

Firmware and DDC Instruction

Take 27B1H for example

1 F/W Upgrade SOP

1.1 Materials list



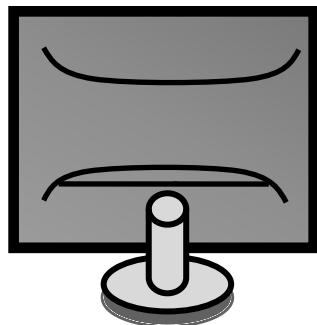
ISP JIG: 715GT089-B



HDMI cable



PC

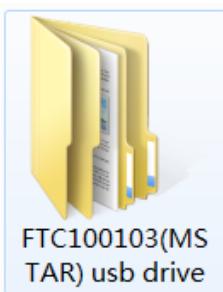


Monitor

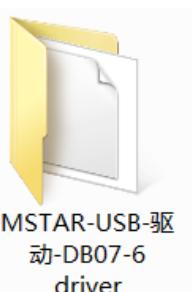


USB cable

TPV P/N: 089G1758 X



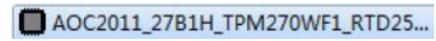
USB port driver



MSTAR driver

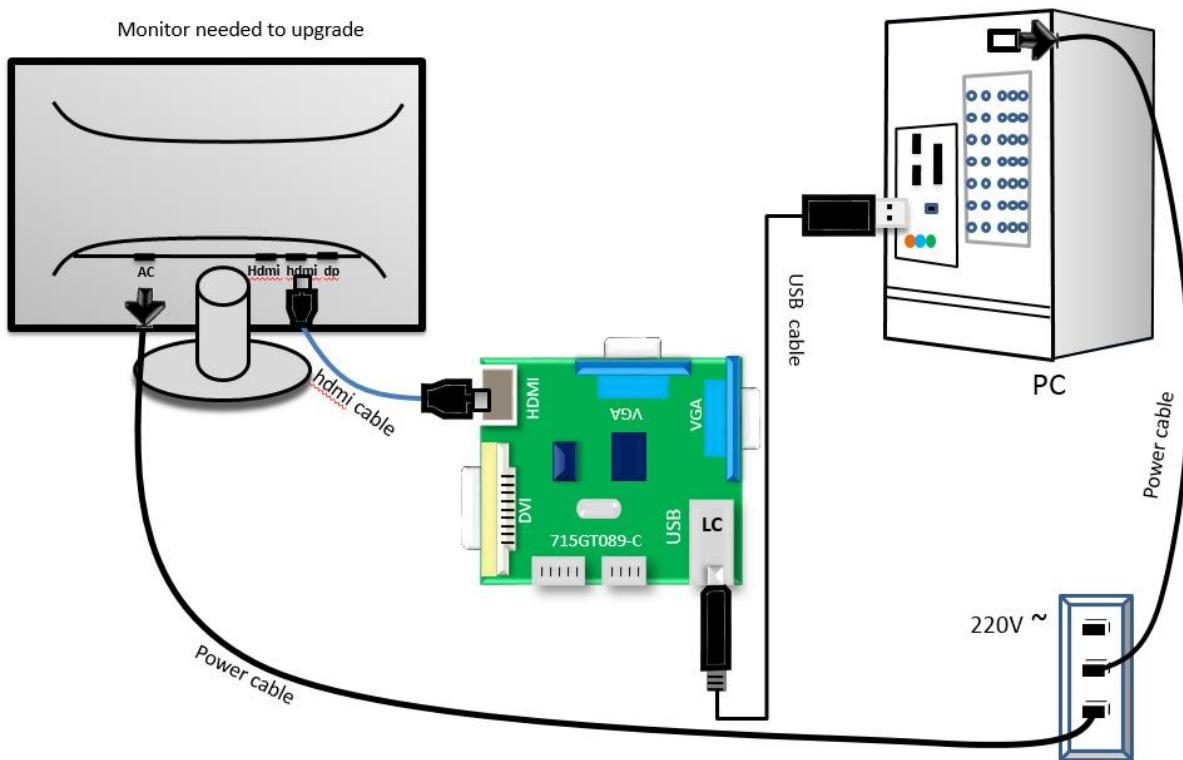


ISP tool: V4.5.183



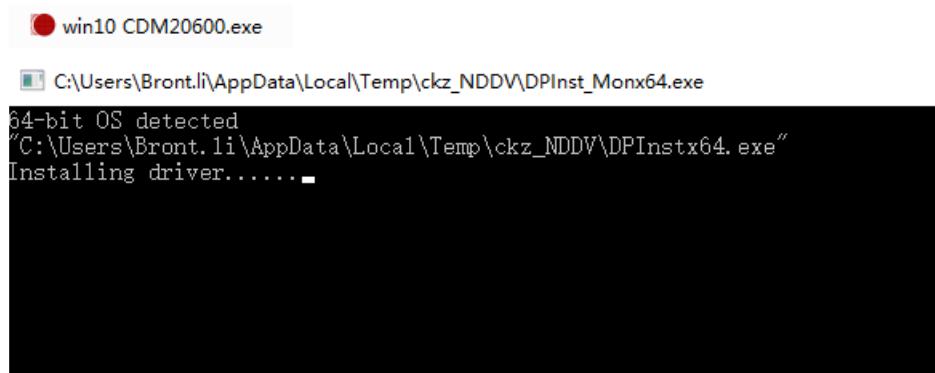
New F/W

1.2 Connection

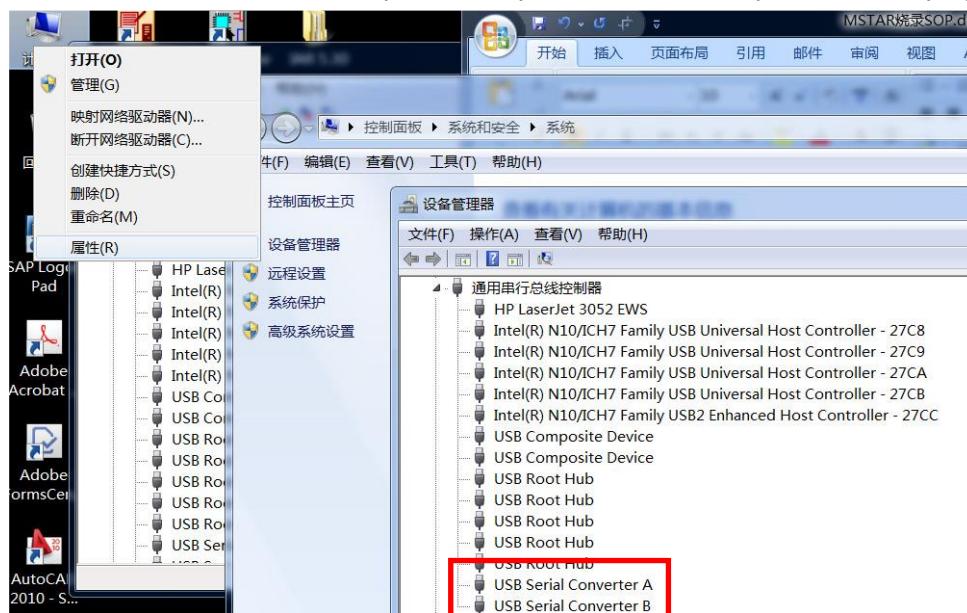


1.3 Install USB driver.

If you use this ISP board first time, you need to install mstar driver .



After installation the USB serial port driver, please to check the port. Look the properties of "my Computer".

