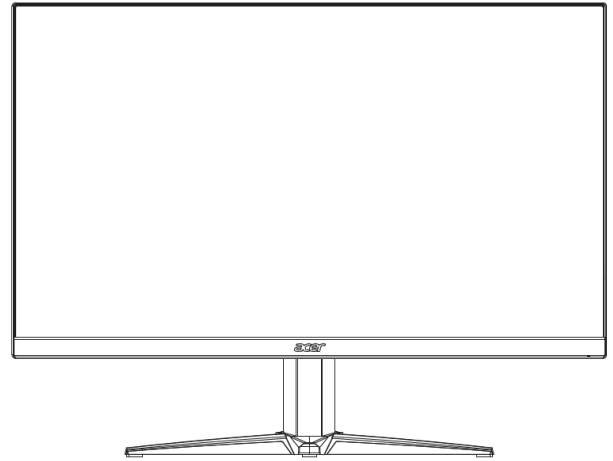


Service
Service
Service



Acer Monitor VG280K
**LIFECYCLE EXTENSION
GUIDE**

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Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all ACER Company Equipment. The service procedures recommended by ACER and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. ACER could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, ACER has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by ACER must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected. Hereafter throughout this manual, ACER Company will be referred to as ACER.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from ACER. ACER assumes no liability, express or implied, arising out of any unauthorized modification of design.

Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

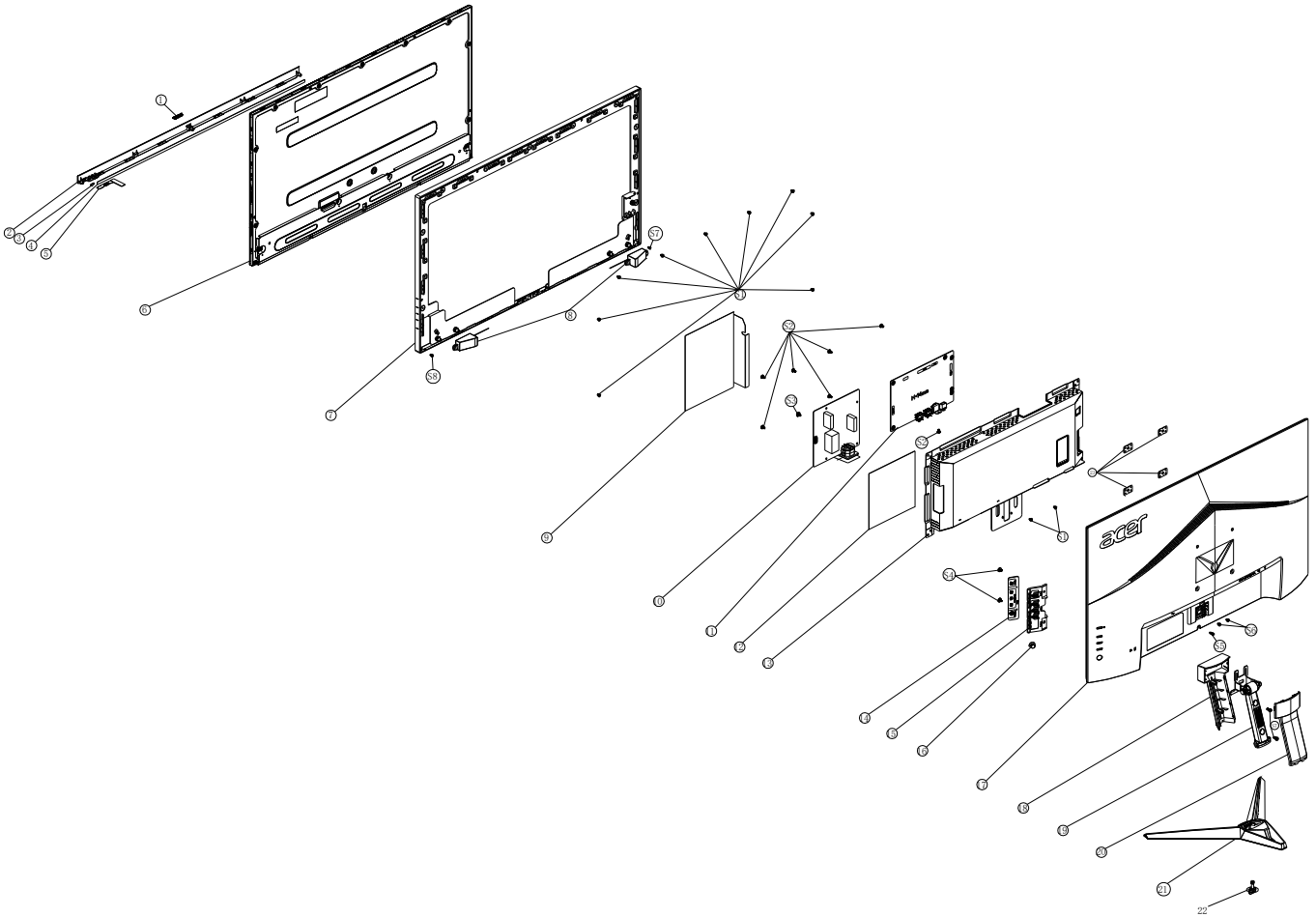
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)¹.

