

## FS26XX OTP Instruction

### I. Instructions

The FS26 series chip is NXP's new generation of functionally safe SBC products and can be used in FS26 according to customer requirements

Set some parameters of the chip on the sample: One Time Program (OTP). This article mainly introduces the use of FS26 Socket

Develop board to realize the operation flow of burning OTP configuration file on FS26 empty sample.

### 2:Hardware and software equipment:

- (1) 12V power supply (current capacity > 0.5A)
- (2) FS26 Socket Development Board (Model: KITFS26SKTEVM)

Order information link: : <https://www.nxp.com/design/development-boards/analog-toolbox/fs26-safety-sbc-programming-socket-board:KITFS26SKTEVM>

Schematic and PCB layout materials download link : <https://www.nxp.com/design/development-boards/analog-toolbox/fs26-safety-sbc-programming-socket-board:KITFS26SKTEVM>

- (3) PC, install FS26 GUI software (software version 3.1.342 or later)

Download address (NXP secure website)-> <https://www.nxp.com/mynxp/profile>

The screenshot shows the NXP MyNXP Secure Files interface. The page title is 'Secure Files' and the subtitle is 'Secure documentation and software for which you have secure access rights.' The main content area contains a search form with the following fields: 'Product Name' (FS26), 'Product Category' (Select), and 'Application Category' (Select). Below the search form is a '1 product' section showing 'FS26: Safety System Basis Chip (SBC) with Low Power Fit for ASIL D' with '9 files'.

- (4) USB cable (USB Mini-B)

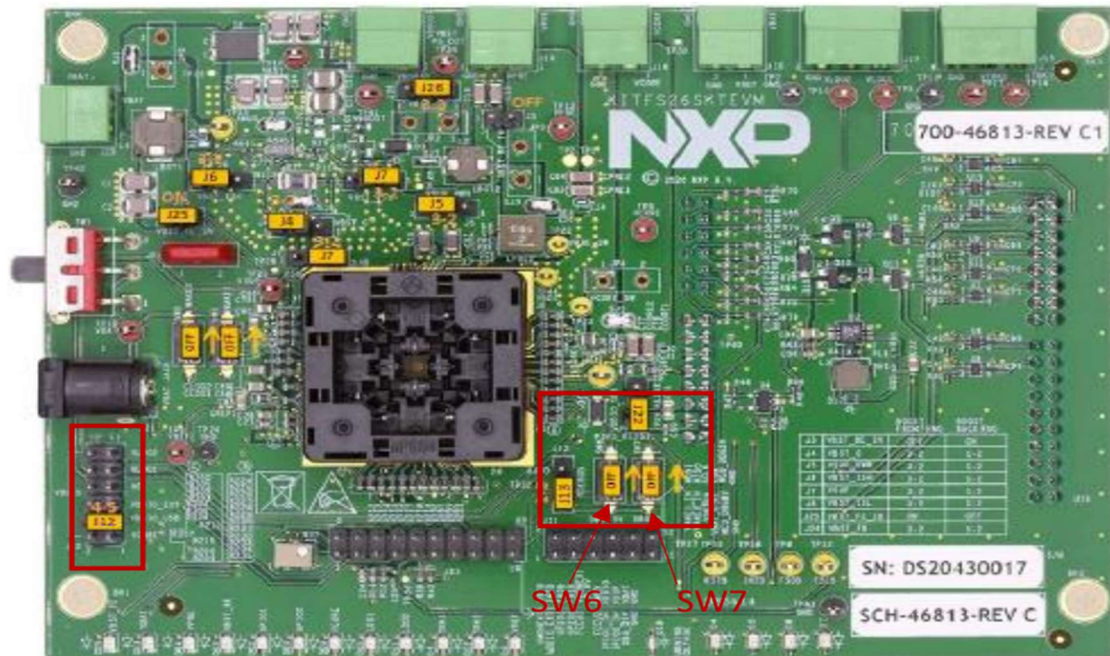


### 3. Preparation before OTP burning

(1) Check whether the default Jumper Settings of the EVB board are correct, with special attention