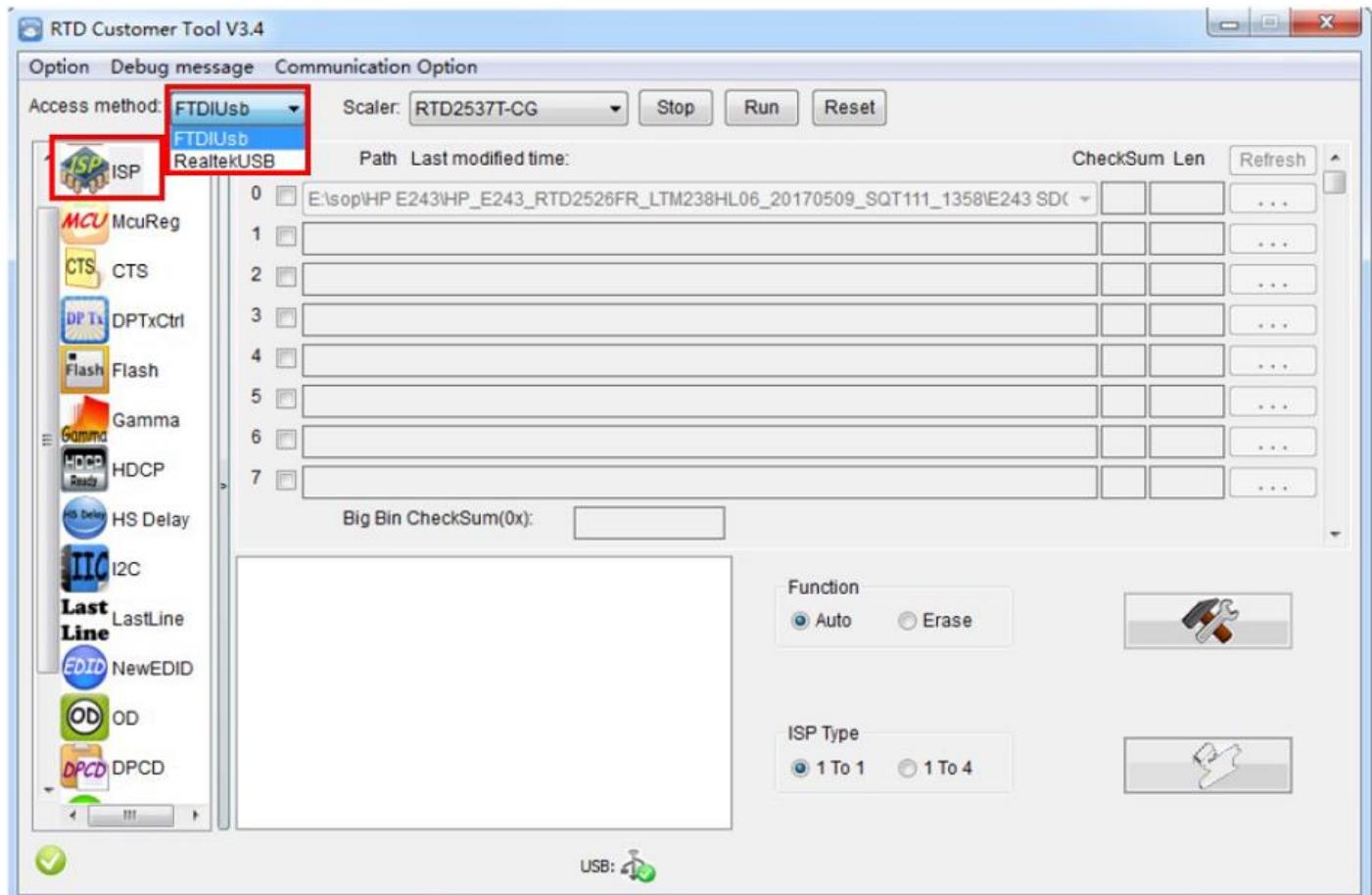


1.4 Update the Software.

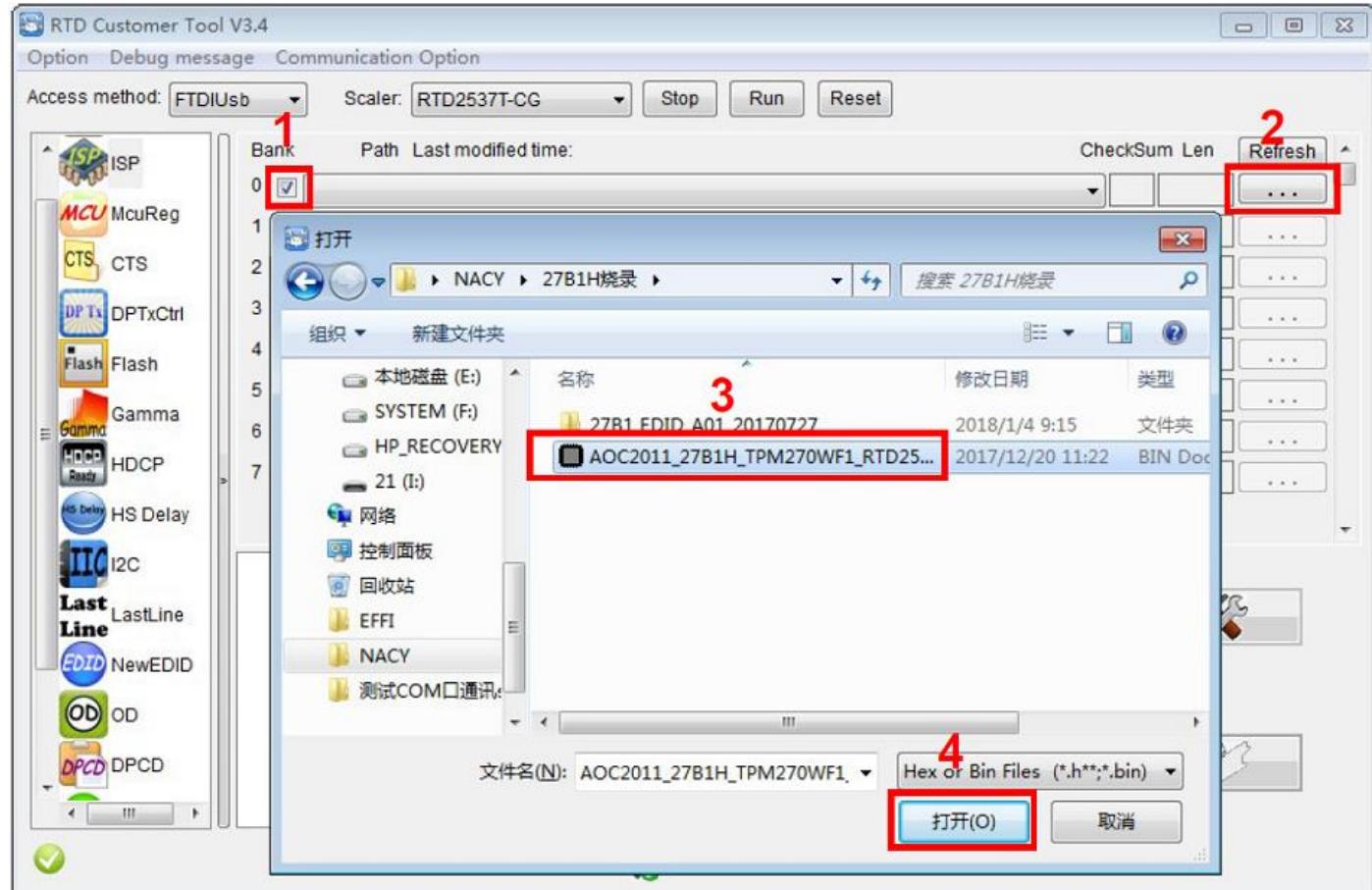


1.4.1 Double-click `RTDTool.exe` to run the ISP tool. Choose the FTDIUSB communication way.