1. Exploded view diagram with list of items



Item	TPV Part No.	Description	ACER Part No.
5	LEPCLQA2	LED BOARD	N/A
6	750GBN280DCB12N000	PANEL	N/A
10	PLPCHI541KE3B	ADAPTER BOARD	N/A
11	CBPCJE2C0Q1	MAIN BOARD	N/A
14	KEPCLQA6	KEY BOARD	N/A
	395GLM5151T563COAX	COAXIAL CABLE 51P-51P 320MM(MB TO PANEL)	

2. Mechanical Instruction

Tools Required

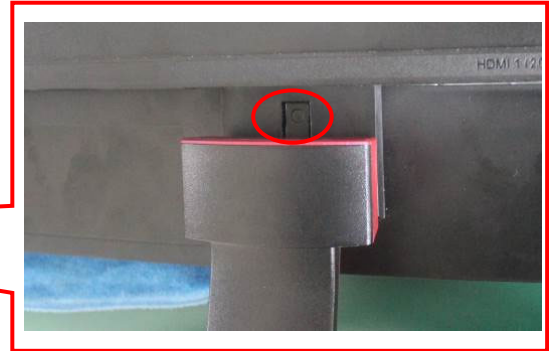
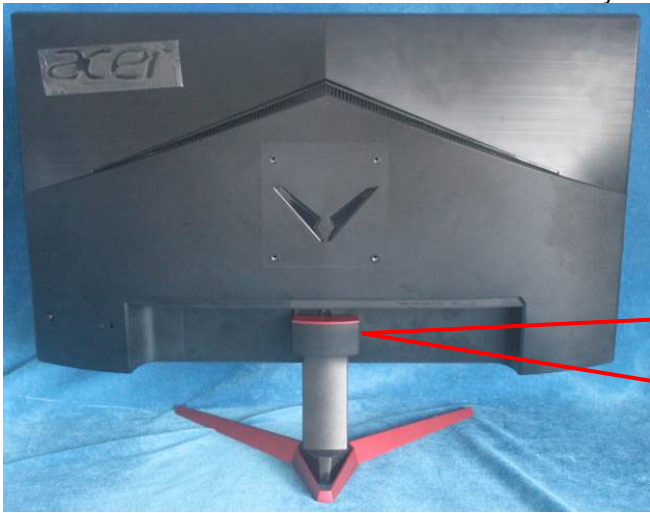
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

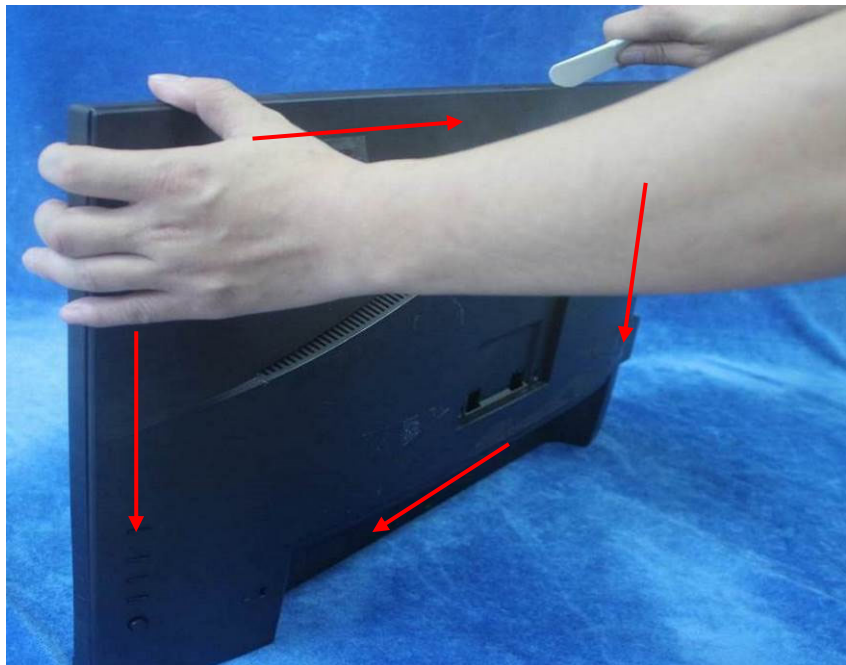
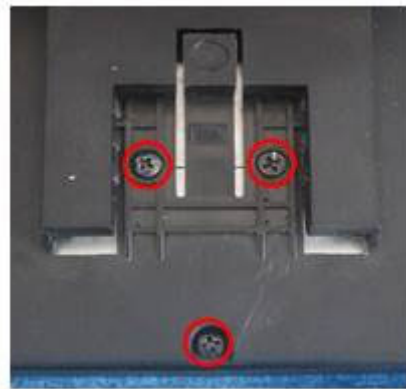
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

