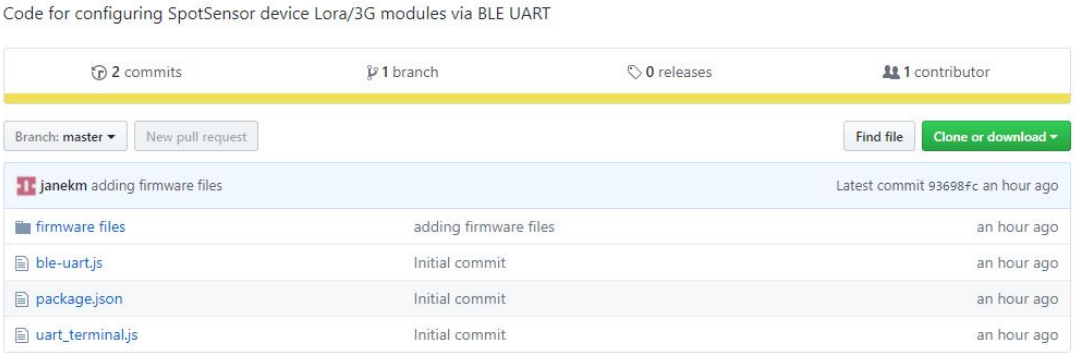
Configuring SpotSensor Device Lora Modules via BLE UART_V1_en

Tools required:

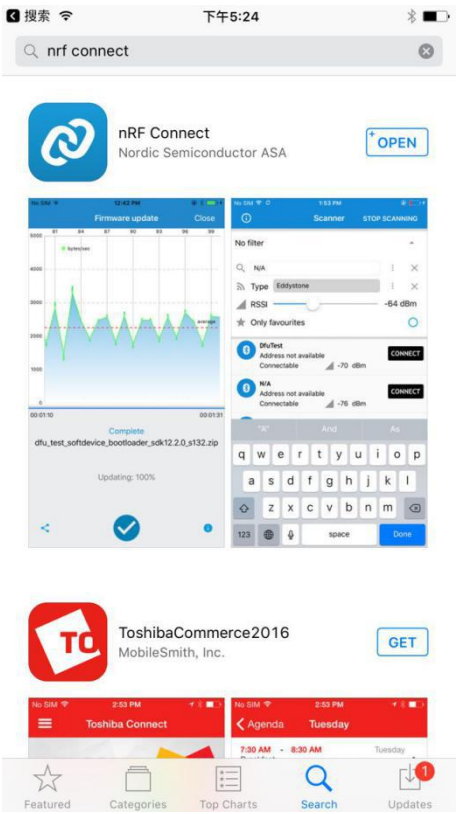
One smartphone (ios/android) and one Mac.

Preparations:

1. Download the zip file ble-uart-setup-master.zip from https://github.com/SpotSensors/ble-uart-setup and unzip it. Load the folder “firmware files” to the phone.The file in this folder must stay as a zip file without decompression. Load ble-uart.js,package.json,uart_terminal.js to the the Mac.