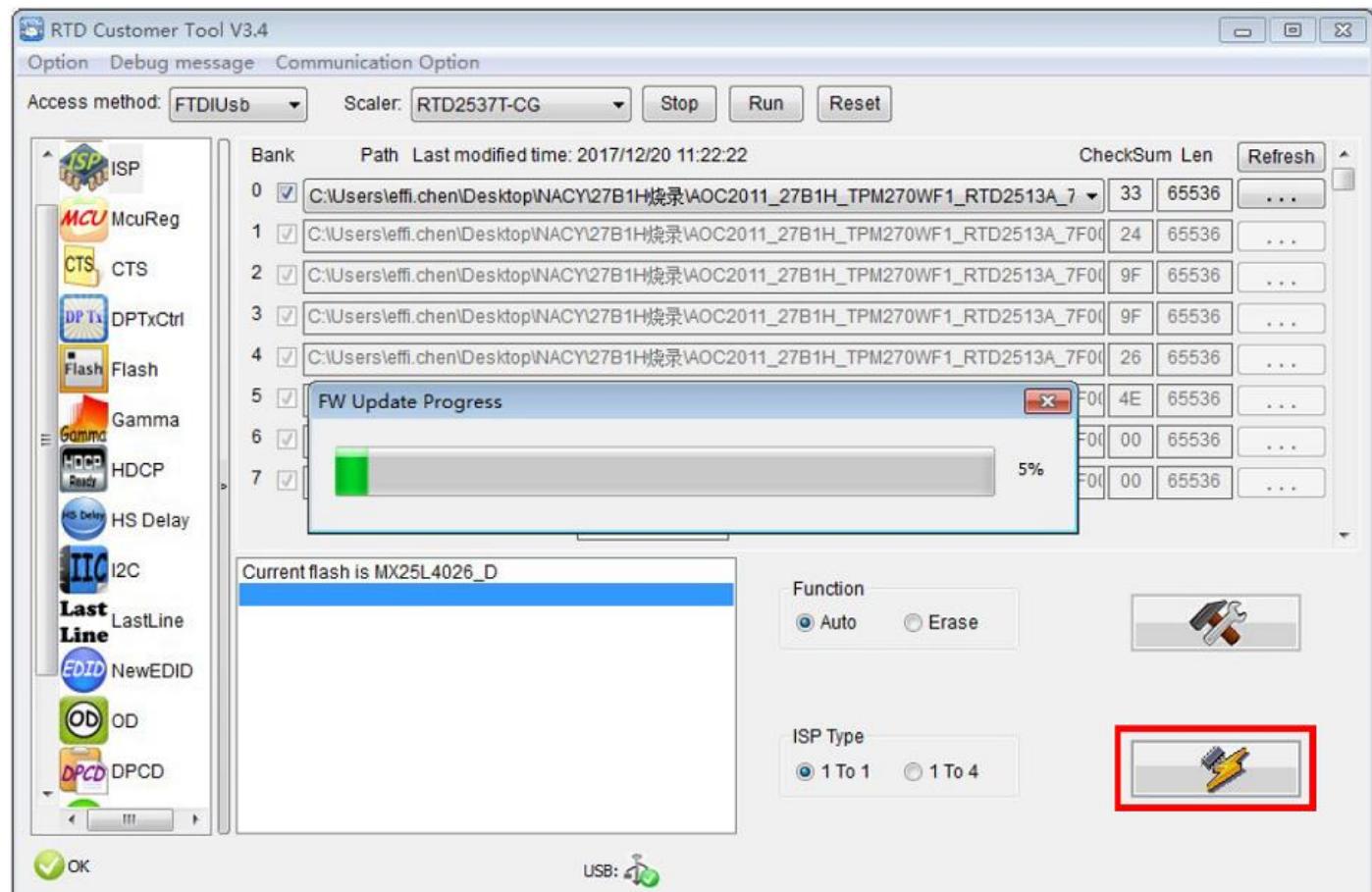
Note: Must to install driver firstly



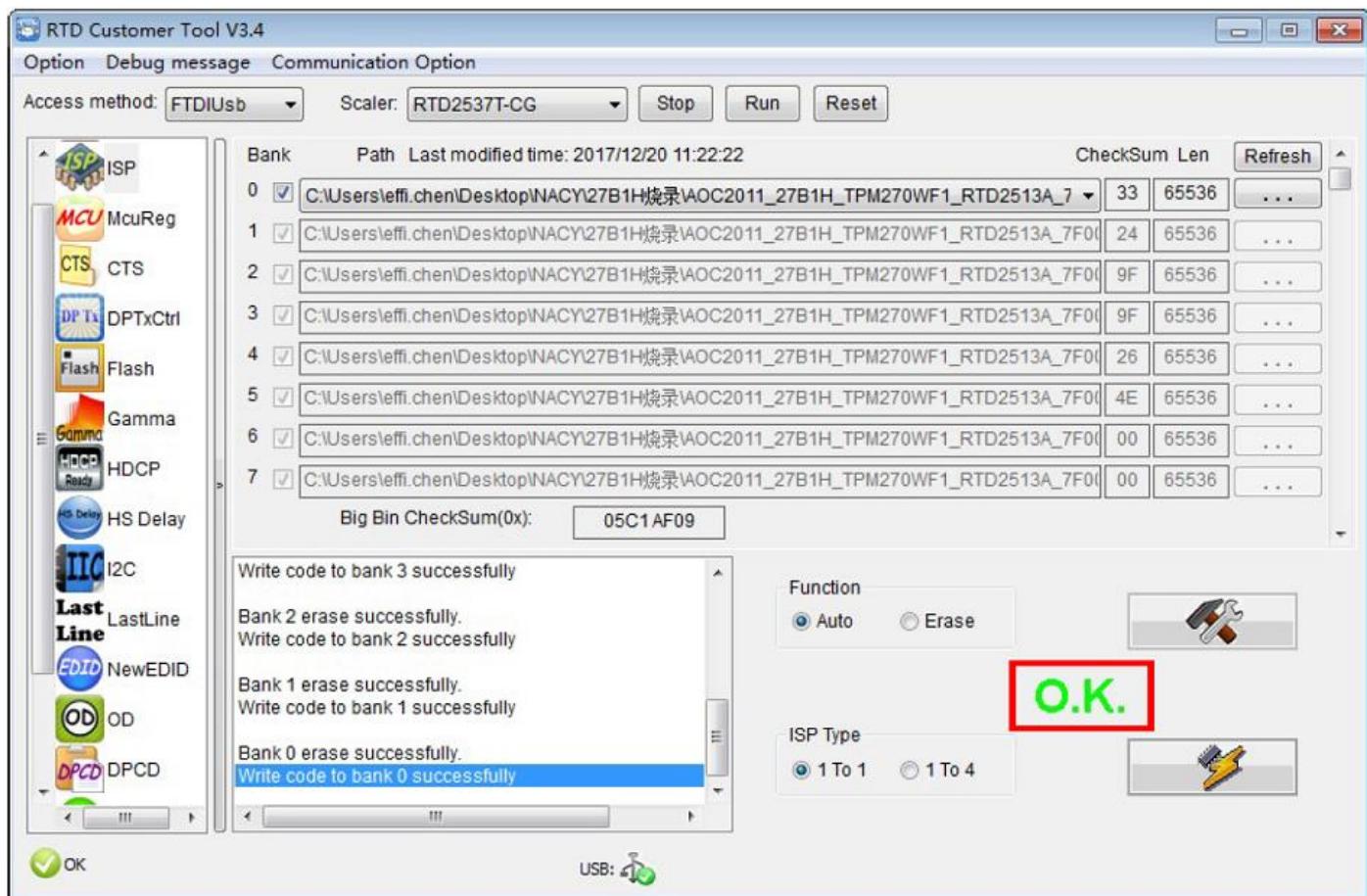
1.4.2 Load the F/W you want to upgrade.



1.4.3 Click  to start programming.



1.4.4. After about 3 minutes, there will pop up message as below figure which promotes the upgrade successful..



1.5. Check the FW version after upgrade.

Check in the factory menu.

(1) Connect source to monitor, and turn it on.

