SDK126X-FM33LE0XX 工程简单介绍

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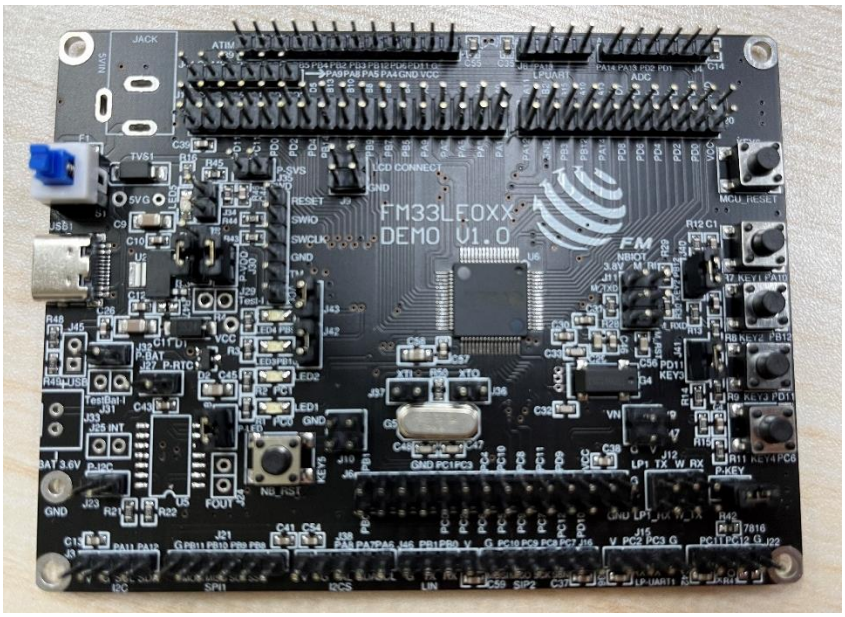
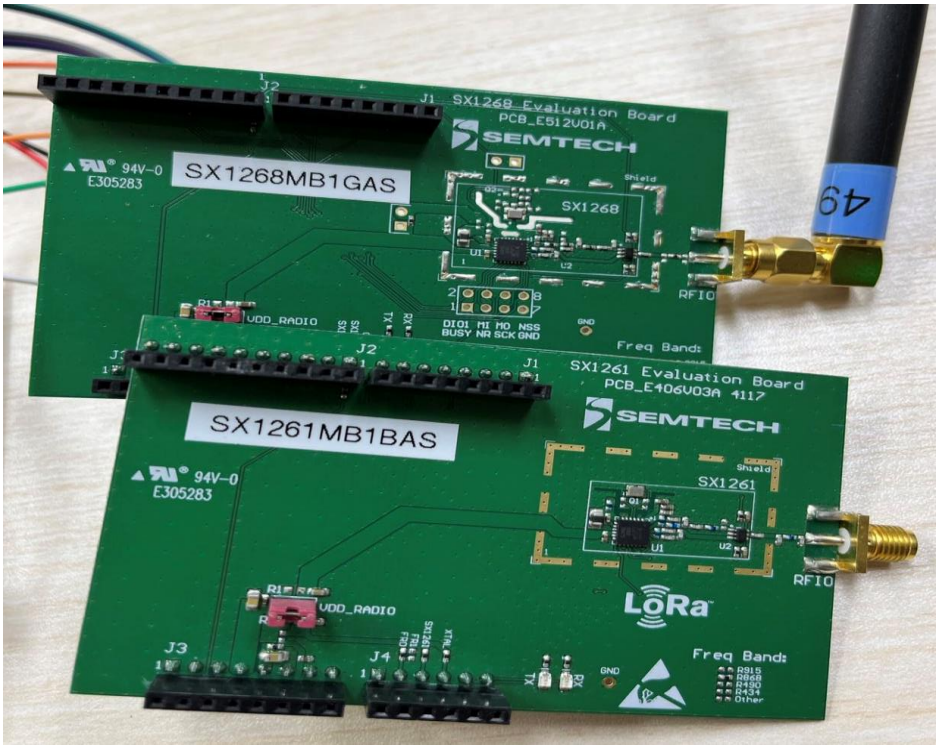
1 简单介绍

