AscentOptics

HFWriteCode User Guide

Prepare by_____   Date _____

Review by _____

AscentOptics

Shenzhen Ascent Optics Co., Ltd.
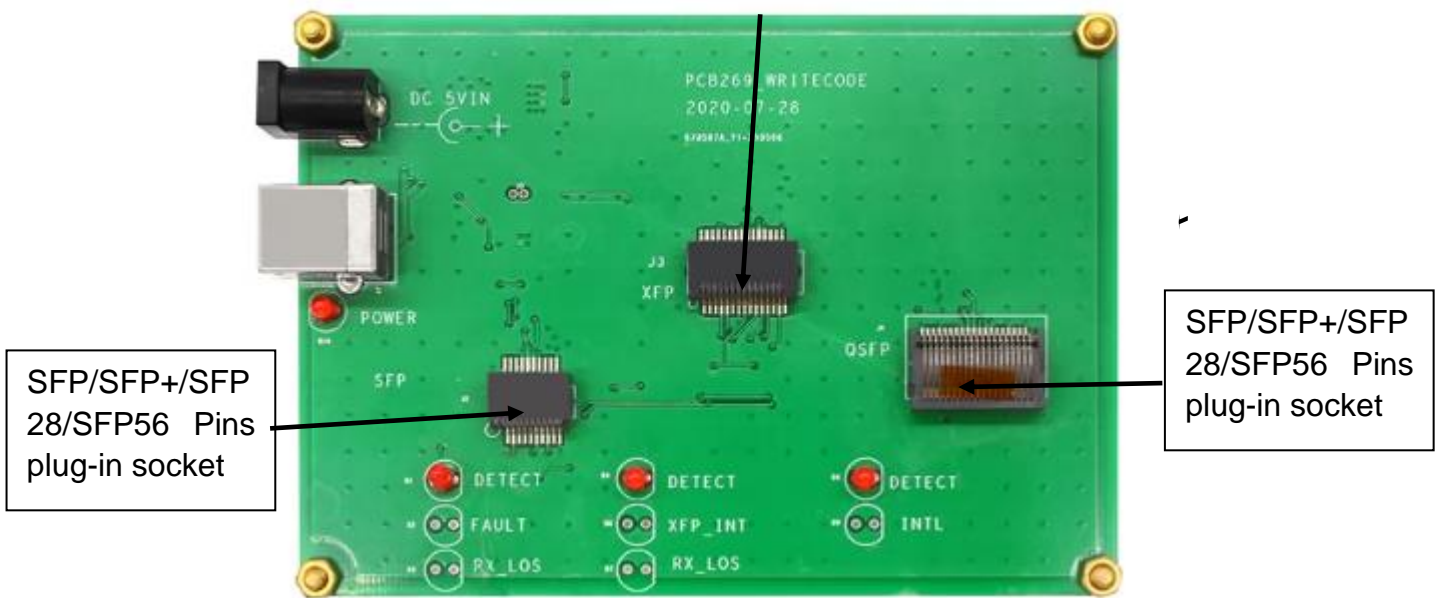
Contents

1. EEPROM Programmer Board Functions

● Supports SFP/SFP+/SFP28/SFP56 Transceivers/DAC/AOC Code Reading/Code Saving/Coding

● QSFP+/QSFP28/QSFP56 Transceivers/DAC/AOC Code Reading/Code Saving/Coding

● XFP Transceivers Code Reading/Code Saving/Coding

Application Scenarios

● W7/W10/W11 Operating System

（1）Simple Programmer Board

XFP Pins plug-in socket

SFP/SFP+/SFP28/SFP56 Pins plug-in socket

SFP/SFP+/SFP28/SFP56 Pins plug-in socket

(2) EEPROM Box

(3) Other Accessories

2. Connection Installation Instructions

- Connect the program board to the computer with the USB cables
  （Figure 1）
- Plug the fiber optical modules into the program board housting socket
  （Figure 2）

Figure   1

Figure 2

- Click to open software page（as shown in Figure 3 and Figure 4）
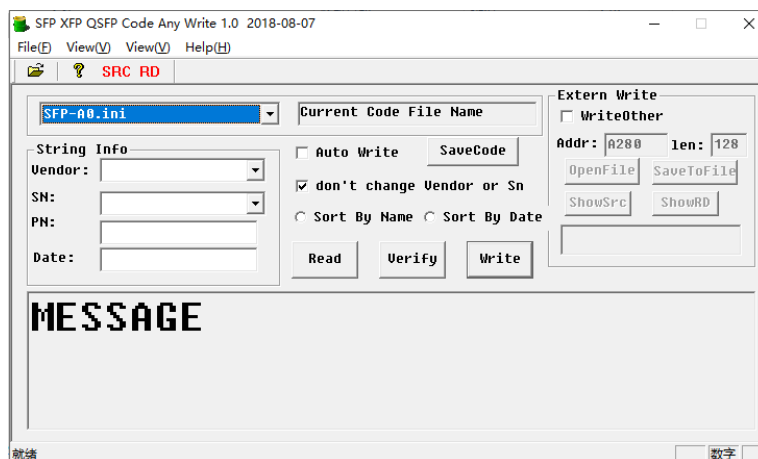

Figure 3

Figure 4

3.SFP/SFP+/SFP28/SFP56 Transceivers/DAC/AOC Code Reading/Code Saving/Coding

(1) Read Code   A0 A2

- **Read A0**

    Insert the pins of the SFP optical module that you want to read into the corresponding SFP socket (as shown in Figure 5). Select the configuration file that corresponds to the SFP optical module. For SFP/SFP+/SFP28/SFP56 series optical modules, you can use the "SFP-A0" configuration file to read the data. Click the "Read" button (as shown in Figure 6). Then you can read the A0 information of the SFP optical module.
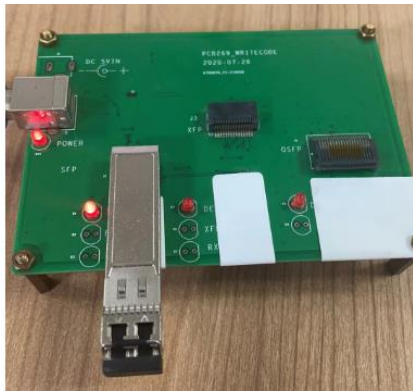

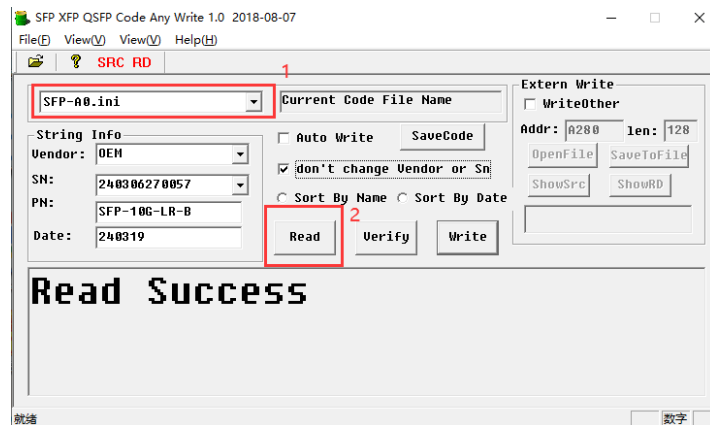Figure 5   Figure 6

- **Read   A2**

    Select the "SFP-A2" configuration file. Click the "Read" , you can then read the A2 information of the SFP optical module.
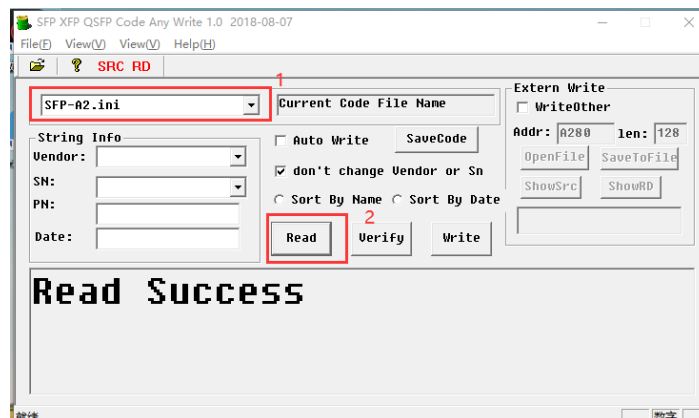

Figure 7

(2) Save Code   A0 A2

● **Save the A0 Code**
　　Insert the pins of the SFP optical module that you want to read into the SFP socket.