J12: 3-4 J13: 1-2 J22: 1-2

SW6: OFF SW7: OFF

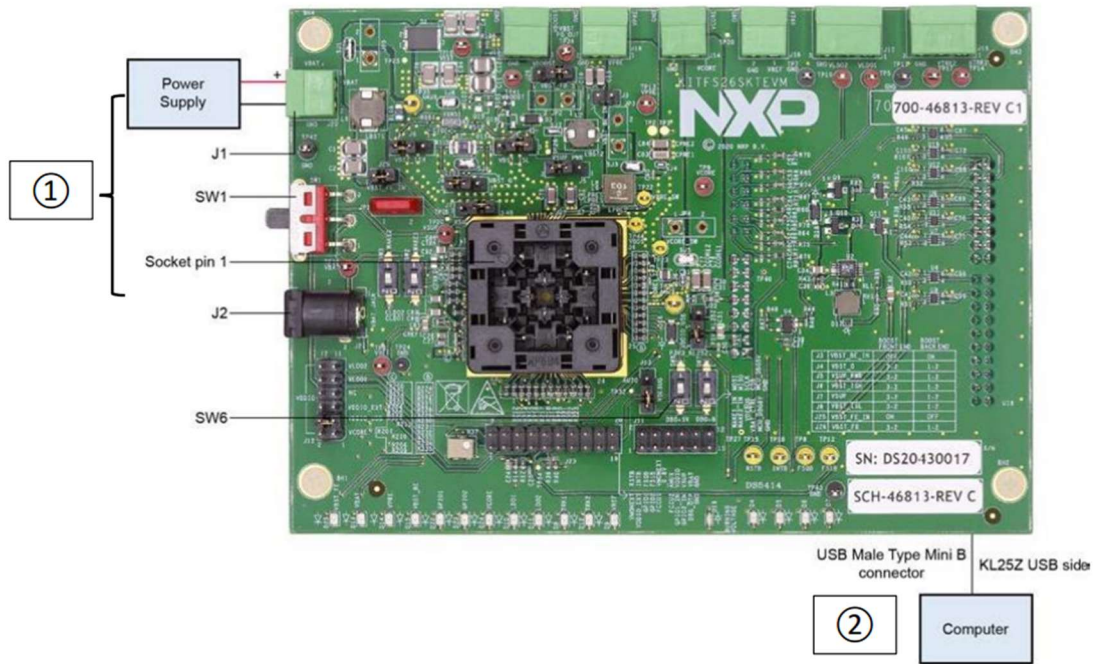


(2) Hardware connection



1: The 12V power supply for the FS26 development board comes from the connector J1, or the Banana Head J2. SW1 switch is used to select the 12V power supply for FS26 coming from J1 or J2.

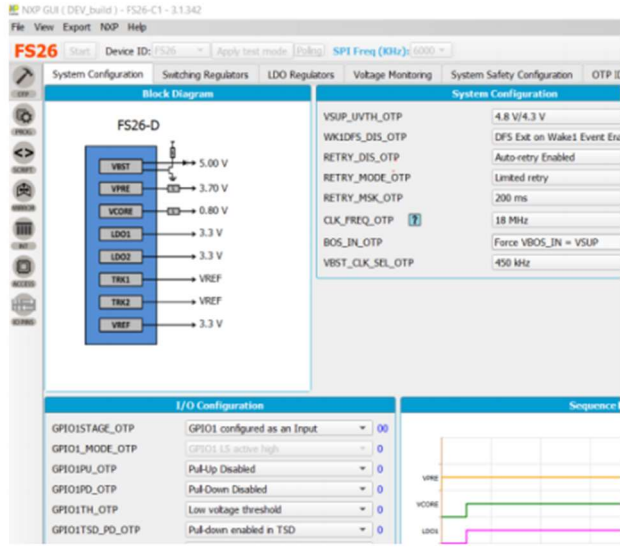
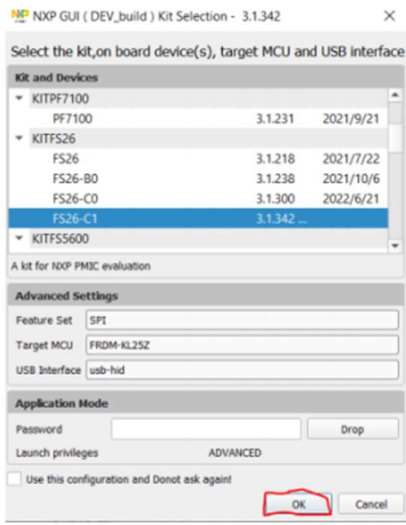
2: Connect the KL25 and PC on the FS26 development board with USB cable.