1.1 测试使用硬件

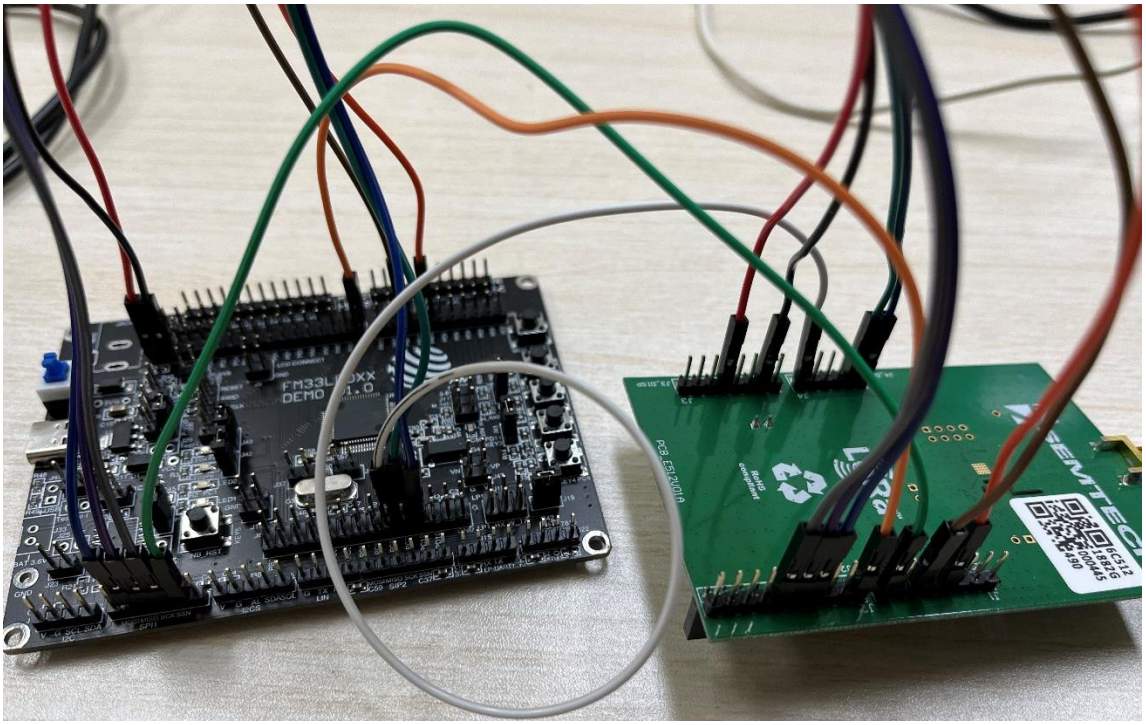




1.2 用到的引脚

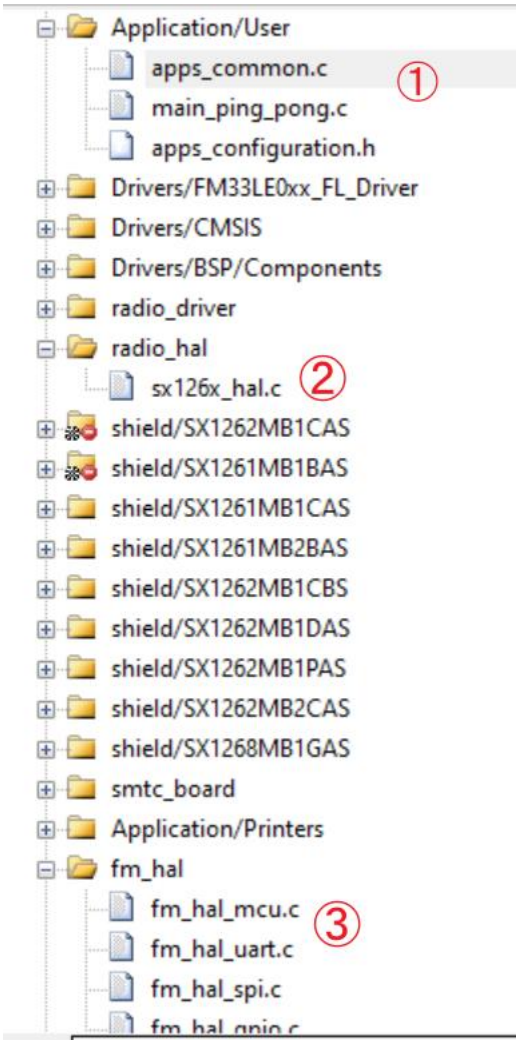
modem_pinout.h

```
#define SMTC_RADIO_SPI_GPIO      GPIOB
#define SMTC_RADIO_SPI_MOSI_PIN  FL_GPIO_PIN_11
#define SMTC_RADIO_SPI_MISO_PIN  FL_GPIO_PIN_10
#define SMTC_RADIO_SPI_SCLK_PIN  FL_GPIO_PIN_9
#define SMTC_RADIO_SPI_NSS_PIN   FL_GPIO_PIN_8

#define SMTC_RADIO_NRST_GPIO GPIOC
#define SMTC_RADIO_NRST_PIN  FL_GPIO_PIN_8

#define SMTC_RADIO_DIOX_GPIO GPIOA
#define SMTC_RADIO_DIOX_PIN  FL_GPIO_PIN_15
#define SMTC_DIOX_EXIT_LINE  FL_GPIO_EXTI_LINE_3

#define SMTC_RADIO_BUSY_GPIO GPIOA
#define SMTC_RADIO_BUSY_PIN  FL_GPIO_PIN_13

/* LED */
#define SMTC_LED_RX_GPIO GPIOC
#define SMTC_LED_RX_PIN  FL_GPIO_PIN_12

#define SMTC_LED_TX_GPIO GPIOC
#define SMTC_LED_TX_PIN  FL_GPIO_PIN_11