2.1 Select the configuration file corresponding to the SFP optical module. For SFP/SFP+/SFP28/SFP56 series optical modules, you can use the "SFP-A0" configuration file to read the code (as shown in Figure 8).

2.2 Click the "Read" button (as shown in Figure 8)

2.3 Click the "Save Code" button (as shown in Figure 8)

2.4 Name the code (as shown in Figure 8)

2.5 Save the code to your computer (as shown in Figure 8)
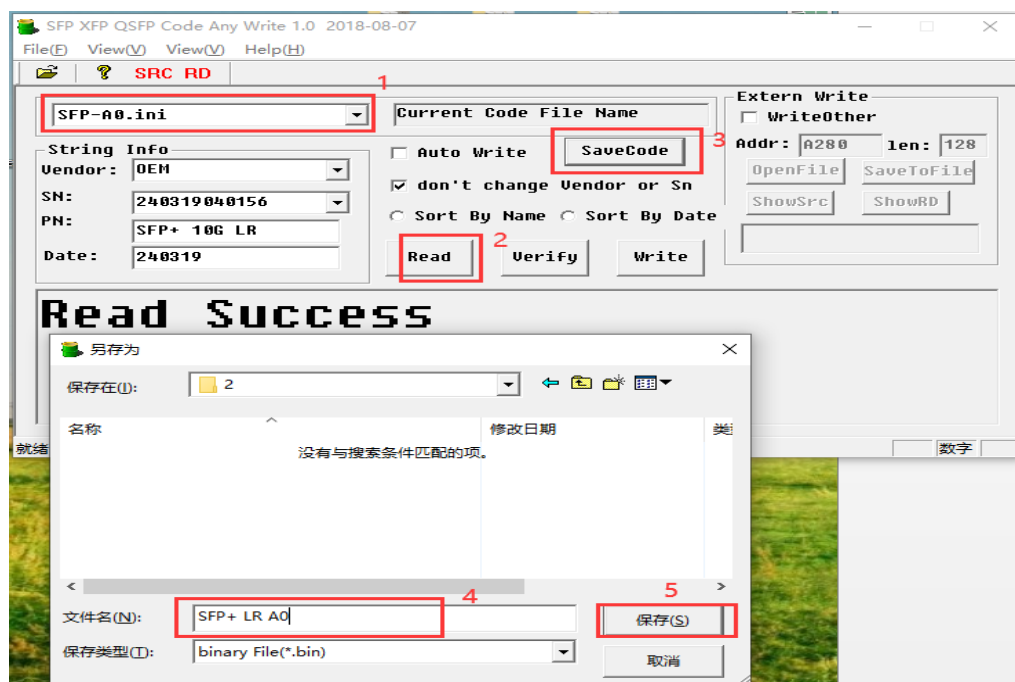

Figure 8

● **Save the A2 Code**

2.6 Select the configuration file corresponding to the SFP optical module. For SFP/SFP+/SFP28/SFP56 series optical modules, you can use the "SFP-A2" configuration file to read the code (as shown in Figure 9)

2.7 Click the "Read" button (as shown in Figure 9)

2.8 Click the "Save Code" button (as shown in Figure 9)

2.9 Name the code (as shown in Figure 9)

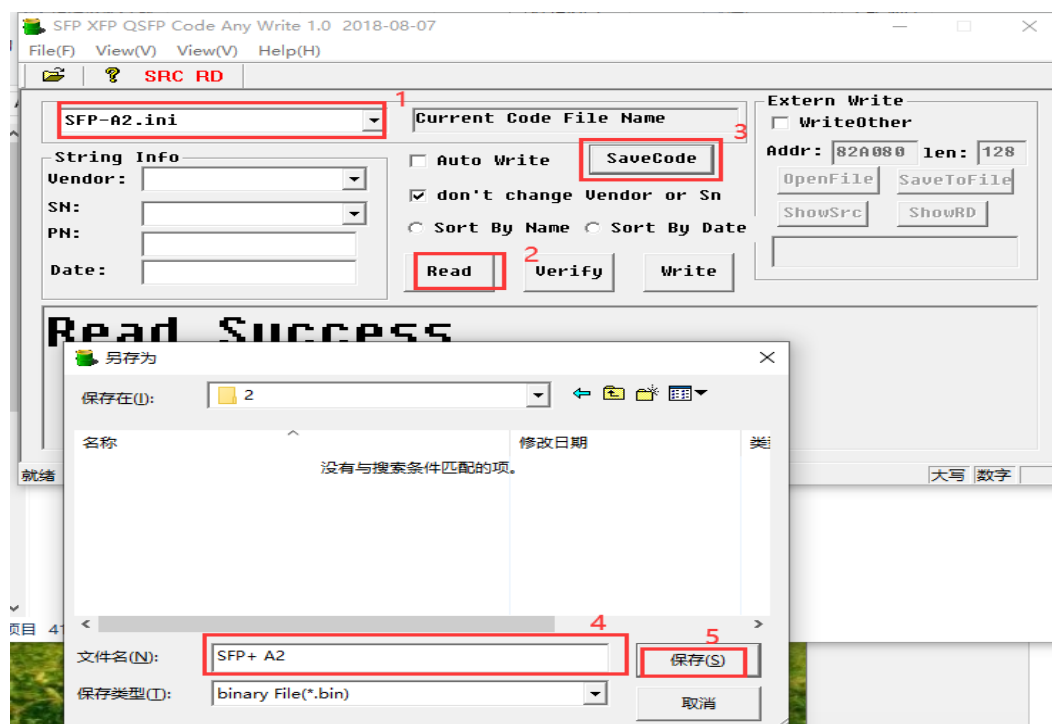2.10 Save the code to your computer (as shown in Figure 9)

Figure 9

(3) Write Code　A0 A2

For example: Writing the Password "00 00 10 11 " for the CISCO 10G LR 10km Optical module.

Insert the 10G LR 10km optical module that needs to be written into the programming board.