(3) 12V power + FS26 EVB + computer is connected well, pay attention to the 12V is not powered on first.

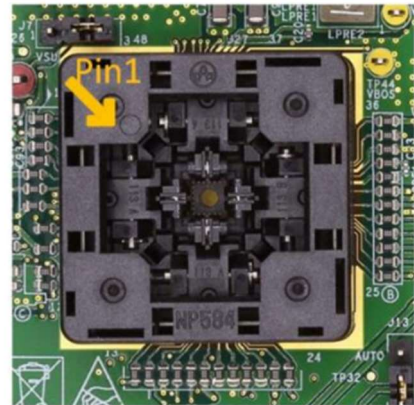


(4) Double-click the GUI file of FS26, select the version of FS26-C1, and click OK. After opening, the interface is as follows:

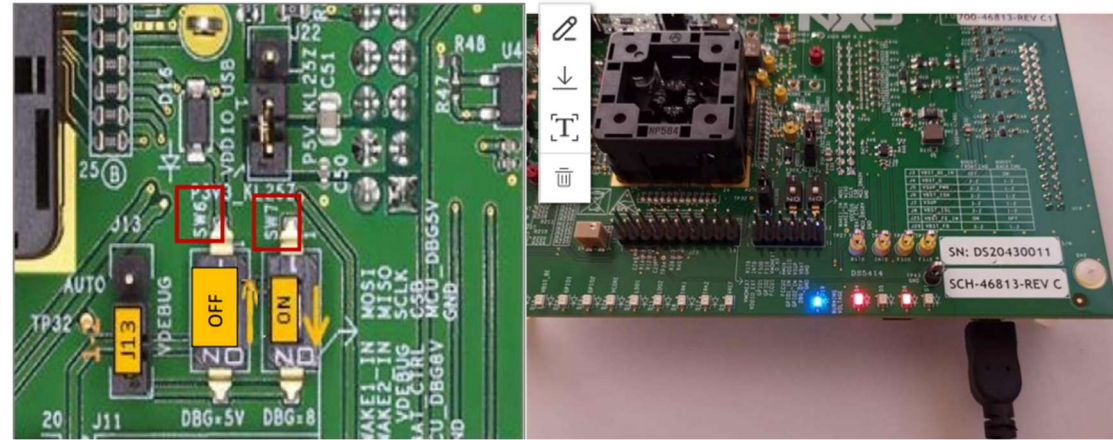


#### 4:OTP burning steps

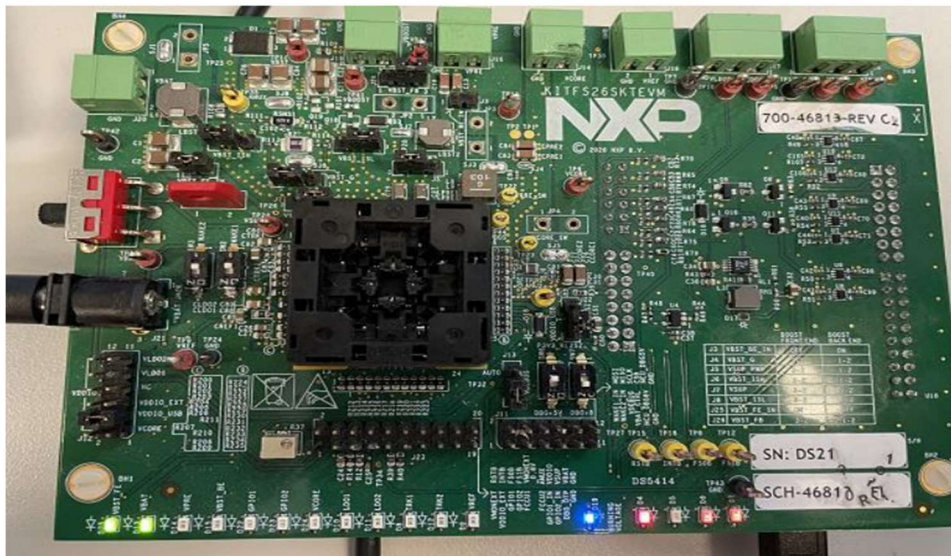
- (1) Put the FS26 blank->A0 version chip into the Socket, and pay attention to the correct position of pin 1