#define ANT_SW_GPIO GPIOA
#define ANT_SW_PIN  FL_GPIO_PIN_0

/* UART1 */
#define FM_UART1_GPIO    GPIOC
#define FM_UART1_TX_PIN  FL_GPIO_PIN_3
#define FM_UART1_RX_PIN  FL_GPIO_PIN_2
```



1.3 工程介绍

客户编写自己的代码。



2 工程测试举例

Table 2-1 工程测试列表

功能	TX Project	RX Project
CAD	sx126x-sdk_tx_infinite_preamble	sx126x-sdk_cad
	sx126x-sdk_per_transmitter	sx126x-sdk_cad_then_receive
	sx126x-sdk_cad_then_transmit	sx126x-sdk_per_receiver
PER	sx126x-sdk_per_transmitter	sx126x-sdk_per_receiver
Ping Pong	sx126x-sdk_ping_pong	
Spectral scan	sx126x-sdk_tx_cw or sx126x-sdk_tx_infinite_preamble	sx126x-sdk_spectral_scan
Spectrum display	sx126x-sdk_tx_cw or sx126x-sdk_tx_infinite_preamble	sx126x-sdk_spectrum_display
sx126x-sdk_tx_cw	这两个工程比较简单，只是一种信号发射，可以配着以上工程检测信号状态，或者有条件的，在频谱仪上观察波形状态。	
sx126x-sdk_tx_infinite_preamble		