(2) Press "menu" key and AC on simultaneously. when the screen lights, release the "menu" and then press "menu" again to open below menu and select "F" to open factory menu.



```

22B1H 20171109 V002
Auto Color
Gain R 1315G 1315B 1315
Offset R 2036G 2036B 2036

Cool R 106 G 113 B 128
Bri 90 Con 50

Normal R 120 G 124 B 128
Bri 90 Con 50

Warm R 128 G 128 B 128
Bri 90 Con 50

sRGB R 128 G 128 B 128
Bri 90 Con 50

Spread spectrum
Freq 40 Amp 20

DFM Off
BurnIn Off

MST T5880T9-8
Panel On 0
TPM215HW01-DAT03
Logo On

```

Check this
F/W version.

(3) If the version is right, please do autocolor in factory menu, choose to“autocolor” and click“menu”,when appear the word “pass”,it's seems that autocolor IS OK.

```

22B1H 20171109 V002
Auto Color Pass
Gain R 1277G 1290B 1356
Offset R 2036G 2036B 2036

Cool R 106 G 113 B 128
Bri 90 Con 50

Normal R 120 G 124 B 128
Bri 90 Con 50

Warm R 128 G 128 B 128
Bri 90 Con 50

sRGB R 128 G 128 B 128
Bri 90 Con 50

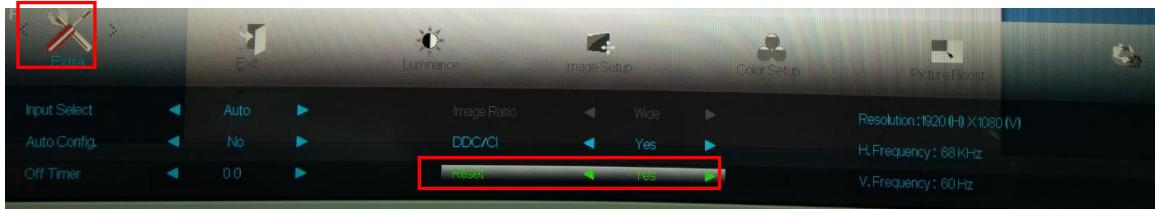
Spread spectrum
Freq 40 Amp 20

DFM Off
BurnIn Off

MST T5880T9-8
Panel On 0
TPM215HW01-DAT03
Logo On

```

(4) please do factory reset in user menu re-upgrade F/W as the above steps.



(5)Factory reset will turn off “Burn in” mode which screen color switches among red, green, blue and black

2 EDID writing SOP

Take 243B1 for example.