2.1 Disassembly Procedures:

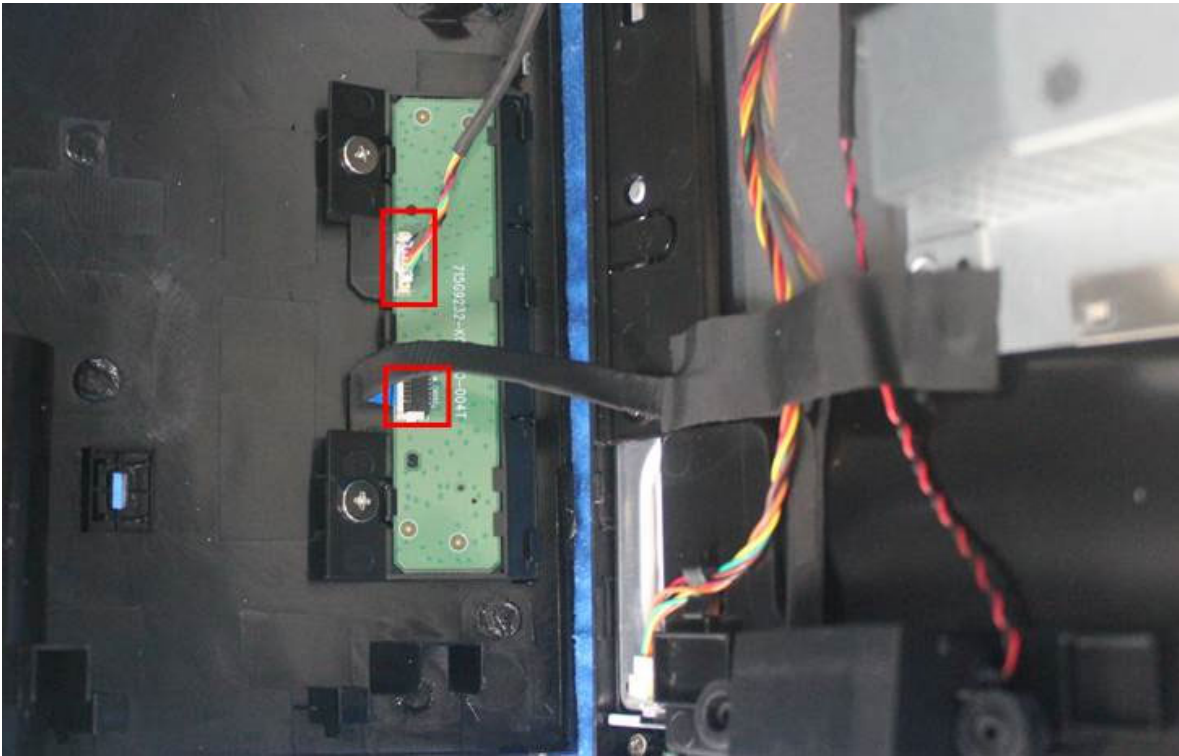
S1. Push the button to remove the stand base ass'y.



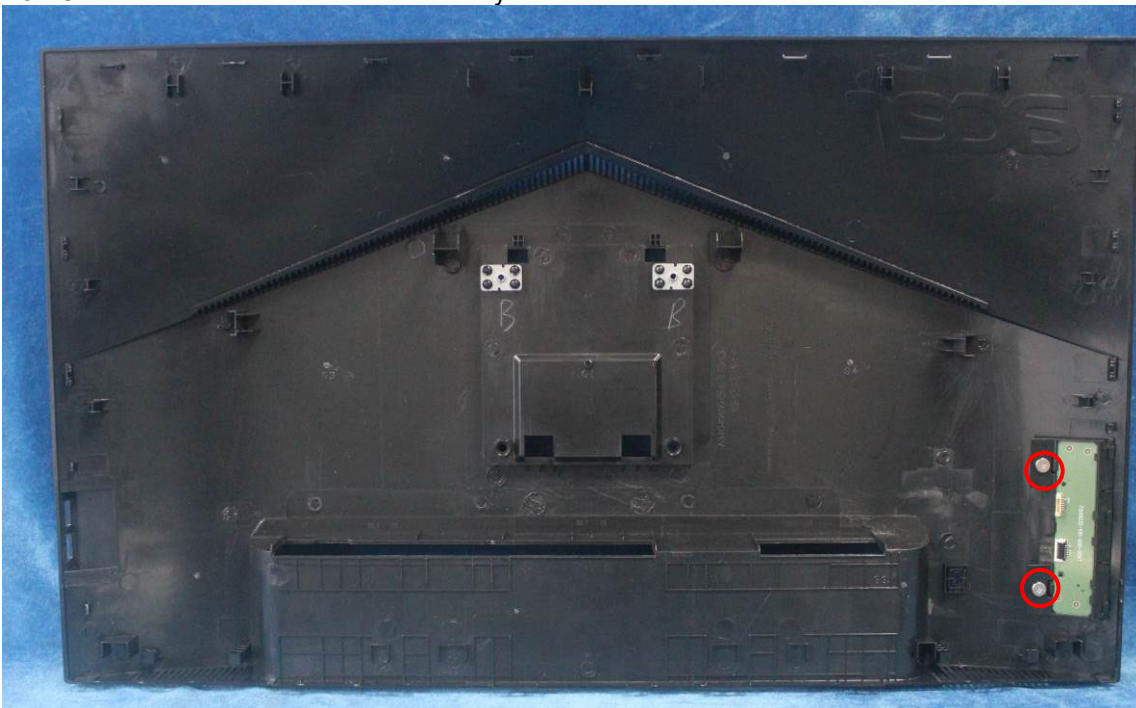
S2. Unscrew the screws then Use a tool (like picture using) to open all latches for Remove the REAR COVER.
(Be careful the position of the key board.).