3 注意事项

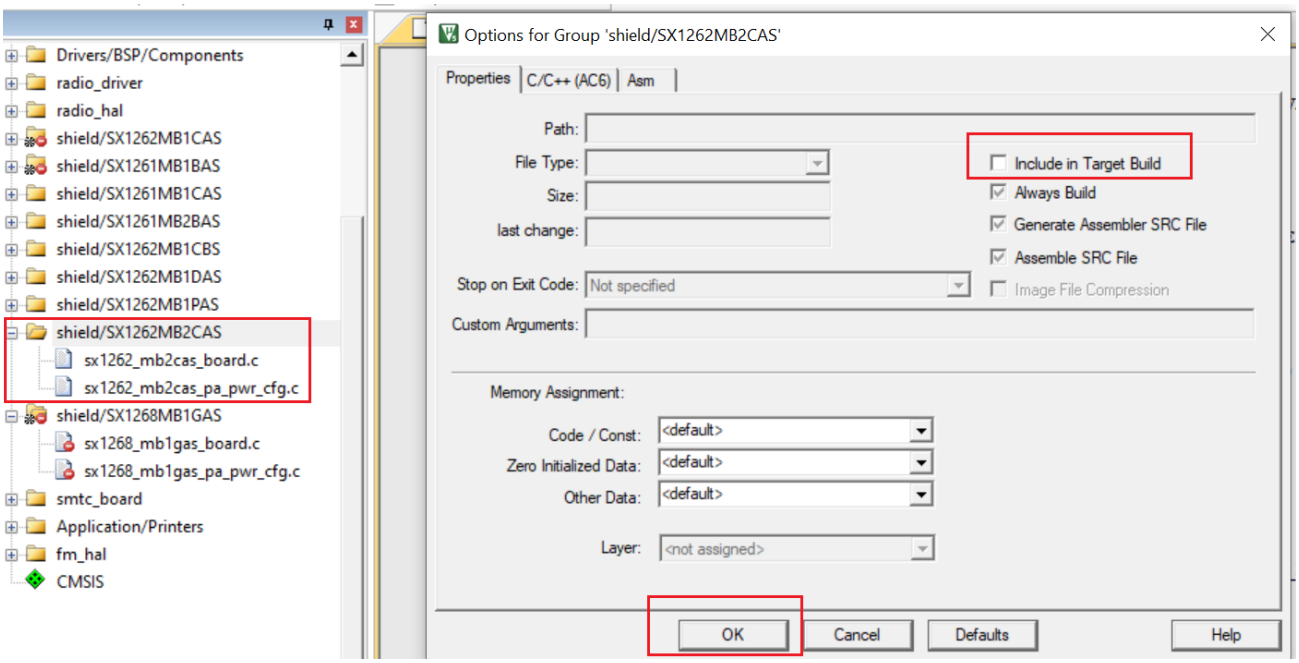
3.1 README

每个工程下的 README，一定要读，这是每个工程的简单介绍，对这个工程实现的功能的一个概括。

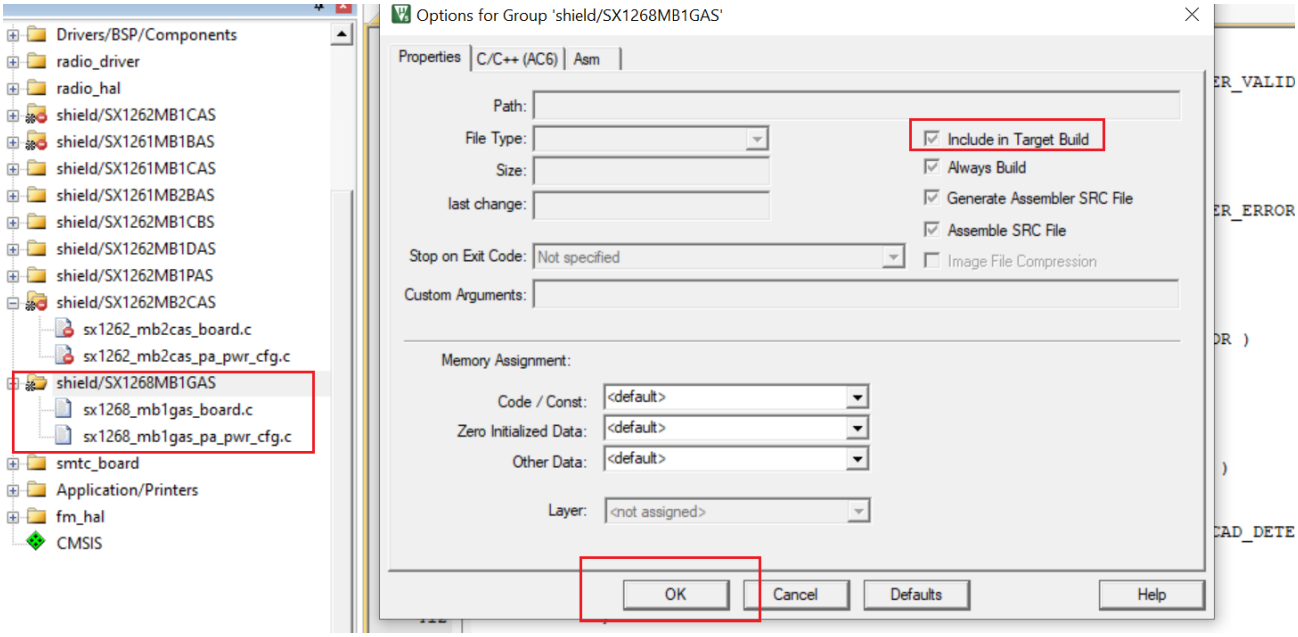
3.2 选择不同测试板

如果要测试不同的 EVK 板子，比如 SX1261、SX1262 和 SX1268，要注意在代码工程中 shield 文件夹下选择相应的.c 文件。比如现在要使用 SX1268MB1GAS 的 EVK 开发板。