● **Write A0 code**

3.1Select the configuration file "SFP-A0 00001011" corresponding to the 10G LR optical module with the password "00 00 10 11" (as shown in Figure 10)

3.2Click the ![folder icon] Or select the menu：File->Select Code Source Foler，choose the folder where you saved the codes, Click OK. (as shown in Figure 10)

3.3Click the "Write" (as shown in Figure 10)

3.4 After selecting the configuration file, wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 11)
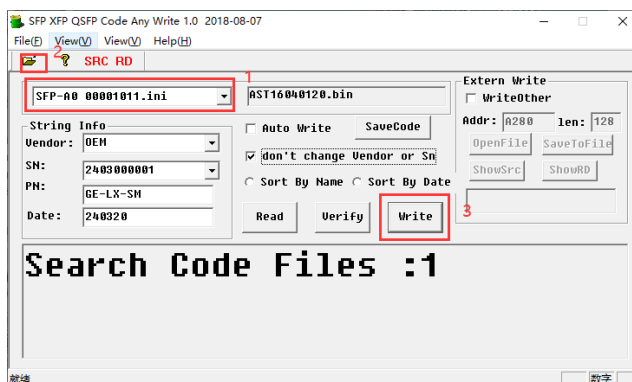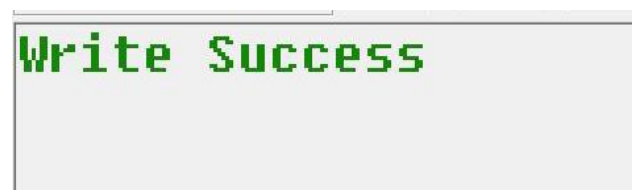

Figure 10

Figure 11

● **Write A2 code**

3.5 Select the configuration file "SFP-A2 00001011" corresponding to the 10G LR optical module with the password "00 00 10 11" (as shown in Figure 12)

3.6 Click the ![folder icon] Or select the menu：File->Select Code Source Foler，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure12)

3.7 Click the "Write", (as shown in Figure 12)

3.8 After selecting the configuration file, wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 13)
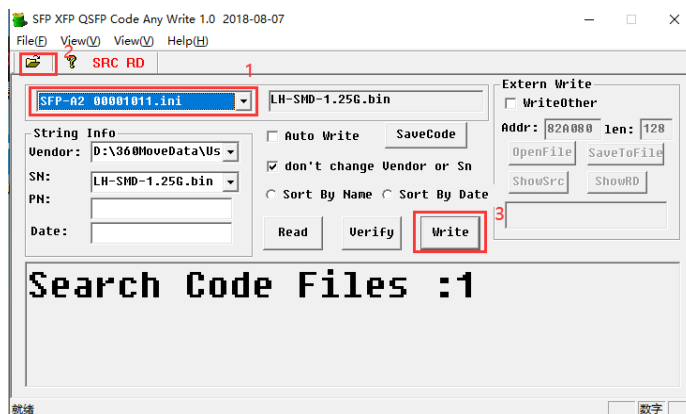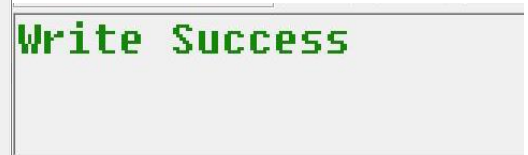

Figure 12   Figure 13

(4) Auto write Code A0 A2

For example: Writing the Password "00 00 10 11 " for the CISCO 10G LR 10km Optical module.

4.1 Select the configuration file "SFP-A0 00001011" corresponding to the 10G LR optical module with the password "00 00 10 11" (as shown in Figure 14)

4.2 Click ![folder icon] Or select the menu：File->Select Code Source Foler，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 14)

4.3 Check the "WriteOther" box (as shown in Figure 14)

4.4 Change the "len" value to 120 (as shown in Figure 14)

4.5 Click "OpenFile" and select the Page02 file that needs to be written (as shown in Figure 14)

4.6 Check the "Auto Write" box (as shown in Figure 14)

4.7 Insert the module with the corresponding serial number into the SFP socket on the programming board

4.8 Wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 15)

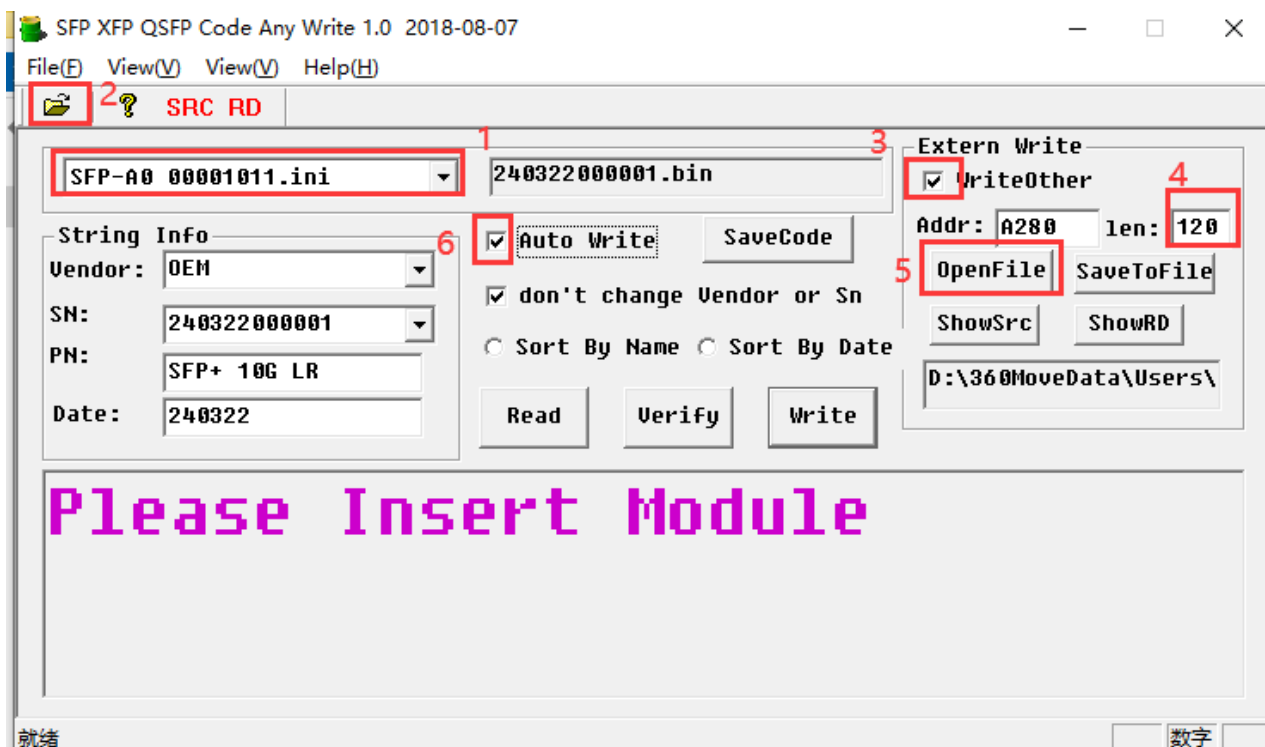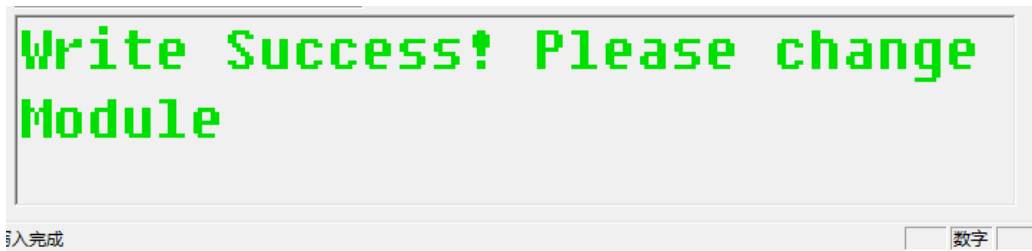4.9 Remove the module and insert the next module

Figure 14

Figure 15

4.QSFP+/QSFP28/QSFP56　Transceivers/DAC/AOC Code Reading/Code Saving/Coding

(1)　Read Code　Page00 Page02

● **Read Page00**

Insert the pins of the QSFP optical module that you want to read into the QSFP socket (as shown in Figure 16). Select the configuration file corresponding to the QSFP optical module.