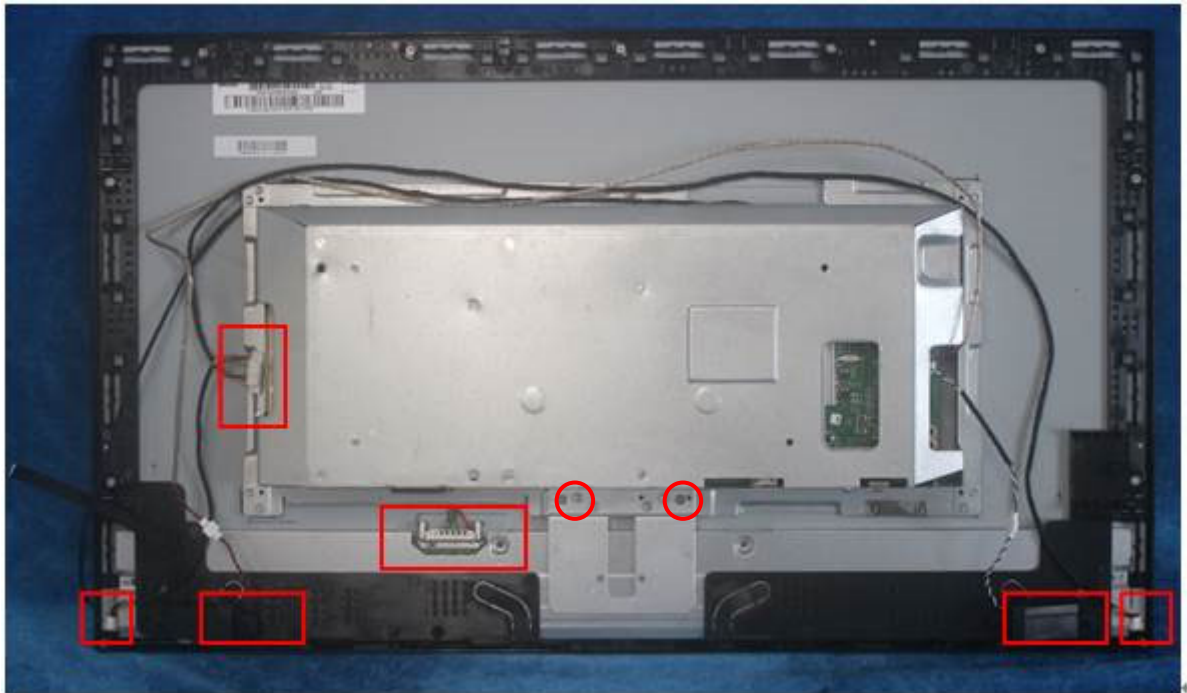
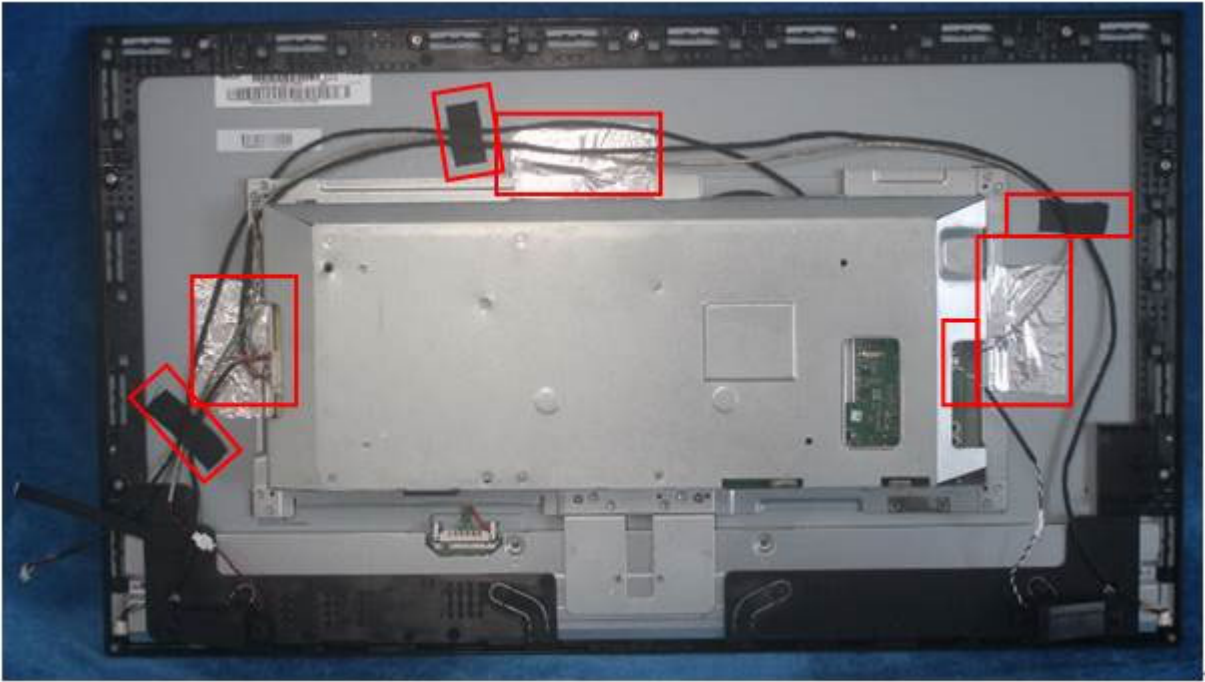
Disconnect the cables to remove the rear cover.