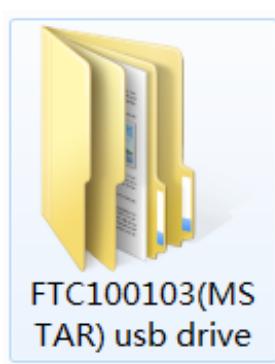
2.1 Materials list



HDMI cable



USB cable



FTC100103(MS
TAR) usb drive

TPV P/N: 089G1758 X

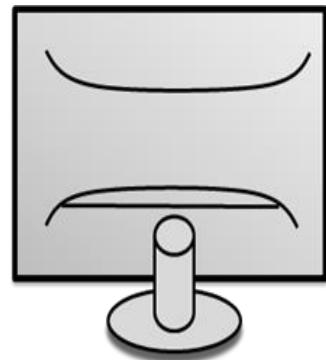
USB port driver



ISP JIG: 715GT089-B



PC



Monitor



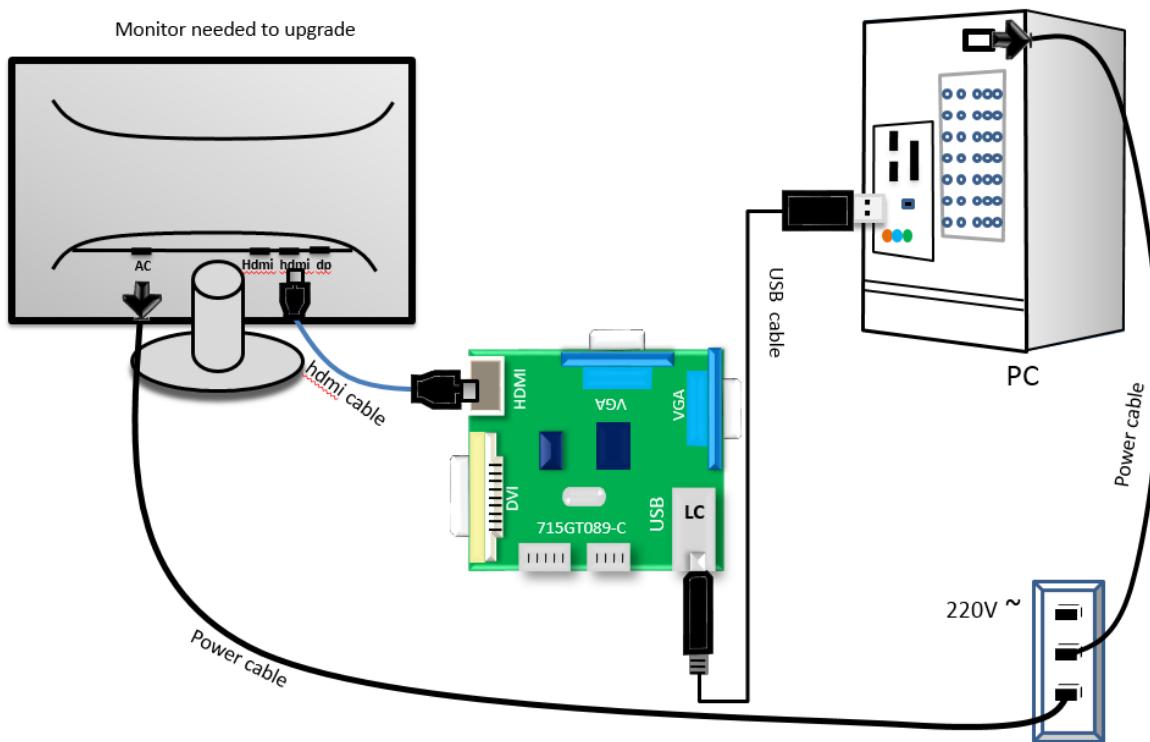
TPVDDC_V066_
20170512.exe

ISP tool



EDID

2.2 Connection(DC on the monitor)



2.3 Install USB driver.

2.4 Prepare the EDID written.

2.4.1 Change the EDID files name as below rule.

Analog EDID → WA.dat HDMI EDID → WH.dat

2.4.2 Copy these files to one folder named as 22B1H EDID which must contains "config.ini" file.



2.4.3 Copy 22B1H EDID to DDC folder and put DDC and ISP tool together.



2.4.4 Setting the Config as below.



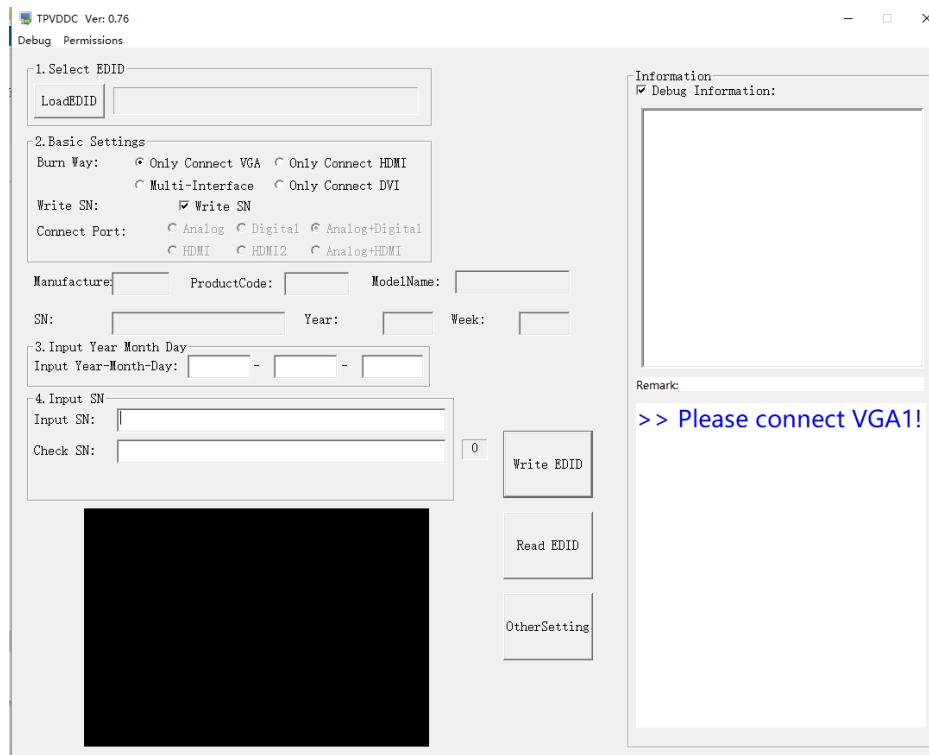
```
Config.ini - 记...
[TPVDDCD1g]
PokavokeFlag=1
Language=1
CELL1=0
ConnectSFISFlag=1
UserID=32626
Board=1
[Setting]
CheckYear=2017
```

2.5 Run the ISP tool

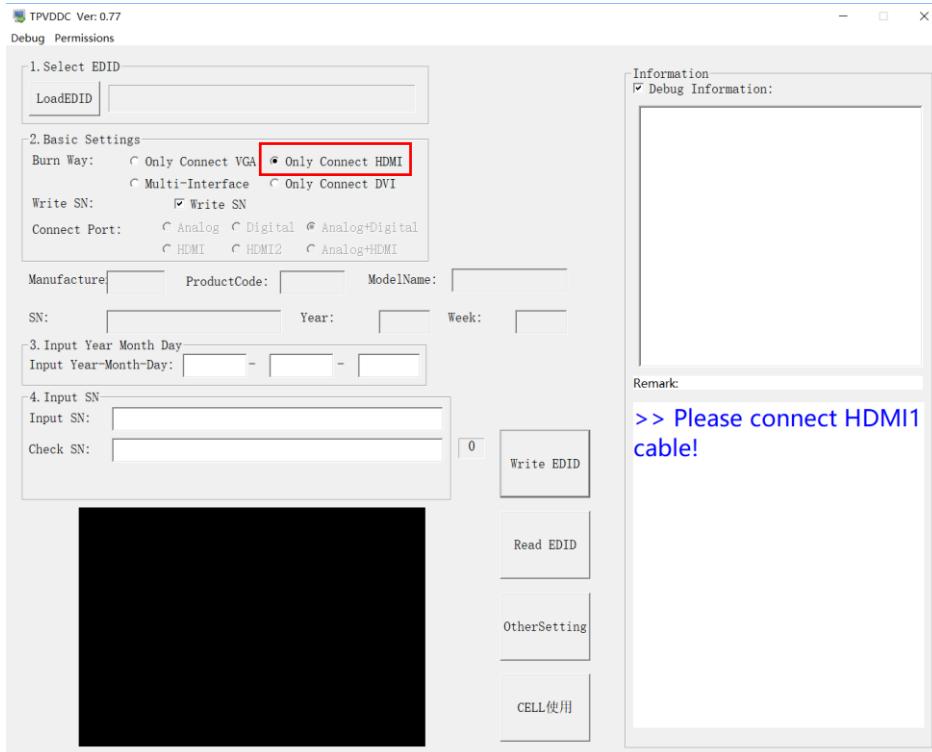
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.