2. Install the APP “ nRF connect” on the phone.

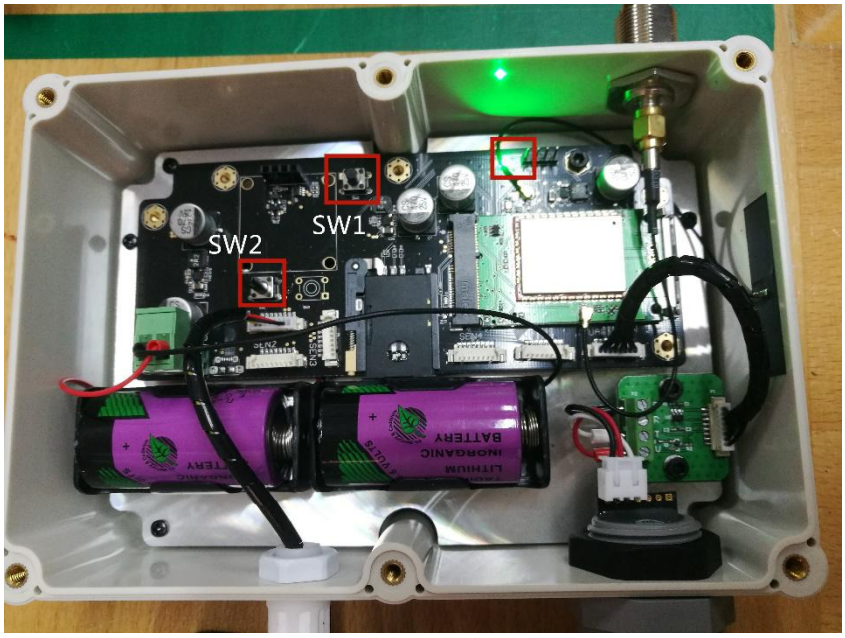


3. Install node (https://nodejs.org/en/) on the Mac.

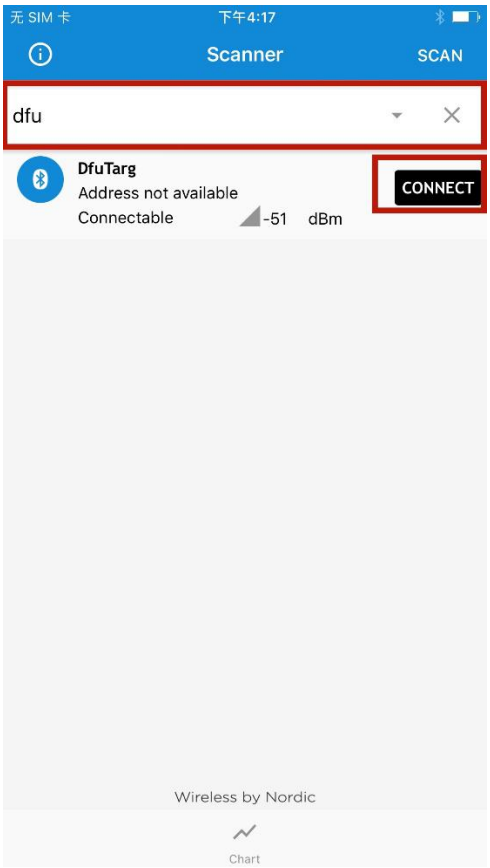
Firmware download and Lora parameter setting

1. Download Lora param setting firmware to the device.

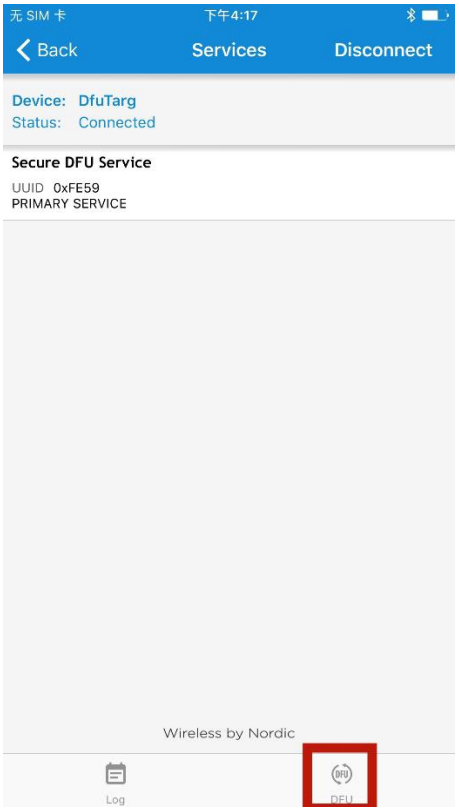
a) Supply power to the device. Press and hold SW2, press and release SW1, the led should be lighting constantly.The device entered bootloader mode.