For QSFP+/QSFP28/QSFP56 optical transceivers/DAC/AOC, you can use the "QSFP QSFP28-Page00.ini" configuration file to read the code. And then click the "Read" button (as shown in Figure 16). If the display shows "Read Success", it means the Page00 data has been successfully read.
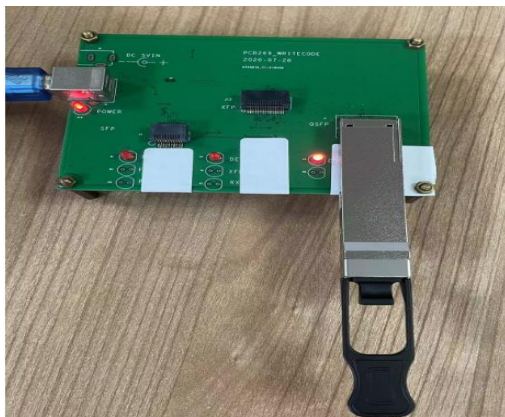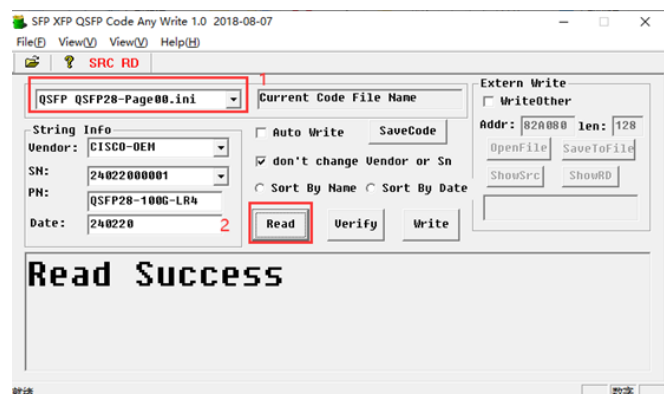

Figure 16   Figure 17

● **Read Page02**

Select the configuration file "QSFP QSFP28-Page02", and click the "Read" button. If the display shows "Read Success", it means the Page02 data has
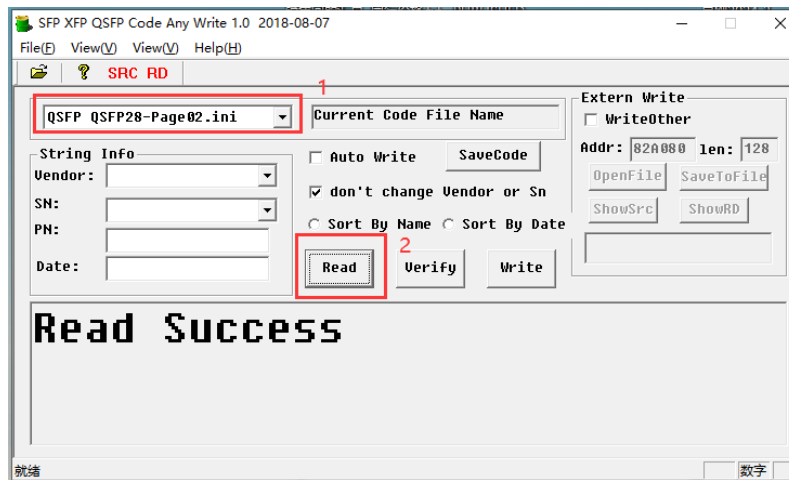
been successfully read. (as shown in Figure 18)

Figure 18

(2) Save Code Page00 Page02

● **Save Page00**

Insert the pins of the QSFP optical module that you want to read into the QSFP socket.

2.1 Select the configuration file corresponding to the QSFP optical module.

For QSFP+/QSFP28/QSFP56 optical transceivers/DAC/AOC, you can use the "QSFP QSFP28-Page00.ini" configuration file to read the code(as shown in Figure 19).

2.2 Click the "Read" (as shown in Figure 19)

2.3 Click the "SaveCode" (as shown in Figure 19)

2.4 Name the code (as shown in Figure 19)

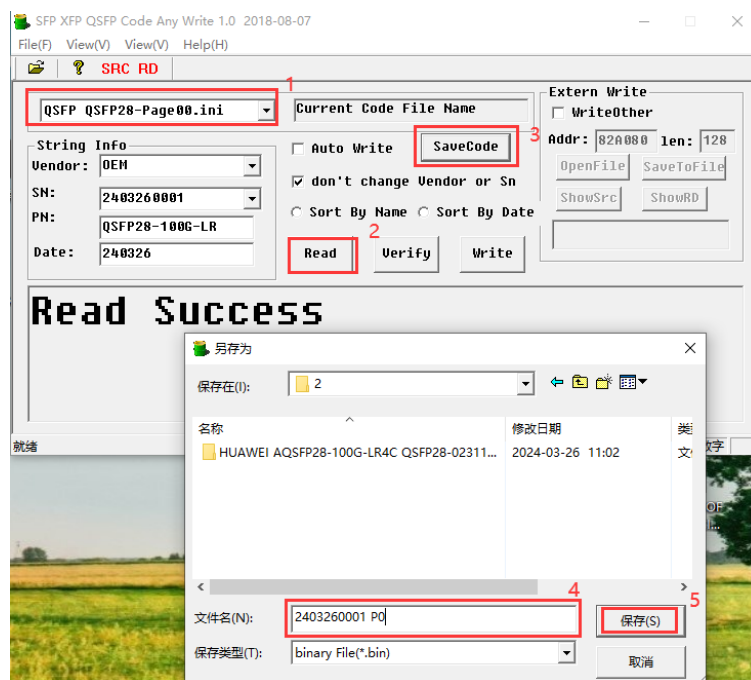2.5 Save the code to your computer (as shown in Figure 19)

Figure 19

● **Save Page02**

2.6 Select the configuration file corresponding to the QSFP optical module, select the "QSFP QSFP28-Page02" configuration file (as shown in Figure 20)

2.2 Click the "Read" (as shown in Figure 20)

2.3 Click the "SaveCode" (as shown in Figure 20)

2.4 Name the code (as shown in Figure 20)

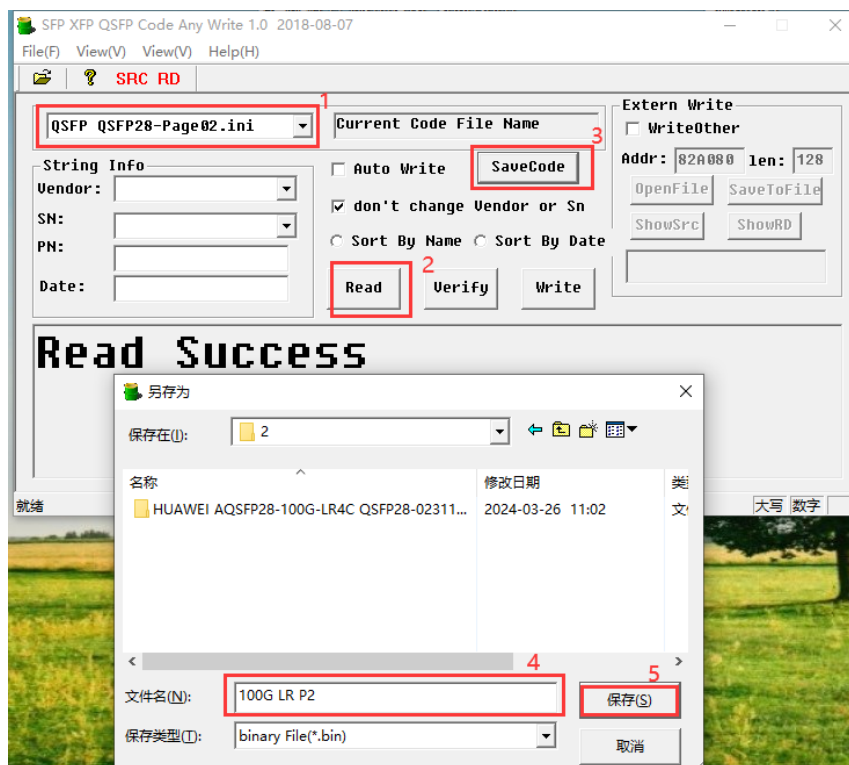2.5 Save the code to your computer (as shown in Figure 20)

Figure 20

(3) Write Code Page00 Page02

For example: Writing the Password "00 00 10 11 " for the CISCO 100G LR 10km Optical module.