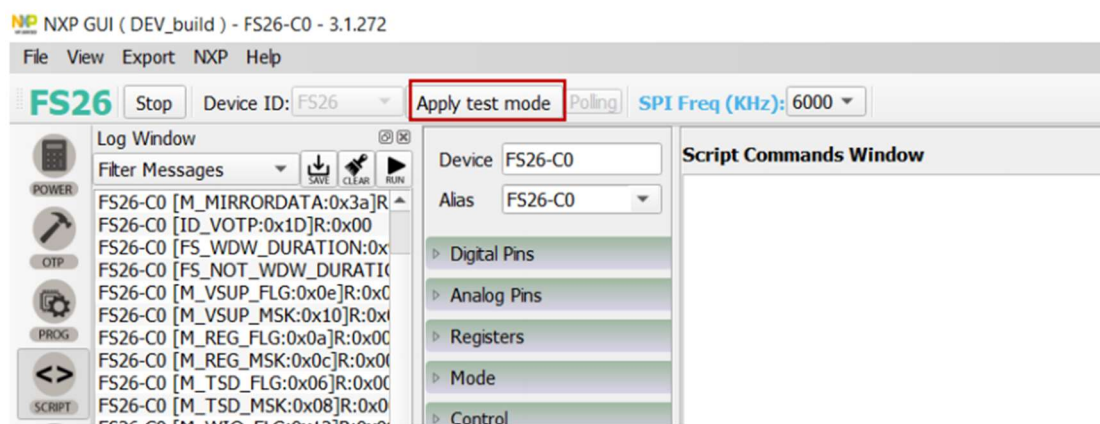
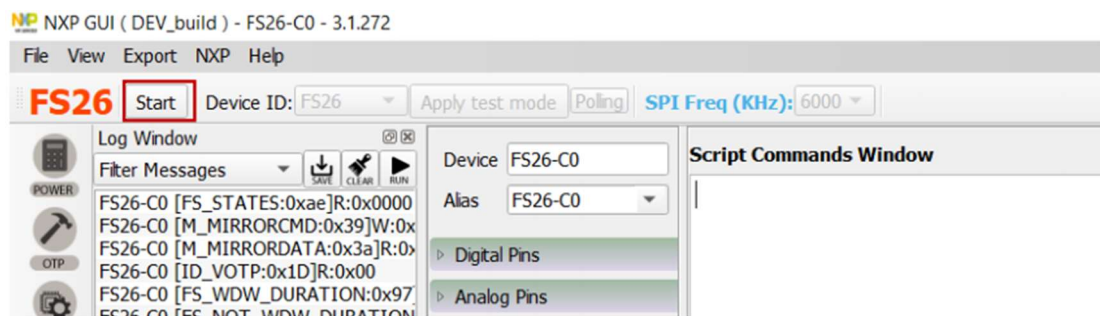
- (2) Put SW6 ON the FS26 development board in the "OFF" state, SW7 in the "on" state, at this time, the "blue" on the EVB board Lights up.



(3) Turn on the 12V power supply and power on the FS26 EVB. At this time, the EVB is on as follows