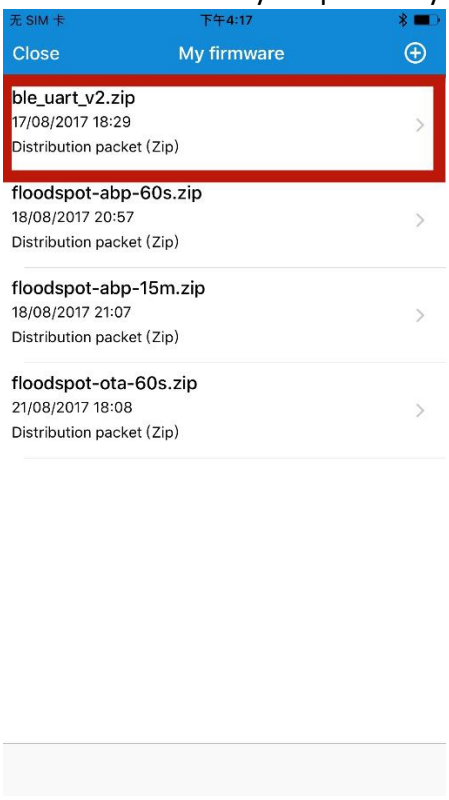
b) Turn on Bluetooth on the smartphone. Open the APP nRF Connect. Press SCAN at the upper right. Search a device called DfuTarg and press CONNECT. If there are too many Bluetooth devices nearby,try use the filter function on top by typing “dfu”.



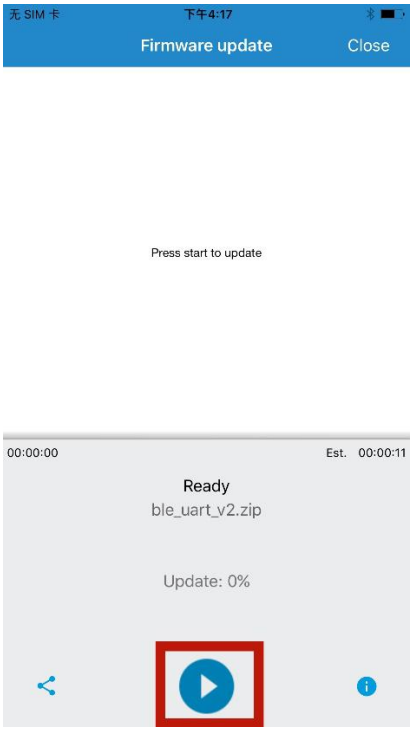
c. Press DFU at the bottom right.



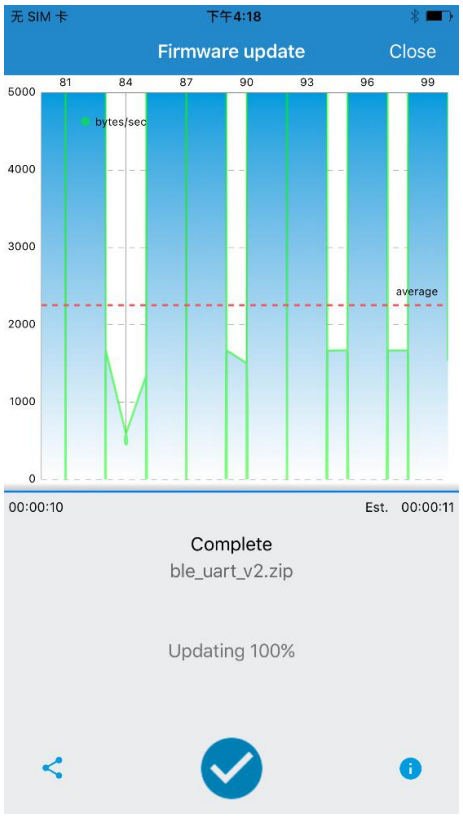
d. Press the file ble_uart_v2.zip . For the first time you may need to import it from the file location on your phone by pressing the “＋” sign at the upper right.



e) Press the start button at the bottom.