Insert the 100G LR 10km optical module that needs to be written into the programming board.

3.1 Select the configuration file "QSFP QSFP28-Page00 00001011" corresponding to the 100G LR optical module with the password "00001011" (as shown in Figure 21)

3.2 Click Or select the menu：File->Select Code Source Foler，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 21)

3.3 Click the "Write"（as shown in Figure 21）

3.4 Wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 22)

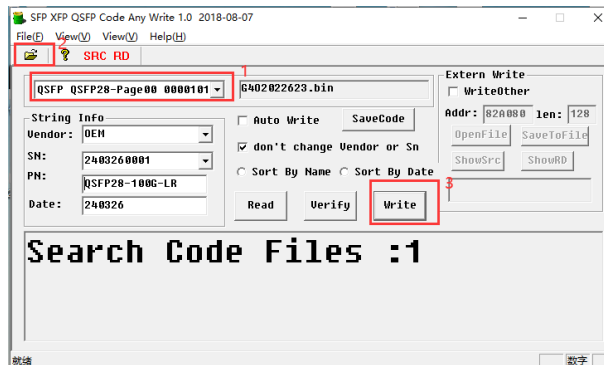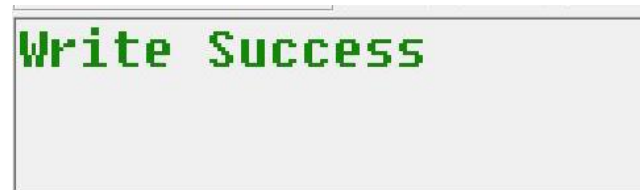Figure 21   Figure 22

- **Write Page02**

3.5 Select the configuration file "QSFP QSFP28-Page02 00001011" corresponding to the 100G LR optical module with the password "00001011" (as shown in Figure 23)

3.6 Click [icon] Or select the menu：File->Select Code Source Folder，select

See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 23)

3.7 Click the "Write"（as shown in Figure 23）

3.8 Wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 24)
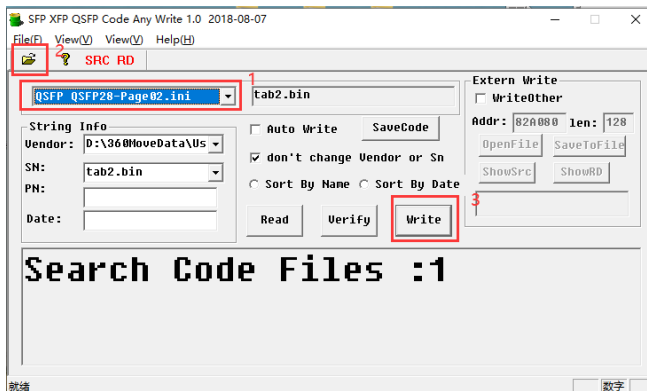
Figure 23   Figure 24

(4) Auto write Code   Page00 Page02

For example: Writing the Password "00 00 10 11 " for the CISCO 100G LR 10km Optical module.

4.1 Select the configuration file "QSFP QSFP28-Page00 00001011" corresponding to the 100G LR optical module with the password "00001011" (as shown in Figure 25)

4.2 Click Or select the menu：File->Select Code Source Folder，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 25)

4.3 Check the "WriteOther" box (as shown in Figure 25)

4.4 Click "OpenFile" and select the Page02 file that needs to be written (as shown in Figure 25)
4.5 Check the "Auto Write" box (as shown in Figure 25)

4.6 Insert the module with the corresponding serial number into the QSFP socket on the programming board.

4.7 Wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 26).
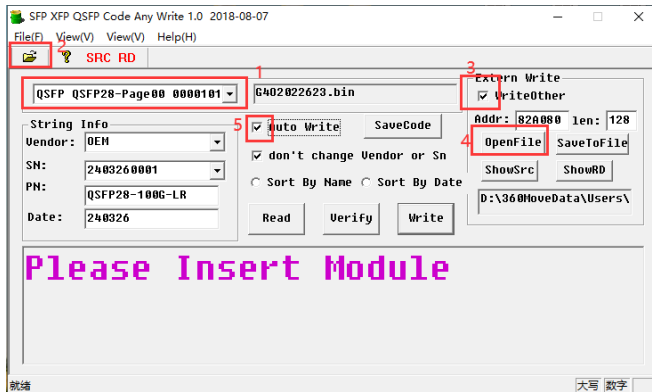
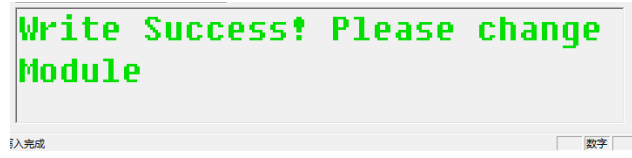4.8 Remove the module and insert the next module.

Figure 25   Figure 26

5.XFP Optical Transceivers Code Reading/Code

Saving/Coding

(1) Read Code Table00 Table02

- **Read Table00**

Insert the pins of the XFP optical module that you want to read into the XFP socket (as shown in Figure 27)