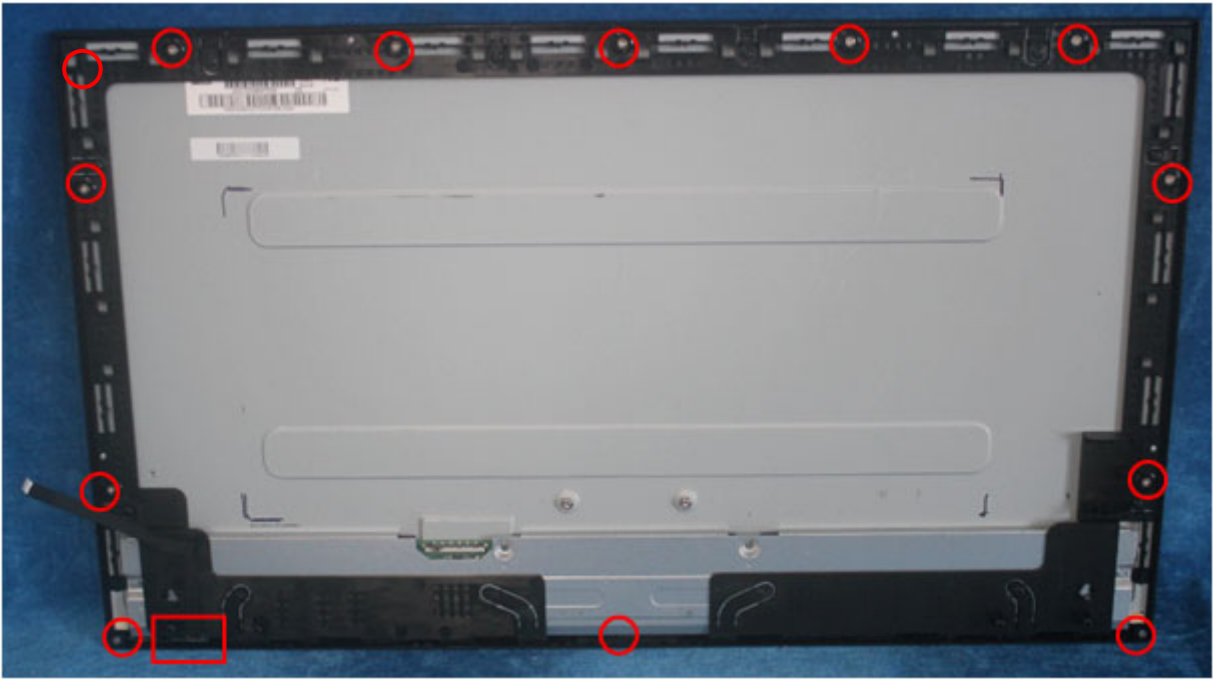
S3. Unscrew the screws to remove the key board.