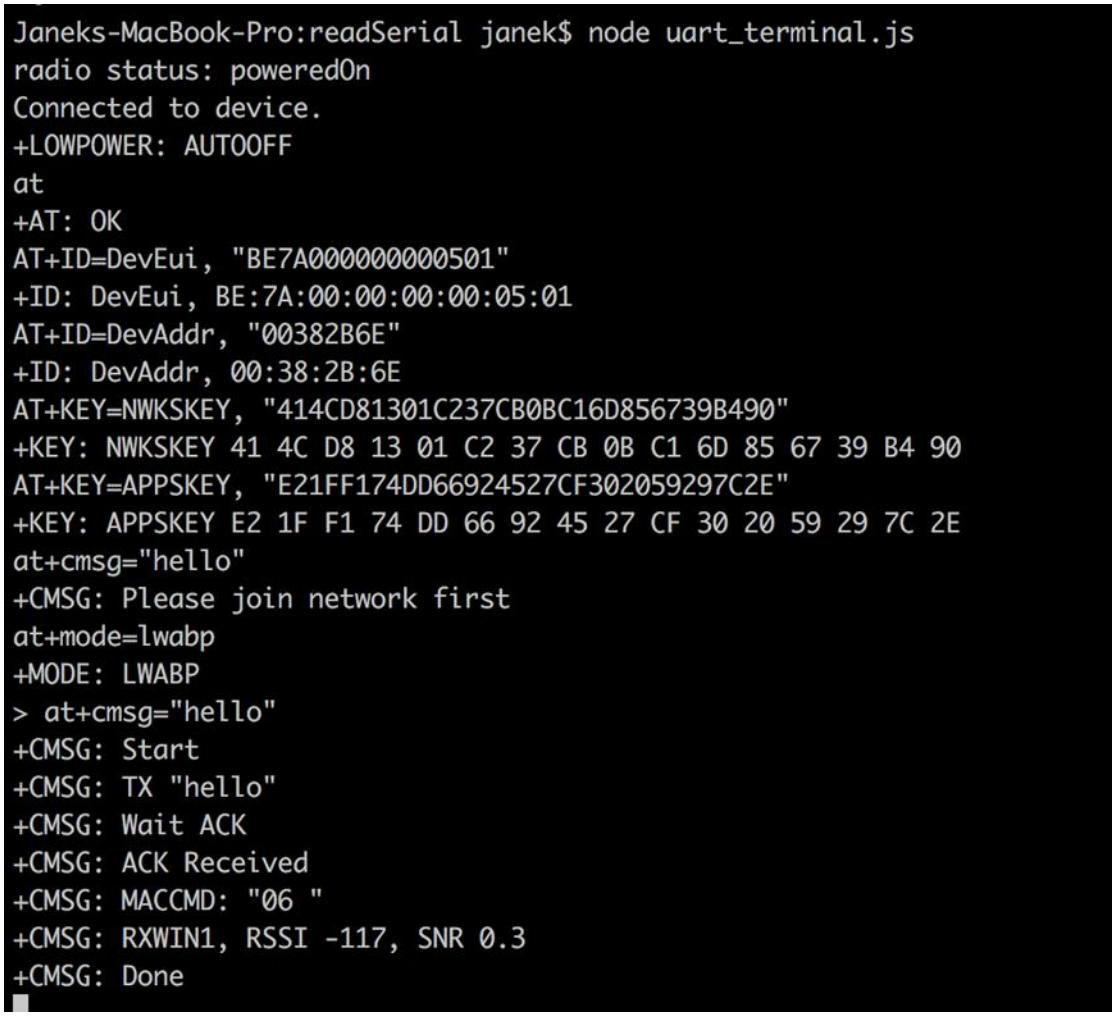
f) When the progress bar goes from 0% to 100% and you see the page below , that means download is completed.



g) Press SW1 (RESET) on the PCB. Program starts to execute.
(Note: Sometimes it will fail unreasonably,just try it again.)

2. Use terminal on the Macintosh to enter where the file uart_terminal.js is located, run command “node uart_terminal.js”. Then you can use the AT command as below to set up ID and KEY directly.
AT+ID=DevEui, "BE7A0000000004DF"
AT+ID=DevAddr, "485F27EF"
AT+KEY=NWKSKEY, "FB6CF7D8ECA558A602FBD3B6D8C9F2BA"
AT+KEY=APPSKEY, "0176679B442F22CB7BA1570B651B8AA0".

AT+CMSG="hello" can be used to test whether message is sent successfully.



3. Download application firmware.
Repeat step 1 , choose the application firmware(floodspot-abp-15m.zip or floodspot-ota-15m.zip) instead of ble_uart_v2.zip when step 1.d.

Any question , please send email to support@spotsensors.com.

SpotSensors
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