Select the configuration file corresponding to the XFP optical module. For XFP optical modules, you can use the "XFP-Table00" configuration file to read the code. Click the "Read" (as shown in Figure 28). If the display shows "Read Success", it means the Table00 data has been successfully read.
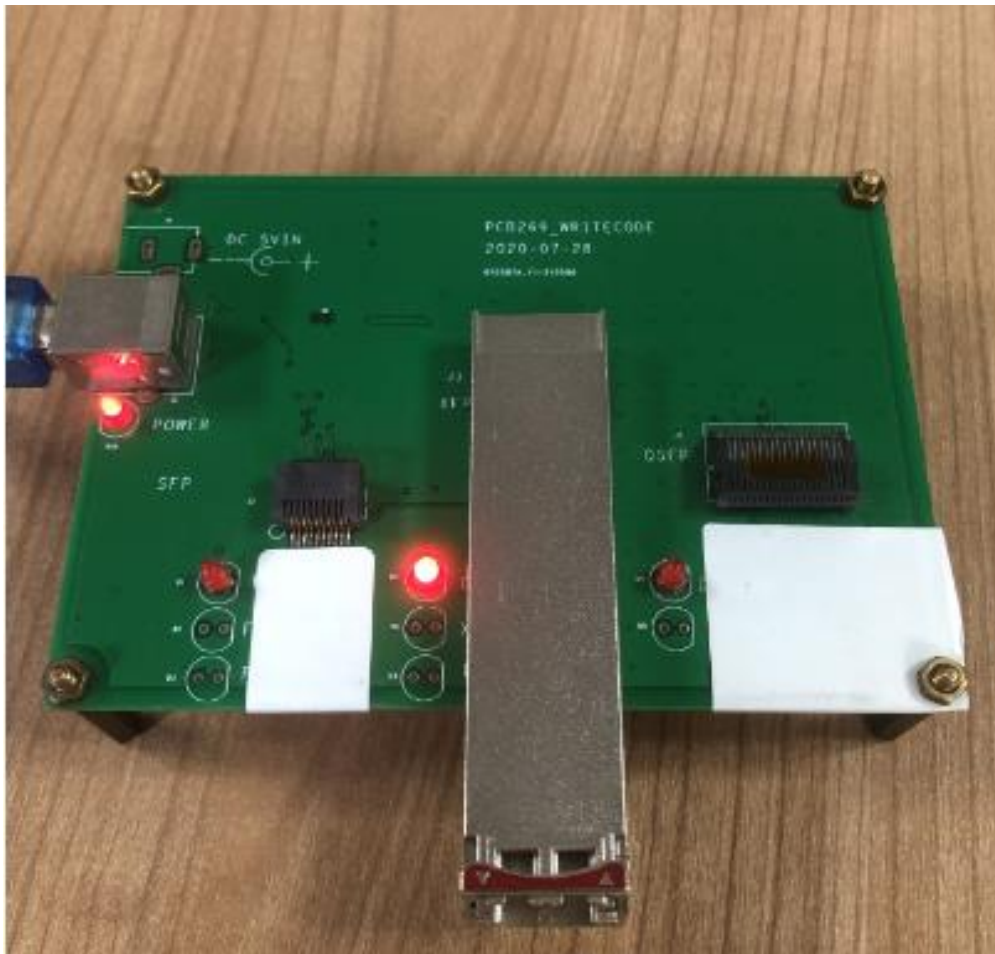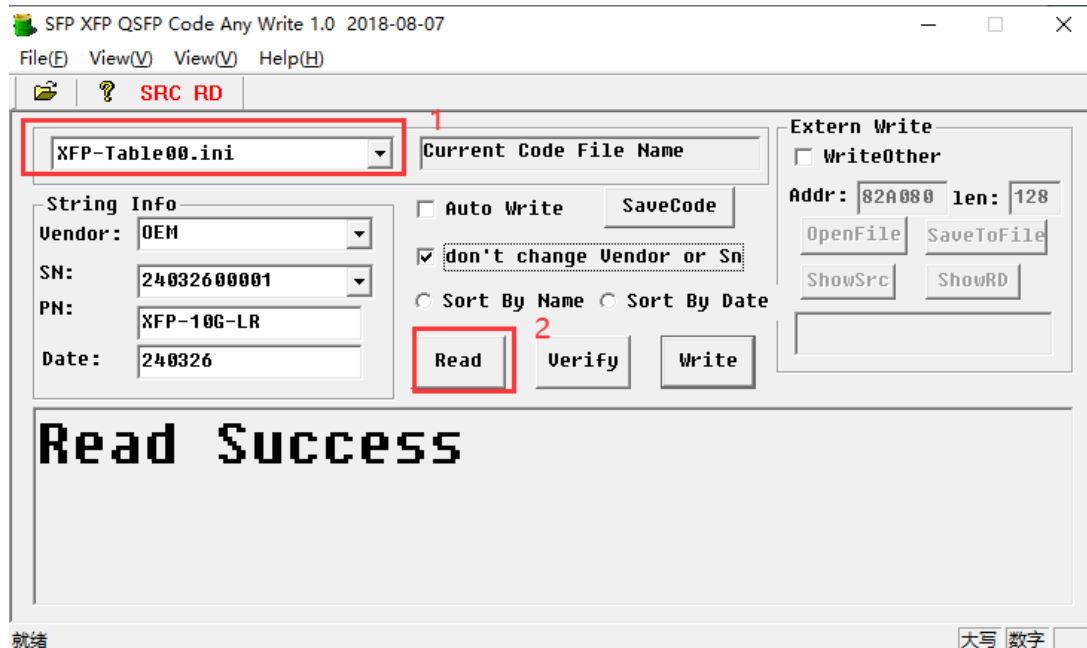
Figure 27

Figure 28

● **Read Table02**

Select the configuration file "XFP-Table02"，click the "Read" , if the display shows "Read Success", it means the Table02 data has been successfully read. (as shown in Figure 29)
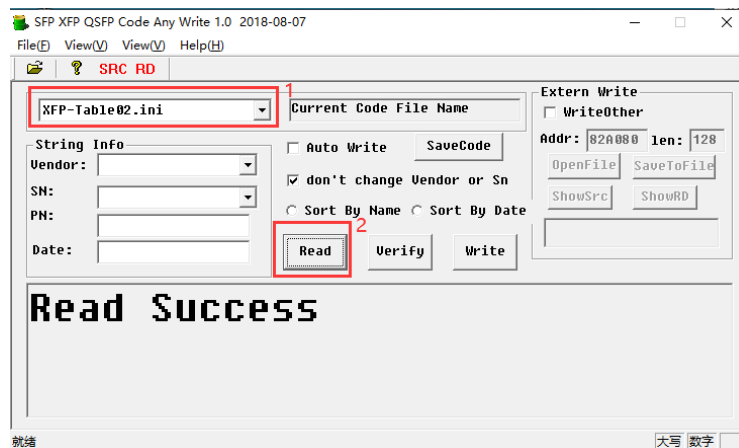

Figure 29

(2) Save Code　Table00 Table02

● **Save Table00 code**

Insert the pins of the XFP optical module that you want to read into the XFP socket.

2.1 Select the configuration file corresponding to the XFP optical module. For XFP optical transceivers, you can use the "XFP-Table00" configuration file to read the code(as shown in Figure 30)

2.2 Click the "Read" (as shown in Figure 30)

2.3 Click the "SaveCode" (as shown in Figure 30)

2.4 Name the code (as shown in Figure 30)

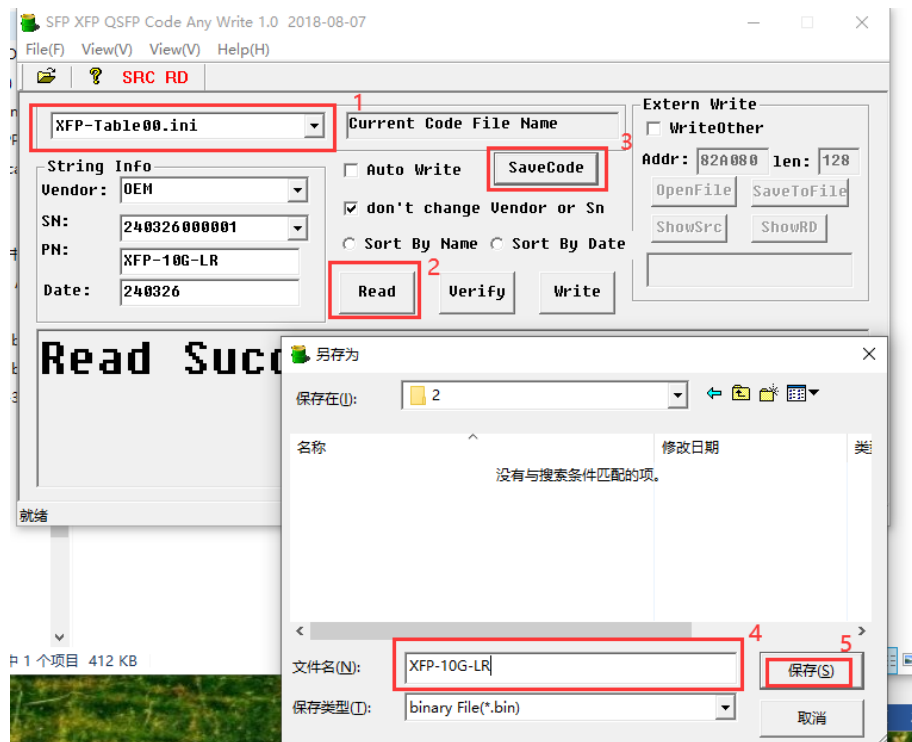2.5 Save the code to your computer (as shown in Figure 30)