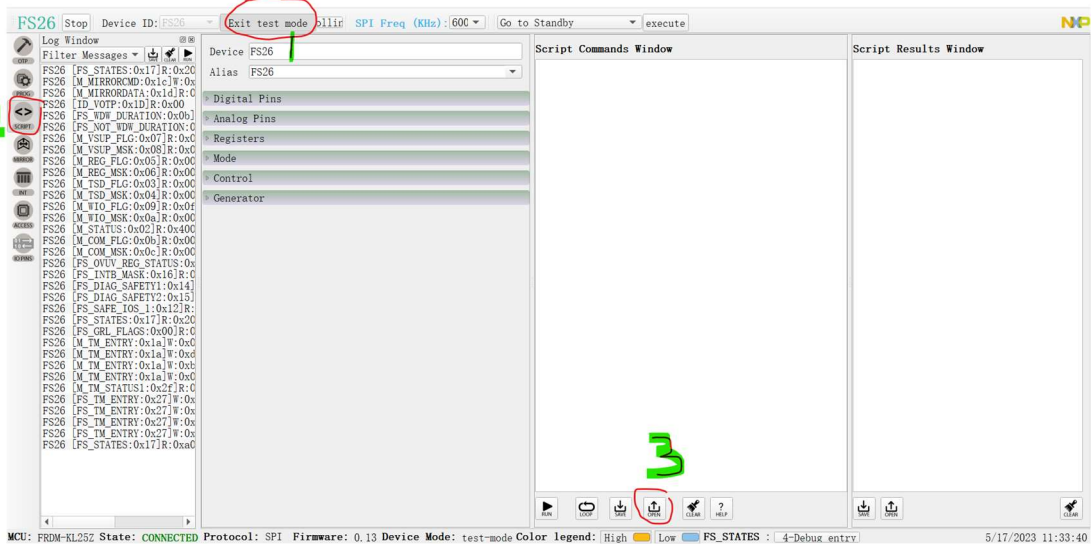


(4) Open the FS26 GUI interface and click "Start" and "Apply Test Mode" successively.

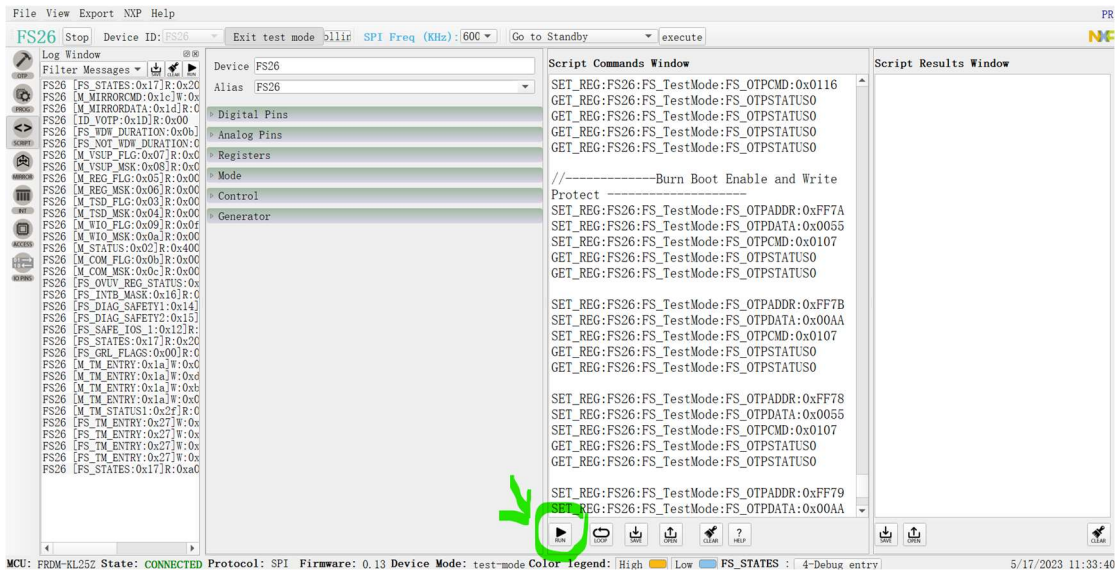


(5) After successfully entering "Test mode", find "Script" from the left bar of GUI, click OPEN, and click Open.

Select the OTP file to burn (e.g. FS26-C1\_DEJ\_OTP\_Rev\_B.txt)



(6) After selecting the OTP file to burn, click RUN until the burn is complete.



(7) After the chip is burned, dial SW7 to "OFF", then you can see the corresponding output path configured in OTP LED light on.



- (8) Power off 12V and take out the chip. At this point, the first chip is burned.
- (9) Repeat the previous process, burn multiple chips.