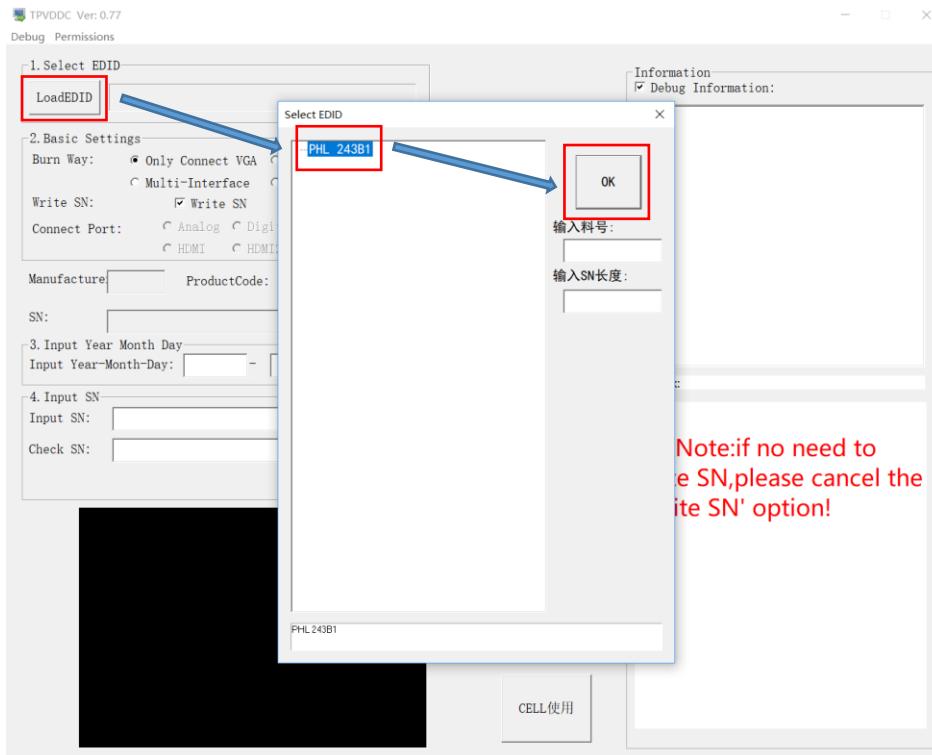
2.5.1 Double-click the icon to open the tool.



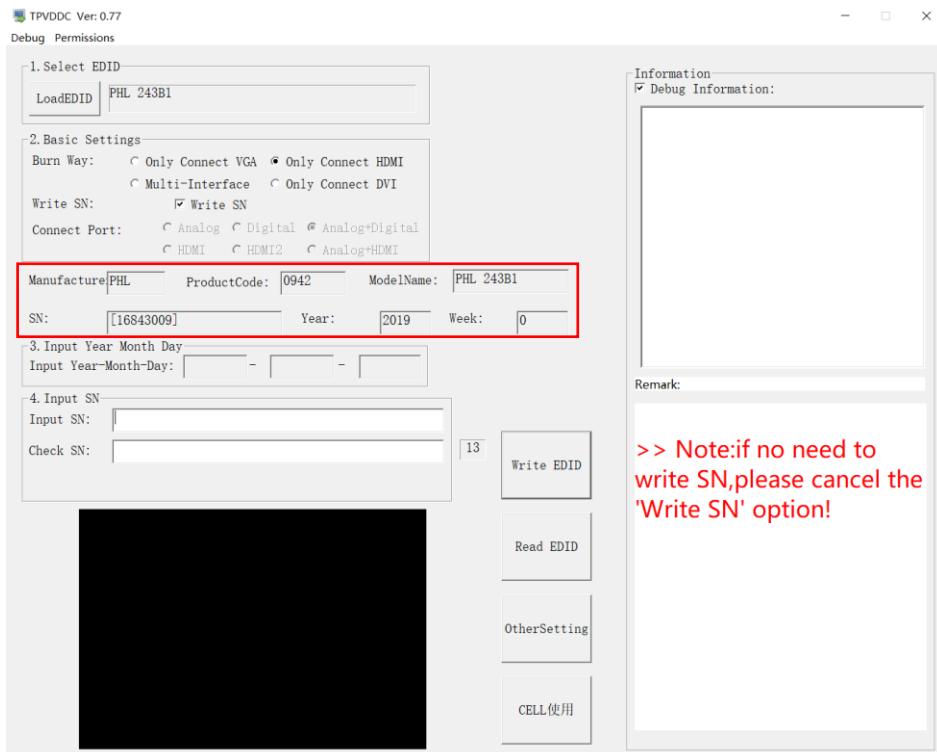
2.5.2 Select Only Connect HDMI.



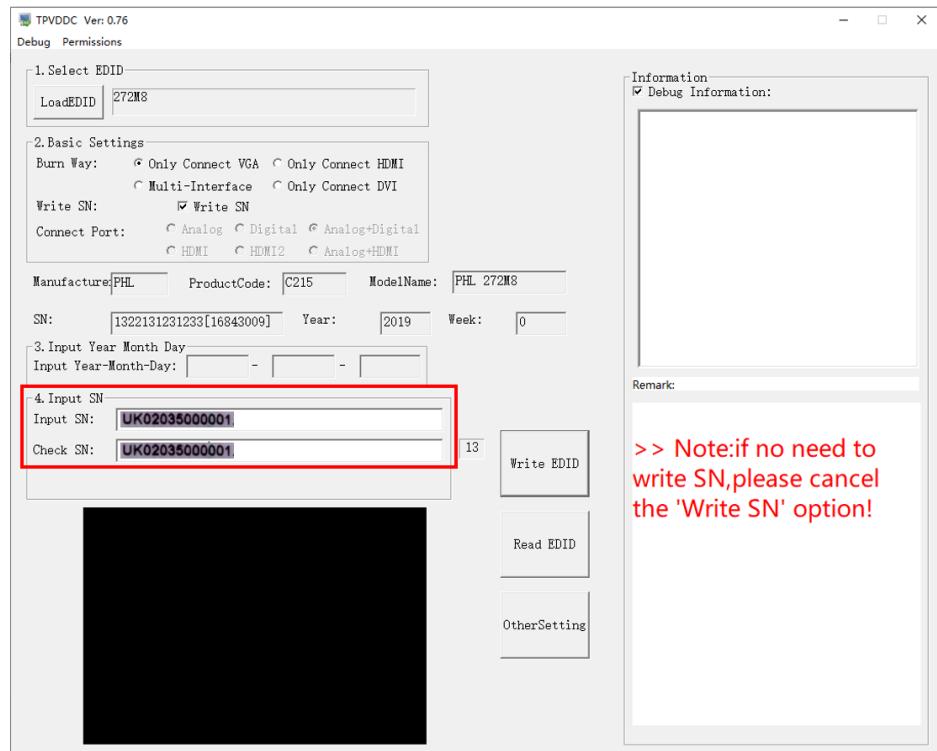
2.5.3 Select the EDID folder.