S4. Tear up all the tapes, disconnect the cables, Unscrew the screws and remove the SPEAKERS.

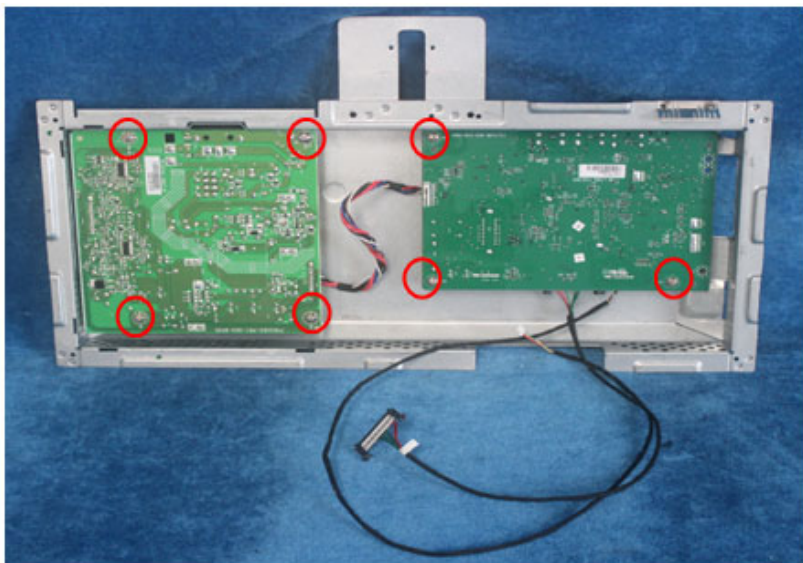


S5. Remove the screws to separate the panel and the Middle Frame/LED Board and the DECO BEZEL.

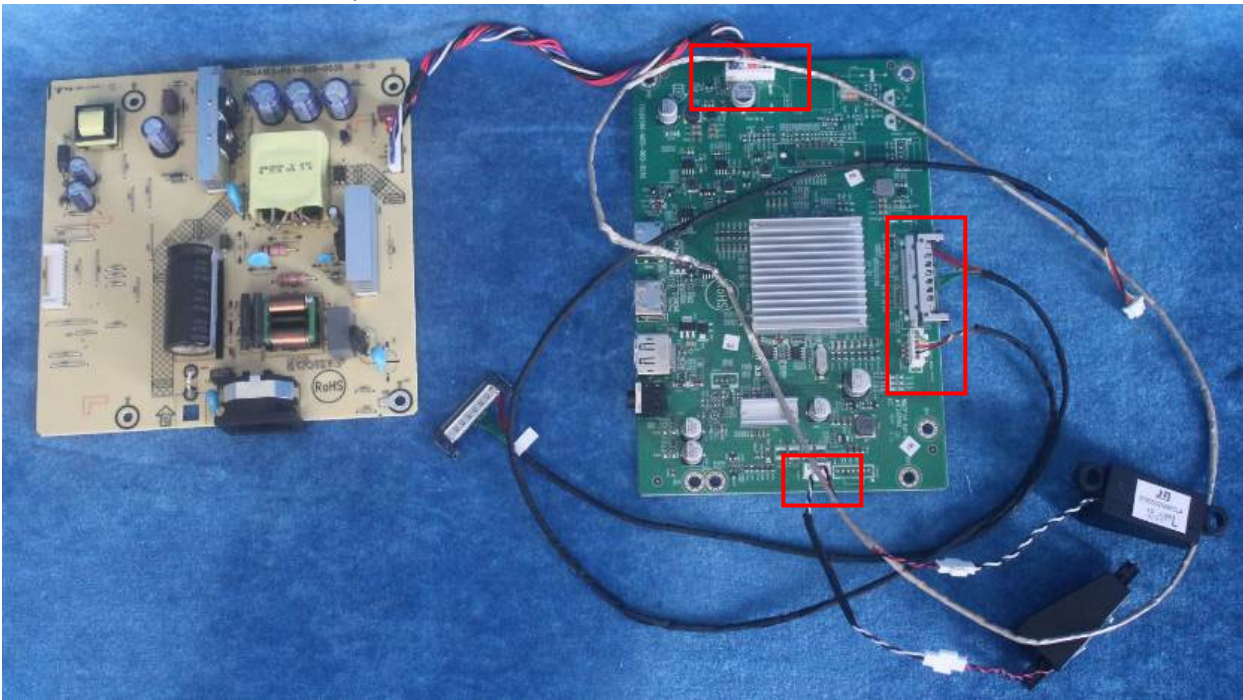




S6. Remove the Mylar and unscrew the all of the screws to remove the power board, main board from mainframe