Figure 30

- **Save Table02 code**

2.6 Select the configuration file corresponding to the XFP optical module, select the "XFP-Table02" configuration file to read the code(as shown in Figure 31)

2.7 Click the "Read" (as shown in Figure 31)

2.8 Click the "SaveCode" (as shown in Figure 31)

2.9 Name the code (as shown in Figure 31)

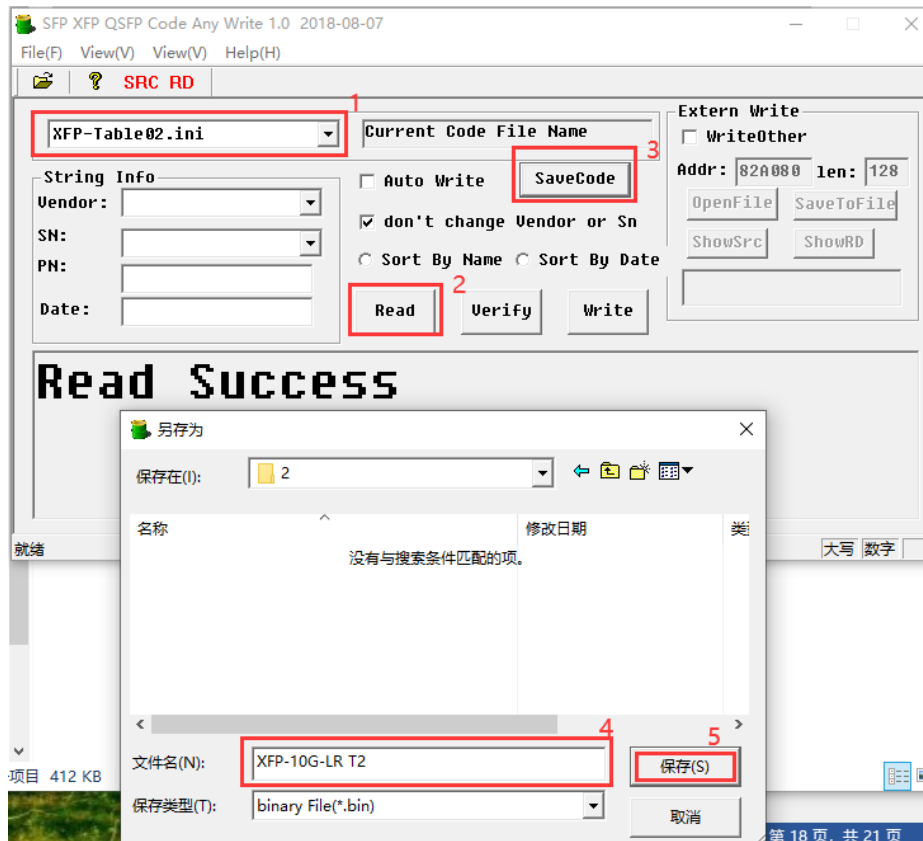2.10 Save the code to your computer (as shown in Figure 31)

Figure 31

(3) Write Code Table00 Table02

For example: Writing the Password "00 00 10 11 " for the CISCO XFP 10G LR 10km Optical module.

Insert the XFP 10G LR 10km optical module that needs to be written into the programming board.

3.1 Select the configuration file "XFP-Table00 00001011" corresponding to the 100G LR optical module with the password "00001011" (as shown in Figure 32)

3.2 Click [image] Or select the menu：File->Select Code Source Folder，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 32)

3.3 Click the "Write"（as shown in Figure 32）

3.4 Wait until the prompt "Write Success" is displayed, indicating that the

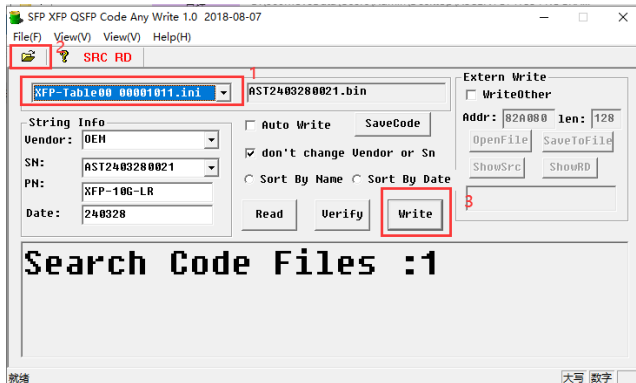programming of the module is complete (as shown in Figure 33)

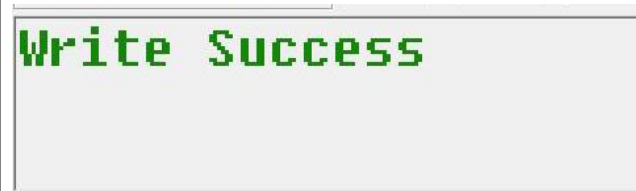Figure 32   Figure 33

● **Write Table02**

3.5 Select the configuration file "XFP-Table02-00001011" corresponding to the 100G LR optical module with the password "00001011" (as shown in Figure 34)

3.6 Click [icon] Or select the menu：File->Select Code Source Folder，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 32)

3.7 Click the "Write"（as shown in Figure 34）

3.8 Wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 35)

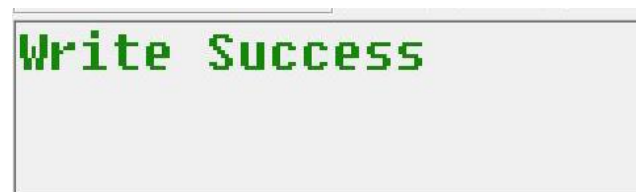Figure 34   Figure 35

(4) Auto write Code   Table00 Table02

For example: Writing the Password "00001011 " for the CISCO XFP 10G LR 10km Optical module.

4.1 Select the configuration file "XFP-Table00 00001011" corresponding to the 10G LR optical module with the password "00001011" (as shown in Figure 36)

4.2 Click 🗁 Or select the menu：File->Select Code Source Folder，select See below,choose the folder where you saved the codes, Click OK. (as shown in Figure 36)

4.3 Check the "WriteOther" box (as shown in Figure 36)

4.4 Click "OpenFile" and select the Table02 file that needs to be written (as shown in Figure 36)

4.5 Check the "Auto Write" box (as shown in Figure 36)

4.6 Insert the module with the corresponding serial number into the XFP socket on the programming board

4.7 Wait until the prompt "Write Success" is displayed, indicating that the programming of the module is complete (as shown in Figure 37)
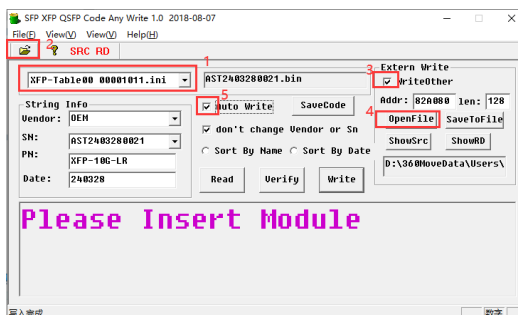
4.8 Remove the module and insert the next module
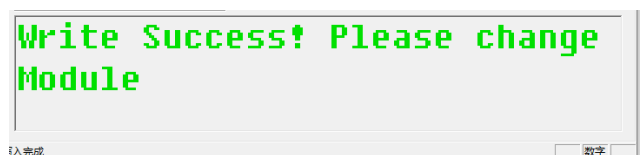

Figure 36   Figure 37

5. Custom Configuration File Passwords

If you need to customize the configuration file password, for example, if the password for programming an SFP module is "12345678", you will need to modify the corresponding configuration file to change the password to "12345678".