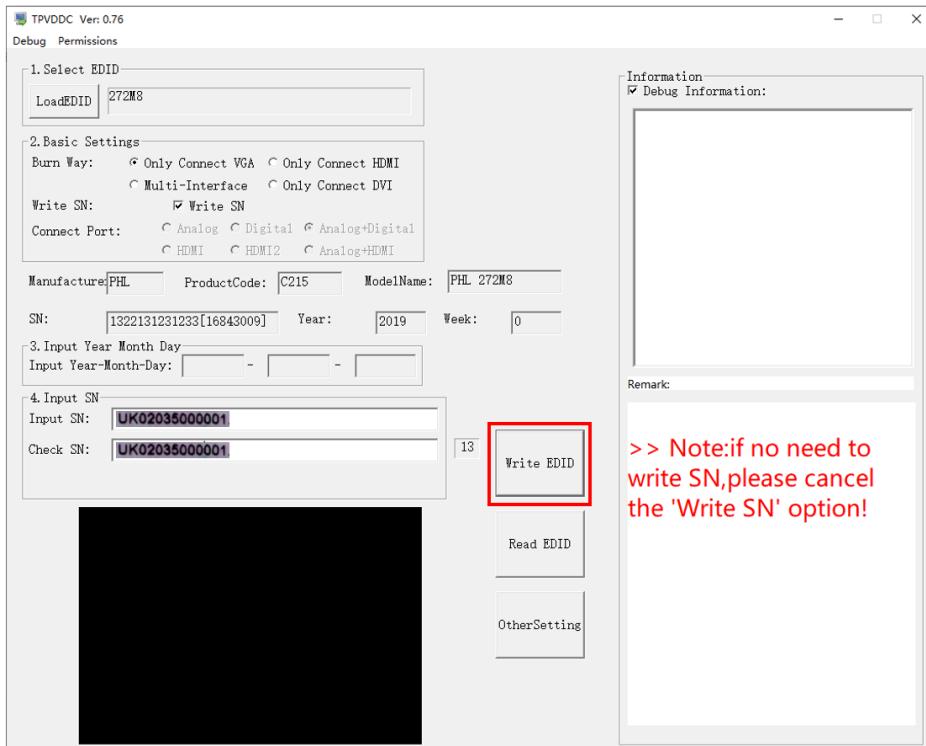
2.5.4 Load EDID successful.



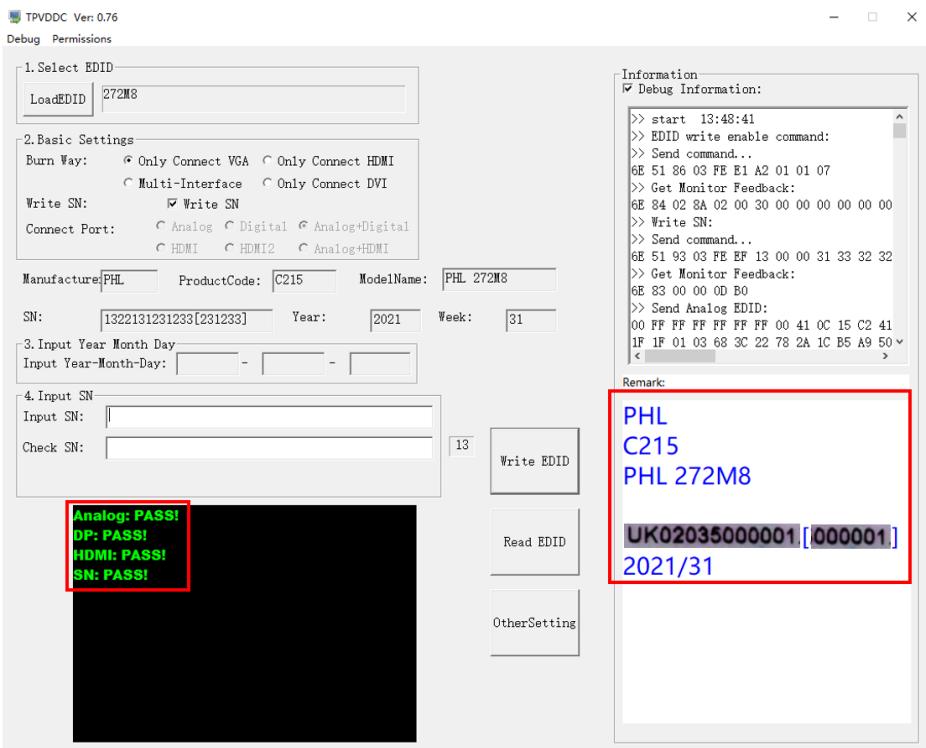
2.5.5 Type in S/N of the monitor.



2.5.6 Click “Write EDID” to start writing.



2.5.7 When the green “PASS” appear, the process is finished.



2.5.8 After writing the EDID pass, you must read the EDID to ensure the EDID data had been write into the monitor. Choose one of the port to read.

1. If it appears all “00” when read the EDID data, you need reconnect the ISP tool or install the the driver of the ISP tool again.

Note: While reading the DP EDID data, you must light up the monitor or connect a signal to the monitor. If after doing this setp the EDID still shows all “00”, but others port can show the EDID data, the EDID data of DP uaually include in FW, can't read out it.

2. If it appears all “FF”, it shows that the EDID data of the Main board is empty, you must writing the EDID again.

6. Troubleshooting.

6.1. Can't write!

(1) AC on the monitor and turn on it.(Restart the monitor)

(2)Take apart the monitor and connect the 7pin of EEPROM to GND to diable write protection then write EDID one by one.

(3) Set the Burn in on last to try again.