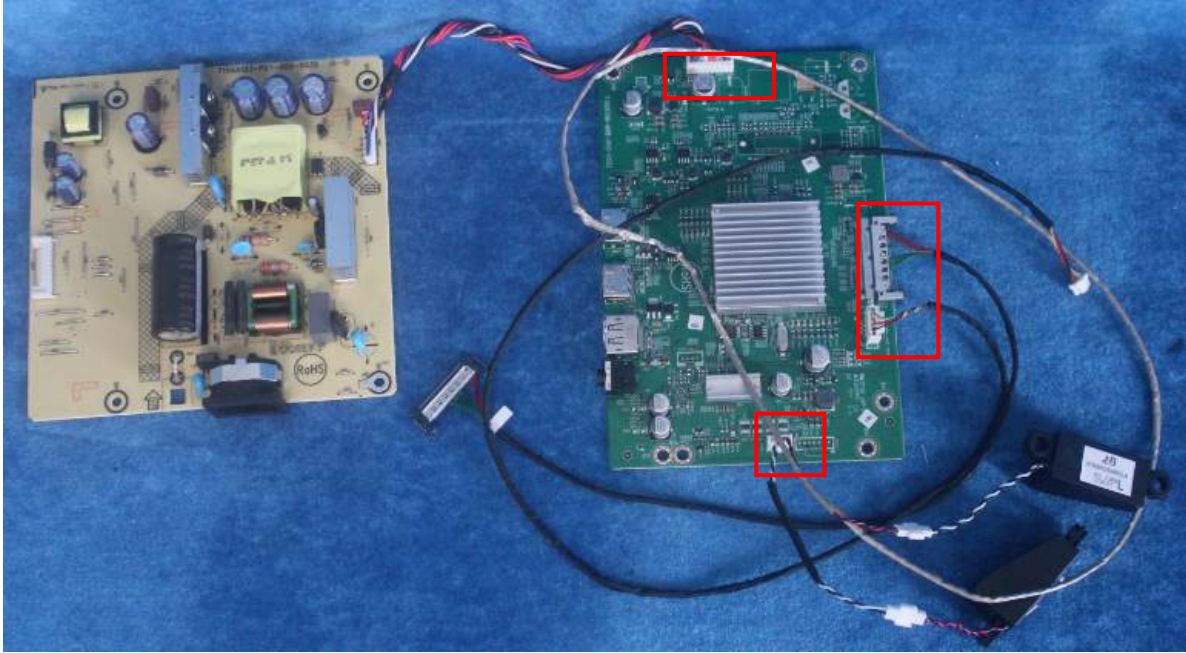


S7. Remove the main board, power board. Disconnect the cables.