1.首先，需要将正在使用的文件去除编译

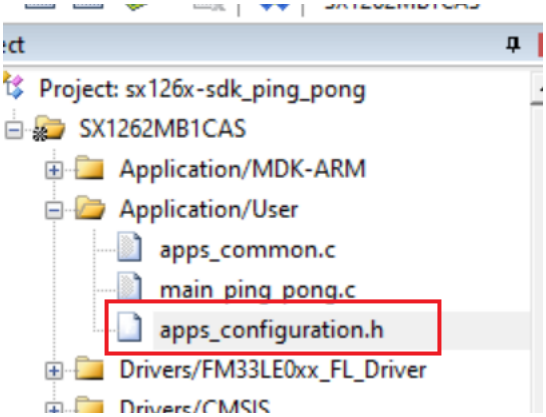


2.然后再添加要使用的板子的.c 文件，shield/SX1262MB2CAS。



3.3 修改模式和参数

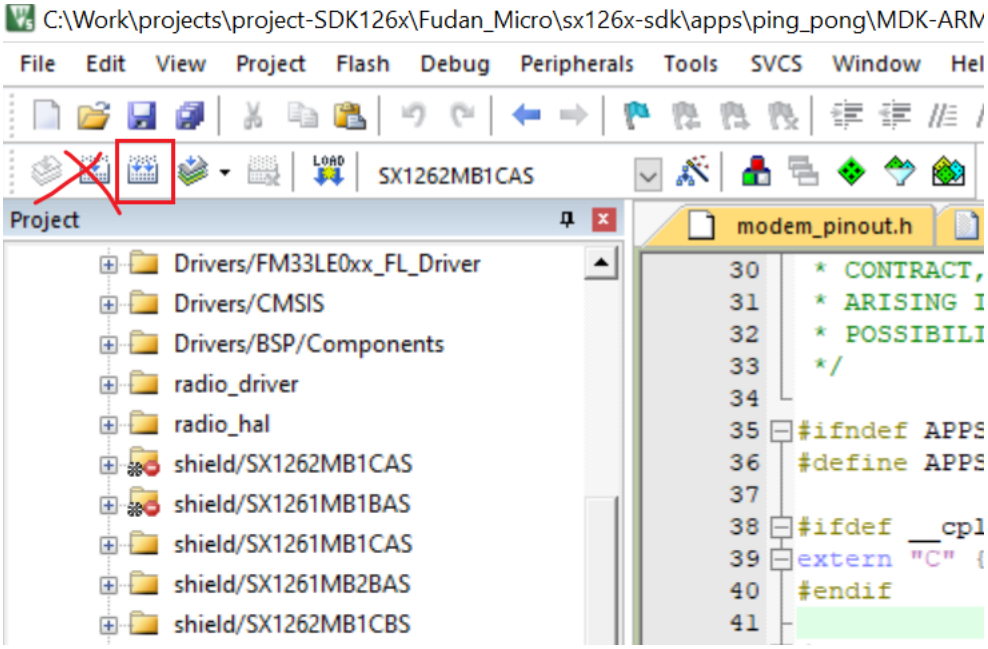
如果要选择 LoRa 或者 GFSK，或者配置不同的 SF、frequency 等参数，直接在 apps_configuration.h 文件中修改即可。



