

Project Configuration Report

Gate_LR_Connect

Target Device:

Target Part: FGM230SA27HGN

Boards:

- Wireless Pro Kit Mainboard (BRD4002A Rev A06)
- FGM230SA Radio Board (BRD4328B Rev A00)

Target SDK

Simplicity SDK Suite v2025.6.2: Bluetooth 10.1.1, Bluetooth Mesh 9.0.2, Connect 4.1.2, EmberZNet 8.2.2.0, Micrium OS Kernel 5.18.01, OpenThread 2.7.2.0 (GitHub-fb0446f53), Platform 5.2.2.0, RAIL 2.19.2, Silicon Labs AI/ML 2.1.2, Silicon Labs Matter 2.7.0-1.4, USB 1.5.1.0, Wi-Fi SDK 3.5.2, Wi-SUN 2.8.0, Z-Wave SDK 7.24.2.0

SDK Version: 2025.6.2

Extensions

- WiSeConnect 3 3.5.2
- Silicon Labs Matter 2.7.0
- Silicon Labs AI/ML 2.1.2

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

- Connect

AES Security (Library)

Configurable: false

Application Framework Common

Sources: app_framework_stack_cb.c, app_framework_sleep.c, app_framework_common.c, app_framework_common_cb.c

Configurable: false

Debug Print

Configurable: true

Configs: debug_print_config.h

Frequency Hopping

Configurable: true

Configs: frequency-hopping-config.h

MAC Queue

Configurable: true

Configs: mac-queue-config.h

Parent Support

Configurable: true

Configs: parent-support-config.h

Poll

Sources: poll.c

Configurable: true

Configs: poll-config.h

Stack Common

Sources: stack-stubs.c, sli-connect-random.c, sl-connect-rail-assert.c,
stack-callback-stubs.c, sli-connect-token.c, sli-connect-api.c, sl-connect-power-manager.c,
sl-connect-watchdog.c, ember-configuration.c, sl-connect-info.c

Configurable: true

Configs: stack-common-config.h

Stack Counters

Configurable: false

- Core

Sensor/Sink Core

Configurable: true

Configs: sl_sensor_sink_config.h

• Platform

- Board

Board Control

Sources: sl_board_control_gpio.c, sl_board_control_stub.c, sl_board_init.c

Configurable: true

Configs: sl_board_control_config.h

- Board Drivers

Si70xx - Temperature/Humidity Sensor

Sources: sl_si70xx.c

Configurable: false

- Board

- Mainboard

BRD4002A

Configurable: false

- Radio Board

BRD4328B

Configurable: false

- Device

- FGM23

FGM230SA27HGN

Sources: system_fgm23.c, startup_fgm23.c

Configurable: true

Configs: device.yaml

- Driver

- Button

Simple Button

Configurable: true

Configs: sl_simple_button_btn0_config.h

- I2C

I2CSPM

Configurable: true

Configs: sl_i2cspm_sensor_config.h

- LED

Simple LED

Configurable: true

Configs: sl_simple_led_led0_config.h

- UART

UARTDRV Core

Sources: uartdrv.c

Configurable: true

Configs: uartdrv_config.h

UARTDRV USART

Configurable: true

Configs: sl_uartdrv_usart_central_config.h

- Radio

- SL RAIL Utility, PTI**

- Configurable: false

- Radio Configuration

- Custom Radio Configuration for simple connect singlephy application**

- Configurable: true

- Configs: radio_settings.radioconf

- Restrictions - Connect OFDM Profile**

- Configurable: true

- Configs: profile_connect_ofdm.restriction

- Security

- Memory Protection Unit

- Simple MPU**

- Sources: sl_mpu_s3.c, sl_mpu_s2.c

- Configurable: false

- PSA Crypto

- PSA Persistent Storage Support (ITS)**

- Sources: sl_psa_its_nvram3.c

- Configurable: false

- Services

- Clock Manager

- Clock Manager**

- Sources: sl_clock_manager_init.c

- Configurable: true

- Configs: sl_clock_manager_oscillator_config.h, sl_clock_manager_ext_flash_config.h, sl_clock_manager_tree_config.h

- 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 STUDIO**

- Sources: sl_iostream_retarget_stdio.c

- Configurable: false

- System Setup

System Setup (sl_main)

Configurable: true

Configs: sl_main_start_task_config.h

- Token Manager

Legacy Token Manager

Sources: sl_token_manufacturing_generic.c, sl_token_manufacturing.c, sl_token_def.c, sl_token_manager.c

Configurable: true

Configs: sl_custom_token_header.h, sl_token_manager_config.h, sl_custom_manufacturing_token_header.h

• Third Party

Tiny printf

Sources: iostream_printf.c, printf.c

Configurable: false

Pins:

Peripherals:

Peripheral	Software Component	Custom Peripheral Name
ACMP0		
ACMP1		
CMU	Clock Manager	
EUSART0	IO Stream: EUSART (vcom)	
EUSART1	IO Stream: EUSART (vcom)	
EUSART2	IO Stream: EUSART (vcom)	
GPIO	SWO Debug	
HFXO0		
I2C0	I2CSPM (sensor)	
I2C1	I2CSPM (sensor)	
IADC0		
KEYSCAN		
LCD		
LESENSE		
LETIMER0		
LFXO		
MODEM		
PCNT0		
PRS Channel ASYNCH0	Radio Utility, FEM	
PRS Channel ASYNCH1	Radio Utility, FEM	
PRS Channel ASYNCH10	Radio Utility, FEM	
PRS Channel ASYNCH11	Radio Utility, FEM	

PRS Channel ASYNCH2	Radio Utility, FEM	
PRS Channel ASYNCH3	Radio Utility, FEM	
PRS Channel ASYNCH4	Radio Utility, FEM	
PRS Channel ASYNCH5	Radio Utility, FEM	
PRS Channel ASYNCH6	Radio Utility, FEM	
PRS Channel ASYNCH7	Radio Utility, FEM	
PRS Channel ASYNCH8	Radio Utility, FEM	
PRS Channel ASYNCH9	Radio Utility, FEM	
PRS Channel SYNCH0	Radio Utility, FEM	
PRS Channel SYNCH1	Radio Utility, FEM	
PRS Channel SYNCH2	Radio Utility, FEM	
PRS Channel SYNCH3	Radio Utility, FEM	
PTI	RAIL Utility, PTI	
TIMER0		
TIMER1		
TIMER2		
TIMER3		
TIMER4		
USART0	UARTDRV USART (central)	
VDAC0		