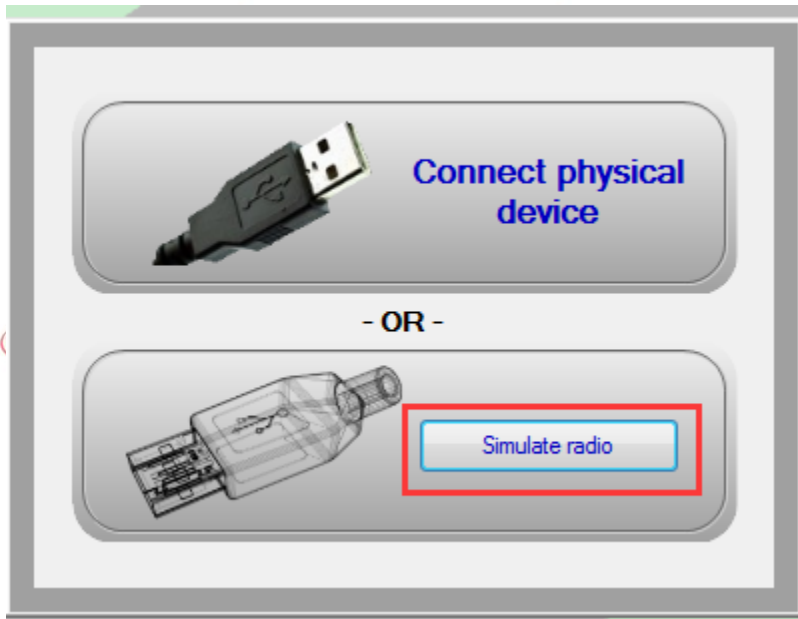


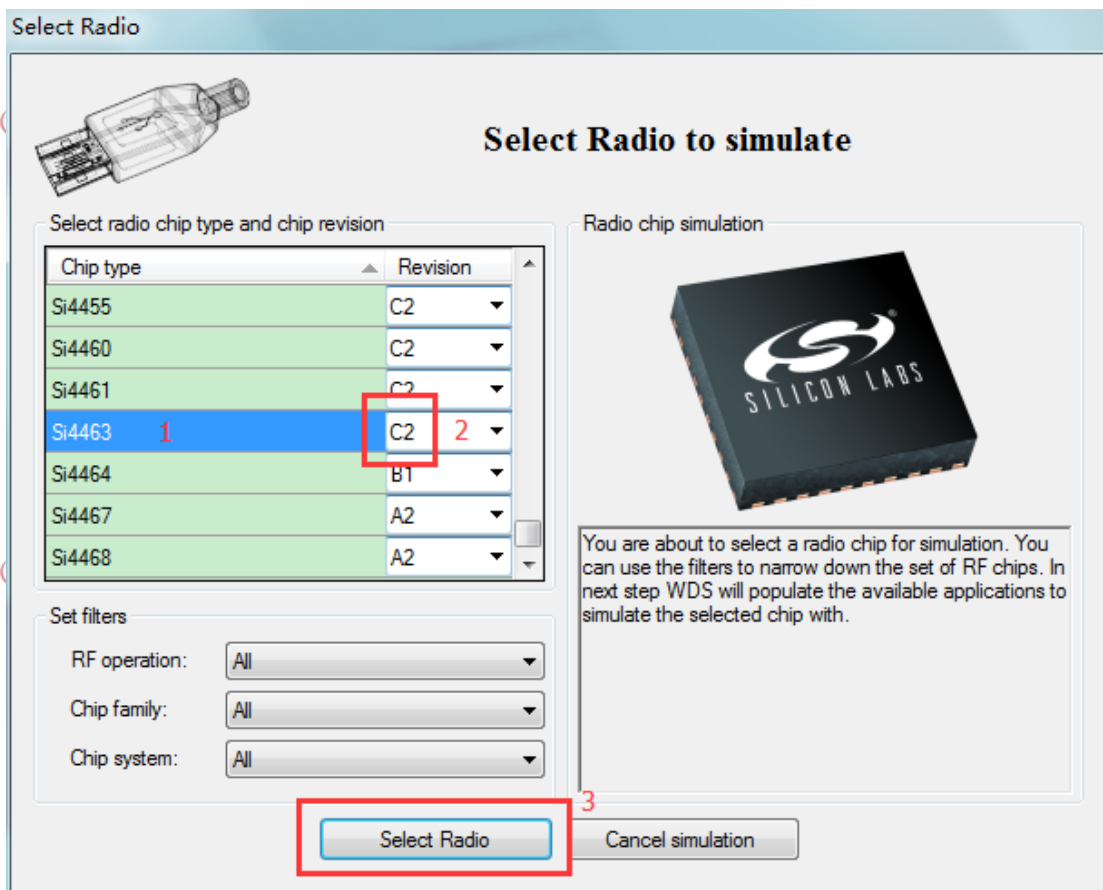
WDS[®]是 Si4463 的参数配置软件，下载地址

<https://www.silabs.com/products/development-tools/software/wireless-development-suite>

