Project Configuration Report
vcr3

Target Device:

Target Part: EFR32BG22C224F512IM40

Boards:
- Wireless Starter Kit Mainboard (BRD4001A Rev A01)
- EFR32BG22 Explorer Kit Board (BRD4108A)

Target SDK

Gecko SDK Suite v4.4.3: Amazon 202012.00, Bluetooth 7.1.1, Bluetooth Mesh 6.1.1, EmberZNet 7.4.3.0, Flex 3.7.3.0, MCU 6.6.3.0, Micrium OS Kernel 5.14.00, OpenThread 2.4.3.0 (GitHub-7074a43e4), Platform 4.4.3.0, Sidewalk 2.0.1, Silicon Labs Matter 2.2.2-1.2, USB 1.2.2.0, Wi-Fi SDK 3.2.0, Wi-SUN 1.10.1.0, Z-Wave SDK 7.21.3.0
SDK Version: 4.4.3

Extensions

• WiSeConnect 3 3.2.0
• Sidewalk 2.0.1
• Silicon Labs Matter 2.2.2

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

• Bluetooth
  - *Application*
    • Firmware Update
      In-Place OTA DFU
      Sources: sl_bt_in_place_ota_dfu.c
      Configurable: true
      Configs: in_place_ota_dfu.xml, sl_bt_in_place_ota_dfu_config.h

- GATT Services

Device Information GATT Service

Sources: sl_gatt_service_device_information.c

Configurable: false

Static GATT Database and Configuration

Configurable: true

Configs: gatt_configuration.btconf

- Miscellaneous

BLE Post Build

Configurable: false

- Bluetooth Host (Stack)

Bluetooth Core

Sources: sl_bt_stack_init.c

Configurable: true

Configs: sl_bluetooth_config.h

- Features with Commands and Events

GATT Client

Configurable: false

GATT Server

Configurable: false

Security Manager

Configurable: false

System

Configurable: false

- Bluetooth LE Controller (Link Layer)

Connection

Configurable: true

Configs: sl_bluetooth_connection_config.h

Legacy Advertising

Configurable: false

Scanner for legacy advertisements

Configurable: false

- Platform
  - *Board*
    - Mainboard
      BRD4001A
      Configurable: false

    - Thunderboard
      BRD4108A
      Configurable: false

  - *Bootloader*
    Bootloader Application Interface
    Sources: btl_interface_ns.c, btl_interface_storage.c, btl_interface.c, btl_interface_nsc.c
    Configurable: true
    Configs: btl_interface_cfg_s2c4.h, btl_interface_cfg.h, btl_interface_cfg_s2c1.h,
    btl_interface_cfg_s2c2.h, btl_interface_cfg_s2c3.h

  - *Device*
    - EFR32BG22
      EFR32BG22C224F512IM40
      Sources: system_efr32bg22.c, startup_efr32bg22.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_mikroe_config.h

    - LED
      Simple LED
      Configurable: true
      Configs: sl_simple_led_led0_config.h

    - SPI
      SPIDRV
      Configurable: true
      Configs: sl_spidrv_mikroe_config.h

- *Peripheral*
  - Init
    GPIO Init

    Configurable: true

    Configs: sl_emlib_gpio_init_IMU_INT_config.h,
    sl_emlib_gpio_init_IMU_CS_config.h, sl_emlib_gpio_init_I2C_Mux_Reset_config.h,
    sl_emlib_gpio_init_Bat_Sense_Voltage_config.h,
    sl_emlib_gpio_init_Flash_CS_config.h,
    sl_emlib_gpio_init_Bat_Sense_Enable_config.h

- *Radio*
  RAIL Utility, PTI

  Sources: sl_rail_util_pti.c

  Configurable: true

  Configs: sl_rail_util_pti_config.h

- *Security*
  - Memory Protection Unit
    Simple MPU

    Sources: sl_mpu.c

    Configurable: false

- *Utilities*
  Component Catalog

  Configurable: false

- Services
  - *IO Stream*
    IO Stream: EUSART Core

    Sources: sl_iostream_eusart.c

    Configurable: false

    - Driver
      IO Stream: EUSART

      Configurable: true

      Configs: sl_iostream_eusart_vcom_config.h

Pins:

Pin #	Pin Name	Function	Custom Pin Name	Software Component
21	PA00			
22	PA01			
23	PA02			
24	PA03	GPIO_SWV		SWO Debug
25	PA04	GPIO mode		Simple LED (led0)

26	PA05	EUART0_TX		IO Stream: EUSART (vcom)
27	PA06	EUART0_RX		IO Stream: EUSART (vcom)
28	PA07	EUART0_RTS		IO Stream: EUSART (vcom)
29	PA08	EUART0_CTS		IO Stream: EUSART (vcom)
20	PB00	GPIO mode	Bat_Sense_Voltage	GPIO Init (Bat_Sense_Voltage)
19	PB01	GPIO mode	Flash_CS	GPIO Init (Flash_CS)
18	PB02	GPIO mode	Btn0	Simple Button (btn0)
17	PB03	GPIO mode	IMU_INT	GPIO Init (IMU_INT)
16	PB04	GPIO mode	Bat_Sense_Enable	GPIO Init (Bat_Sense_Enable)
1	PC00	USART0_TX	SPI_MOSI	SPIDRV (mikroe)
2	PC01	USART0_RX	SPI_MISO	SPIDRV (mikroe)
3	PC02	USART0_CLK	SPI_CLK	SPIDRV (mikroe)
4	PC03		IMU_CS	
5	PC04	PTI_DOUT		RAIL Utility, PTI
6	PC05	PTI_DFRAME		RAIL Utility, PTI
7	PC06	GPIO mode	I2C_Mux_Reset	GPIO Init (I2C_Mux_Reset)
8	PC07			
40	PD00	LFXO_LFXTAL_O		Low Frequency Crystal Oscillator (LFXO)
39	PD01	LFXO_LFXTAL_I		Low Frequency Crystal Oscillator (LFXO)
38	PD02	I2C1_SCL		I2CSPM (mikroe)
37	PD03	I2C1_SDA		I2CSPM (mikroe)

Peripherals:

Peripheral	Software Component	Custom Peripheral Name
CMU		
EUART0	IO Stream: EUSART (vcom)	
GPIO	SWO Debug	
I2C0	I2CSPM (mikroe)	
I2C1	I2CSPM (mikroe)	
IADC0		
LETIMER0		
LFXO	Low Frequency Crystal Oscillator (LFXO)	
MODEM		
PDM		
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	SPIDRV (mikroe)	
USART1	SPIDRV (mikroe)	