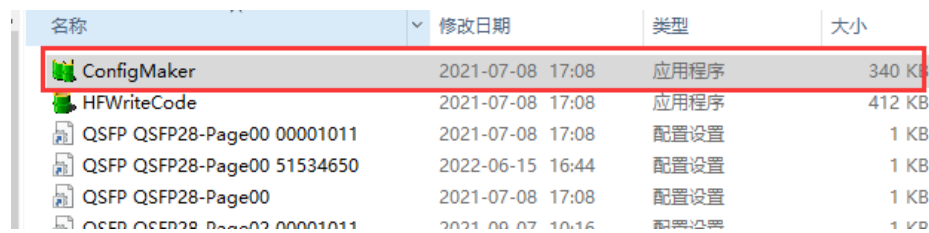1. Click to open the "ConfigMaker" (as shown in Figure 38)

Figure 38

2. Click the [icon] Or select the menu ：File->Open(O) >"SFP-A0 00001011"configuration file (as shown in Figure 39)
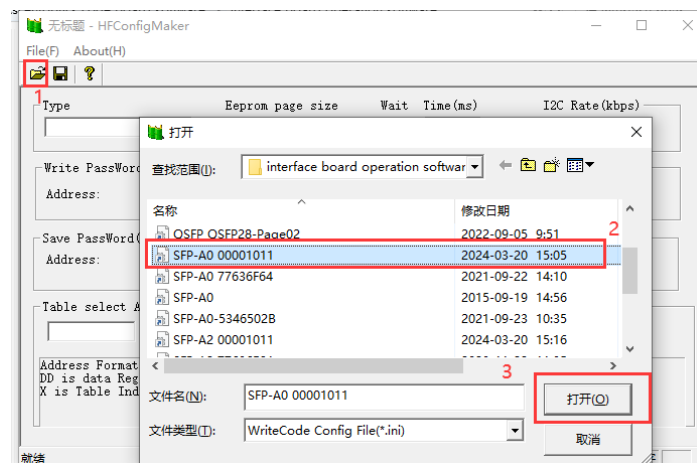

Figure 39

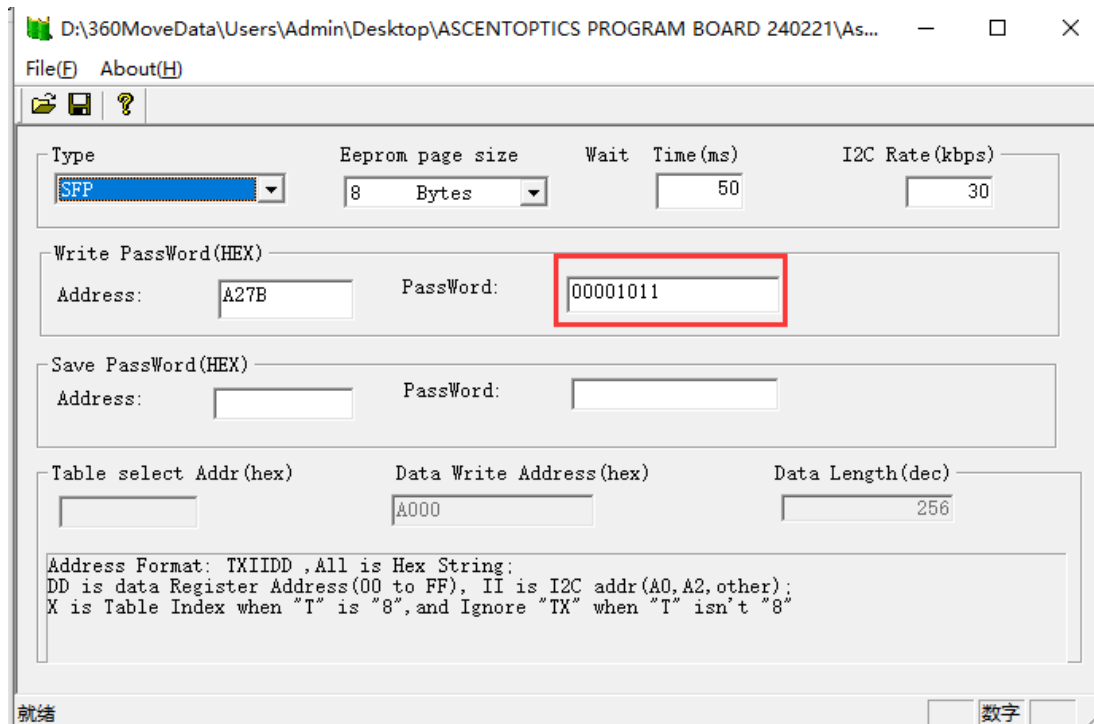3. Change the PassWord from "00001011" to "12345678" (as shown in Figure 40)

Figure 40

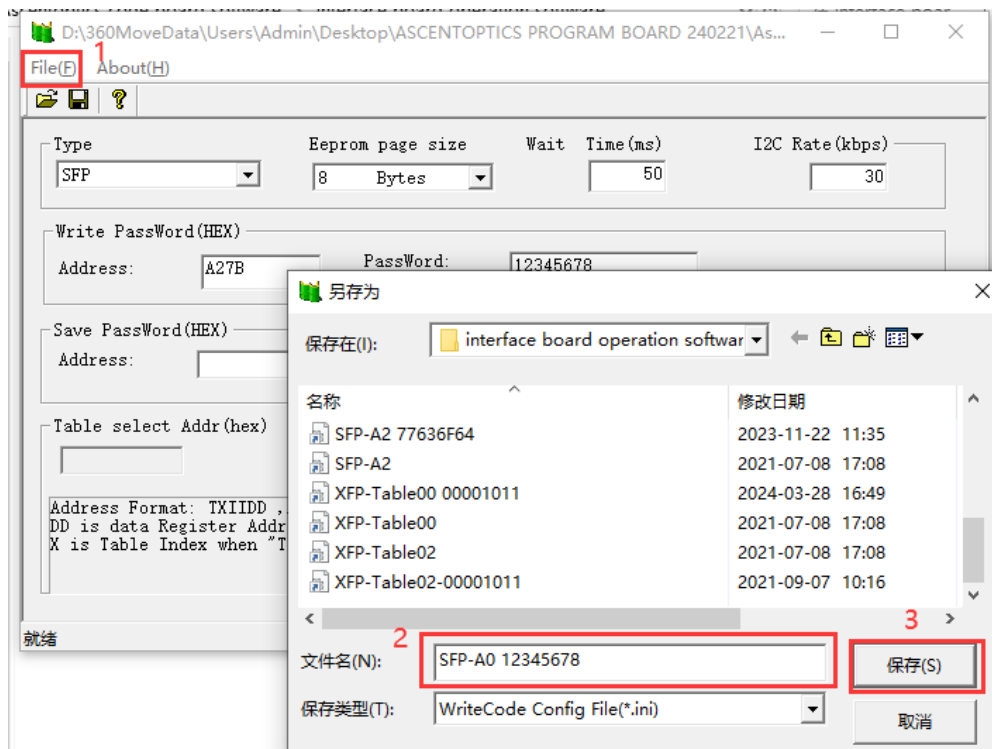4. Finally Click the File>Save As(A) >Rename>Store (as shown in Figure 41)

Figure 41