library**

- Sources: glib\_font\_narrow\_6x8.c, glib\_line.c, glib\_string.c, bmp.c, glib.c, glib\_polygon.c, glib\_font\_number\_16x20.c, glib\_circle.c, glib\_font\_normal\_8x8.c, glib\_rectangle.c, glib\_bitmap.c

- Configurable: true

- Configs: glib\_config.h

- Radio

- RAIL Utility, Initialization**

- Configurable: true

- Configs: sl\_rail\_util\_init\_inst0\_config.h

- RAIL Utility, Recommended**

- Configurable: false

## **- Radio Configuration**

### **Restrictions - Base Profile**

Configurable: true

Configs: profile\_base.restriction

### **Restrictions - Connect OFDM Profile**

Configurable: true

Configs: profile\_connect\_ofdm.restriction

### **Restrictions - Connect Profile**

Configurable: true

Configs: profile\_connect.restriction

### **Restrictions - Long Range**

Configurable: true

Configs: profile\_long\_range.restriction

### **Restrictions - SUN Profile**

Configurable: true

Configs: profile\_sun.restriction

### **Restrictions - Sidewalk Profile**

Configurable: true

Configs: profile\_sidewalk.restriction

### **Restrictions - Wi-SUN FSK Profile**

Configurable: true

Configs: profile\_wisun\_fan\_1\_0.restriction

### **Restrictions - Wi-SUN FSK Profile**

Configurable: true

Configs: profile\_wisun\_fan\_1\_1.restriction

### **Restrictions - Wi-SUN FSK Profile**

Configurable: true

Configs: profile\_wisun\_han.restriction

### **Restrictions - Wi-SUN OFDM Profile**

Configurable: true

Configs: profile\_wisun\_ofdm.restriction

## **- Security**

- Memory Protection Unit

### **Simple MPU**

Sources: sl\_mpu.c

Configurable: false

- Services

- Command Line Interface

- CLI Instance(s)

- Configurable: true

- Configs: sl\_cli\_config\_example.h

- Device Initialization

- Automatic Device Initialization

- Configurable: false

- IO Stream

- IO Stream: Recommended Stream

- Configurable: false

- IO Stream: Retarget STDIO

- Sources: sl\_iostream\_retargget\_stdio.c

- Configurable: false

- System Setup

- System Setup

- Configurable: false

- Third Party

- Tiny printf

- Sources: iostream\_printf.c, printf.c

- Configurable: false

## Pins:

Pin #	Pin Name	Function	Custom Pin Name	Software Component
25	PA00	EUSART0_RTS		Memory LCD with usart SPI driver
26	PA01			
27	PA02			
28	PA03	GPIO_SWV		SWO Debug
29	PA04			
30	PA05			
31	PA06			
32	PA07			
33	PA08	EUSART0_TX		Memory LCD with usart SPI driver
34	PA09	EUSART0_RX		Memory LCD with usart SPI driver
35	PA10	EUSART0_CTS		Memory LCD with usart SPI driver
24	PB00	GPIO mode		Board Control
23	PB01	GPIO mode		Simple Button (btn0)
22	PB02			
21	PB03	GPIO mode		Simple Button (btn1)

1	PC00			
2	PC01	USART0_TX		Memory LCD with usart SPI driver
3	PC02			
4	PC03	USART0_CLK		Memory LCD with usart SPI driver
5	PC04	GPIO mode		MX25 Flash Shutdown with usart
6	PC05			
7	PC06	GPIO mode		Memory LCD with usart SPI driver
8	PC07			
9	PC08	GPIO mode		Memory LCD with usart SPI driver
10	PC09	GPIO mode		Board Control
48	PD00	LFXO_LFXTAL_O		Low Frequency Crystal Oscillator (LFXO)
47	PD01	LFXO_LFXTAL_I		Low Frequency Crystal Oscillator (LFXO)
46	PD02			
45	PD03			
44	PD04	PTI_DOUT		RAIL Utility, PTI
43	PD05	PTI_DFRAME		RAIL Utility, PTI

## Peripherals:

Peripheral	Software Component	Custom Peripheral Name
ACMP0		
ACMP1		
CMU		
EUSART0	IO Stream: EUSART (vcom)	
EUSART1	IO Stream: EUSART (vcom)	
EUSART2	IO Stream: EUSART (vcom)	
GPIO	SWO Debug	
HFXO0		
I2C0		
I2C1		
IADC0		
KEYSCAN		
LCD		
LESENSE		
LETIMER0		
LFXO	Low Frequency Crystal Oscillator (LFXO)	
MODEM		
PCNT0		
PRS Channel ASYNCH0		
PRS Channel ASYNCH1		
PRS Channel ASYNCH10		
PRS Channel ASYNCH11		
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	RAIL Utility, PTI	
TIMER0		
TIMER1		
TIMER2		
TIMER3		
TIMER4		
USART0	Memory LCD with usart SPI driver	
VDAC0		