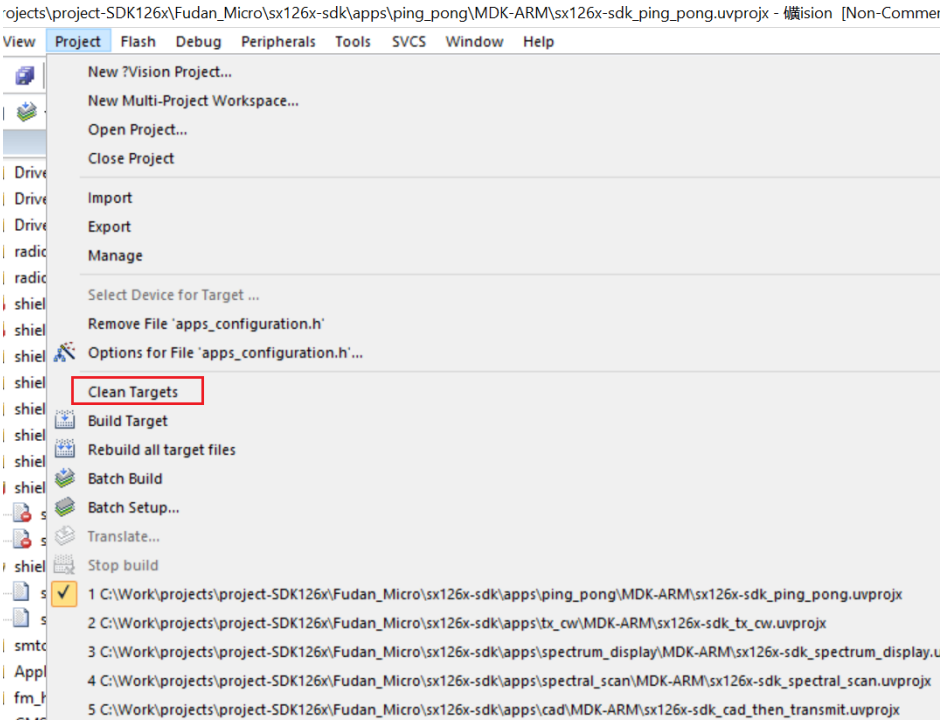
3.4 同一目录下多工程

当在同一目录下有多个 keil 工程时，编译、下载，有时候会出现下载固件错乱的情况。解决方法有两种：

第一种：不要选择 Build，而是选择 Rebuild 去编译。



第二种：编译前先选择 Clean Target 清除一下，再选择 Build。



4 EVK 板子资料下载网址

Table 4-1 EVK 板子网址

Shield	PCB	官网网址
SX1261MB1BAS	E406v03a	Development Kit, SX1261, 868 MHz for Europe | Semtech
SX1261MB1CAS	E449V01A	Development Kit, SX1261, 923 MHz for Asia | Semtech
SX1261MB2BAS	E498V01A	Mbed Shield, SX1261, 868 MHz for Europe | Semtech
SX1262MB1CAS	E428V03A	Development Kit, SX1262, 915 MHz for North America | Semtech
SX1262MB1CBS	E449V01A	Development Kit, SX1262, 923 MHz for Korea | Semtech
SX1262MB1DAS	E449V01A	Development Kit, SX1262, 866 MHz for India | Semtech
SX1262MB1PAS	E449V01A	Development Kit, SX1262, 915 MHz for Australia and North America | Semtech
SX1262MB2CAS	E499V01B	Mbed Shield, SX1262, 915 MHz for North America | Semtech
SX1268MB1GAS	E512V01A	Development Kit, SX1268, 490 MHz for China and Asia | Semtech

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