1. 打开 WDS 软件， 并点击 “Simulate radio”



2.选择 Si4463,Revision 选择 C2， 然后点击“Select Radio”



3. 点击“Frequency and power”，并修改以下参数

The screenshot shows the 'Radio Configuration Application' window. It is divided into three main sections: '1. Select project', '2. Configure project', and '3. Deploy project'. The '2. Configure project' section is further divided into tabs: 'Frequency and power', 'RF parameters', 'Packet', 'Interrupts', and 'GPIO and FRR'. The 'Frequency and power' tab is active and contains several configuration fields. Red boxes highlight the 'Base frequency' (915.00000 MHz), 'Crystal Cap. bank' (0x62), and 'PA power level' (0x7F) fields. Red Chinese text labels '频率配置' (Frequency Configuration) and '发射功率配置' (Transmit Power Configuration) are placed near these fields. The '3. Deploy project' section at the bottom has buttons for 'Create batch', 'Configure & evaluate', 'Download project', and 'Generate source'. The status bar at the bottom indicates 'Device: Si4463 Simulation', 'Chip Revision: C2', and 'Ready for deployment'.

1. Select project

Name	B	C	D	G
Empty framework	+	-	-	+
Unmodulated carrier	+	-	-	+
PN9	+	-	-	+
Standard packet TX	+	-	-	+
Standard packet RX	+	-	-	+

Description: The main purpose of this Project is to generate a source code that contains the radio_config.h file with all the necessary API and property settings for the desired radio and packet related settings. It does not contain... [more](#)

2. Configure project

Frequency and power | RF parameters | Packet | Interrupts | GPIO and FRR

Frequency **频率配置**

Base frequency: **915.00000** MHz Channel spacing: 250.00 kHz
Center frequency: **915 MHz** Channel number: 0
= Base frequency + Channel spacing * Channel number

Crystal

Crystal Frequency: 30.000 MHz Crystal tolerance RX: 10.0 ppm
Crystal Cap. bank: **0x62** ? Crystal tolerance TX: 10.0 ppm
 Use external TCXO/Ref Source

Enable divided system clock output

Clock output: System clock divic 32 kHz clock: Disabled

Power amplifier (PA)

PA mode: ClassE/Square W PA bias: 0x0 --
PA Ramp TC: 29 =6.6µs **PA power level: 0x7F**
 Enable ramp control of External PA **发射功率配置** 0xE =1.11µs

3. Deploy project

Create batch ? Configure & evaluate ? Download project ? Generate source ?

Device: Si4463 Simulation Chip Revision: C2 Ready for deployment

4. 点击“RF parameters”，并修改以下参数

1. Select project

Name	B	C	D	G
Empty framework	+	-	-	+
Unmodulated carrier	+	-	-	+
PN9	+	-	-	+
Standard packet TX	+	-	-	+
Standard packet RX	+	-	-	+

Description:
The main purpose of this Project is to generate a source code that contains the radio_config.h file with all the necessary API and property settings for the desired radio and packet related settings. It does not contain... [more](#)

2. Configure project

Frequency and power | **RF parameters** | Packet | Interrupts | GPIO and FRR

Modulation type: **2FSK** (调试方式)

Data rate: **1.200** Kbps (无线速率)

Deviation: **5.000** kHz (频偏)

RX bandwidth: Auto-Calc kHz

RX data rate error: 0% - 1%

Optimize RX performance

- Low current consumption
- High sensitivity
- Improved blocking
- Improved selectivity

Enable PLL AFC

Enable DSA

Enable antenna diversity

Enable IQ calibration

RSSI average: RSSI averaged over 4

RSSI latch: Disabled, will always re

Check threshold at latch

RSSI threshold: 0x FF

3. Deploy project

Create batch ? | Configure & evaluate ? | Download project ? | Generate source ?

Device: Si4463 Simulation | Chip Revision: C2 | Ready for deployment

5. 点击“Packet”，并按需要修改参数

The screenshot shows the 'Radio Configuration Application' window. It is divided into three main sections: '1. Select project', '2. Configure project', and '3. Deploy project'. The '2. Configure project' section is further divided into tabs: 'Frequency and power', 'RF parameters', 'Packet', 'Interrupts', and 'GPIO and FRR'. The 'Packet' tab is active, showing various configuration options for packet structure and thresholds. Red Chinese annotations are present: '前导码设置' (Preamble configuration) points to the 'Preamble' section, '同步字设置' (Sync word configuration) points to the 'SyncWord' section, and '数据包包长' (Data packet length) points to the 'Field 1' section.

1. Select project

Name	B	C	D	G
Empty framework	+	-	-	+
Unmodulated carrier	+	-	-	+
PN9	+	-	-	+
Standard packet TX	+	-	-	+
Standard packet RX	+	-	-	+

Description: The main purpose of this Project is to generate a source code that contains the radio_config.h file with all the necessary API and property settings for the desired radio and packet related settings. It does not contain... [more](#)

2. Configure project

Use predefined packet: Fully customizable

Packet config | Variable length config | CRC config | Whitening config | Field config

Enable preamble Reset data whitening at the beginning of the packets
 Enable synchron word Packet TX threshold: 48 byte(s)
Number of fields: 1 Packet RX threshold: 48 byte(s)

前导码设置 同步字设置 数据包包长

Preamble	SyncWord	Field 1
----------	----------	---------

Preamble configuration

Preamble TX length: 8 byte(s)
Preamble RX threshold: 20 bit(s)

Preamble pattern: Std. 1010 pattern (>= 40 bits)
 1010 0101

Preamble t-out: 15 nibbles

Use Manchester encoding

3. Deploy project

Create batch ? Configure & evaluate ? Download project ? Generate source ?

Device: Si4463 Simulation Chip Revision: C2 Ready for deployment

6. 点击“GPIO and FRR”，并修改以下参数

The screenshot shows the 'Radio Configuration Application' window. It is divided into three main sections: '1. Select project', '2. Configure project', and '3. Deploy project'. In the '2. Configure project' section, the 'GPIO and FRR' tab is selected. The 'GPIO' settings are visible, with a red box highlighting the configurations for GPIO 2 and GPIO 3. The 'NIRQ' setting has a red annotation '天线开关控制' (Antenna switch control) next to it. The '3. Deploy project' section contains buttons for 'Create batch', 'Configure & evaluate', 'Download project', and 'Generate source'. At the bottom, the device information is shown as 'Device: Si4463 Simulation', 'Chip Revision: C2', and 'Ready for deployment'.

Name	B	C	D	G
Empty framework	+	-	-	+
Unmodulated carrier	+	-	-	+
PN9	+	-	-	+
Standard packet TX	+	-	-	+
Standard packet RX	+	-	-	+

2. Configure project

Frequency and power | RF parameters | Packet | Interrupts | **GPIO and FRR**

GPIO

Enable pullup: [?]

GPIO 0: [] [DONOTHING - Behavior of this pin is not modified.]

GPIO 1: [] [DONOTHING - Behavior of this pin is not modified.]

GPIO 2: [] [RX_STATE - This output is set high while in RX state and is low otherwi]

GPIO 3: [] [TX_STATE - This output is set high while in TX state and is low otherwi]

NIRQ: [] [DONOTHING - Do not modify the behavior of this pin. 天线开关控制]

SDO: [] [DONOTHING - Do not modify the behavior of this pin.]

Drive strength: [GPIOs configured as outputs will have highest drive strength.]

Fast Response Registers

Fast Response Register A: [Disabled. Will always read back 0]

Fast Response Register B: [Disabled. Will always read back 0]

Fast Response Register C: [Disabled. Will always read back 0]

Fast Response Register D: [Disabled. Will always read back 0]

3. Deploy project

[Create batch ?] [Configure & evaluate ?] [Download project ?] [Generate source ?]

Device: Si4463 Simulation | Chip Revision: C2 | Ready for deployment

7. 生成配置参数

The screenshot shows the 'Radio Configuration Application' window. It is divided into three main sections: '1. Select project', '2. Configure project', and '3. Deploy project'.

1. Select project

Name	B	C	D	G
Empty framework	+	-	-	+
Unmodulated carrier	+	-	-	+
PN9	+	-	-	+
Standard packet TX	+	-	-	+
Standard packet RX	+	-	-	+

Description: The main purpose of this Project is to generate a source code that contains the radio_config.h file with all the necessary API and property settings for the desired radio and packet related settings. It does not contain... [more](#)

2. Configure project

Frequency and power | RF parameters | Packet | Interrupts | **GPIO and FRR**

GPIO Enable pullup

GPIO 0: DONOTHING - Behavior of this pin is not modified.

GPIO 1: DONOTHING - Behavior of this pin is not modified.

GPIO 2: RX_STATE - This output is set high while in RX state and is low otherwi

GPIO 3: TX_STATE - This output is set high while in TX state and is low otherwi

NIRQ: DONOTHING - Do not modify the behavior of this pin.

SDO: DONOTHING - Do not modify the behavior of this pin.

Drive strength: GPIOs configured as outputs will have highest drive strength.

Fast Response Registers

Fast Response Register A: Disabled. Will always read back 0

Fast Response Register B: Disabled. Will always read back 0

Fast Response Register C: Disabled. Will always read back 0

Fast Response Register D: Disabled. Will always read back 0

3. Deploy project

Create batch ? | Configure&evaluate ? | Download project ? | **Generate source ?**

Device: Si4463 Simulation | Chip Revision: C2 | Ready for deployment

8.