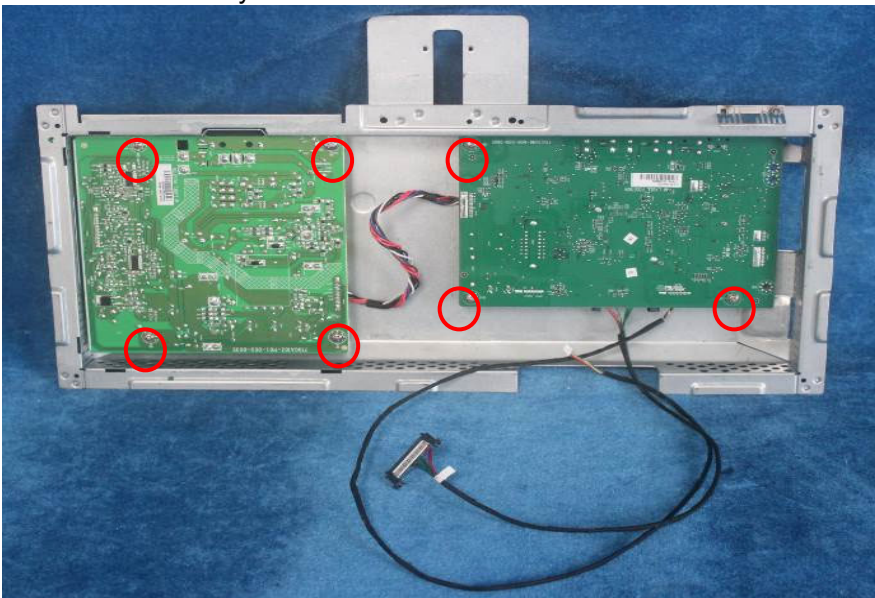


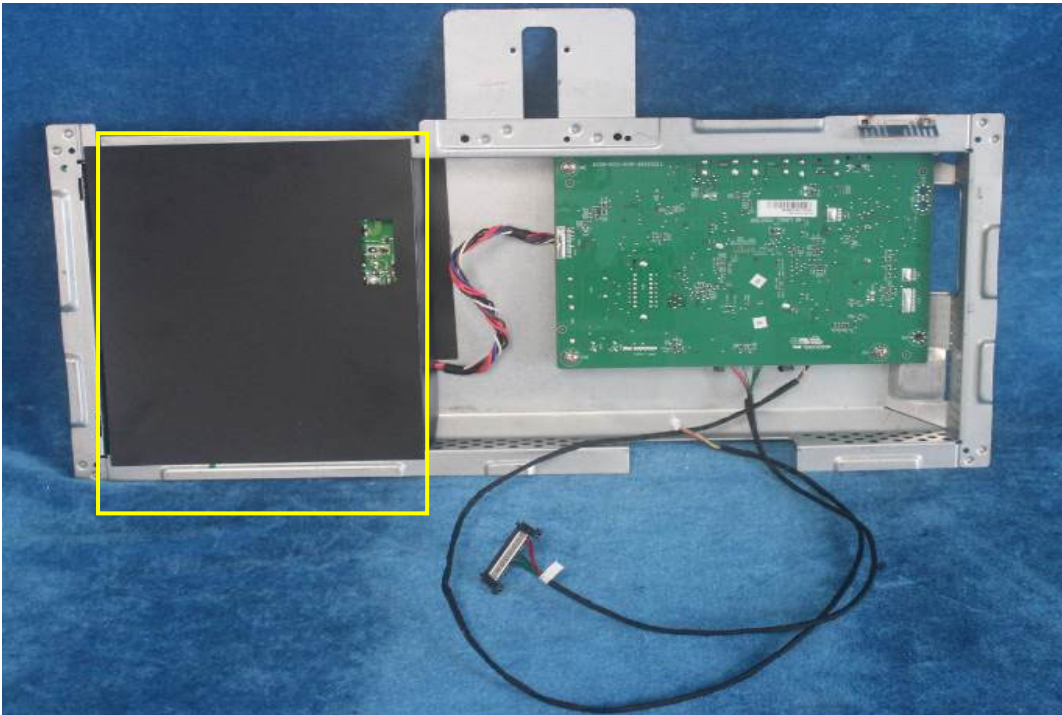
2.2 Assembly Procedures:

S1. Prepare a main board, a power board, a pair of speakers and some essential cables. Connect every cable as the below picture

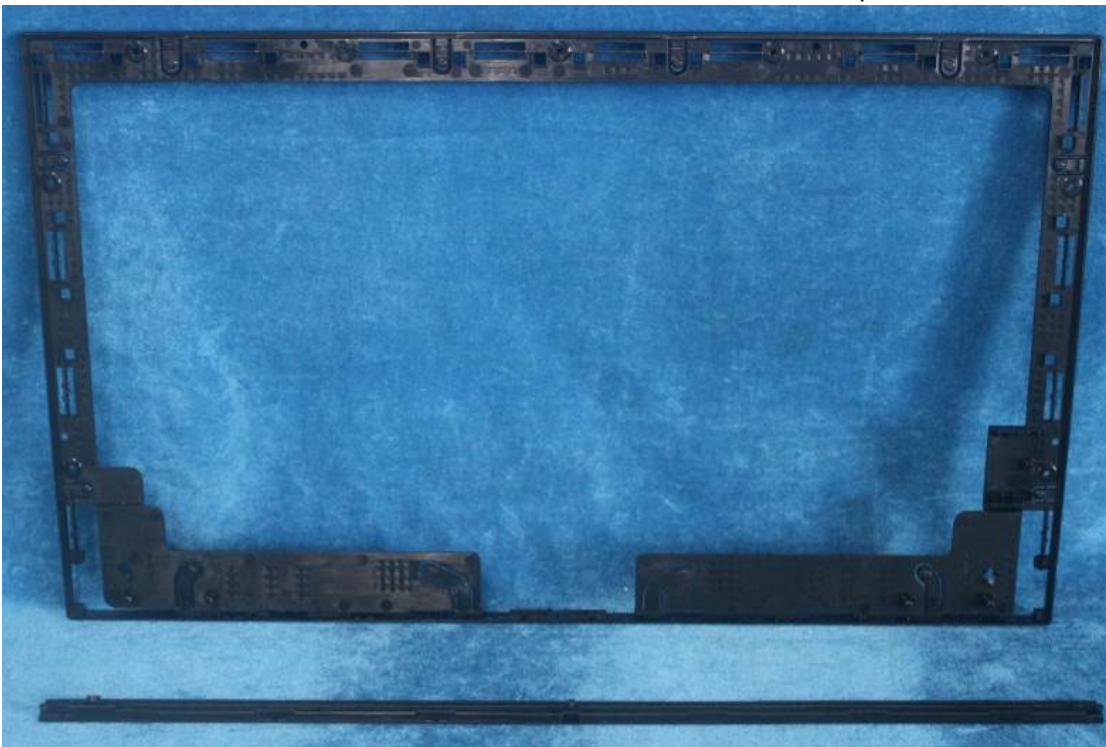


S2. Use a screwdriver to tighten the screws till the power board, main board with shield are firmly attached. Put on the Mylar.



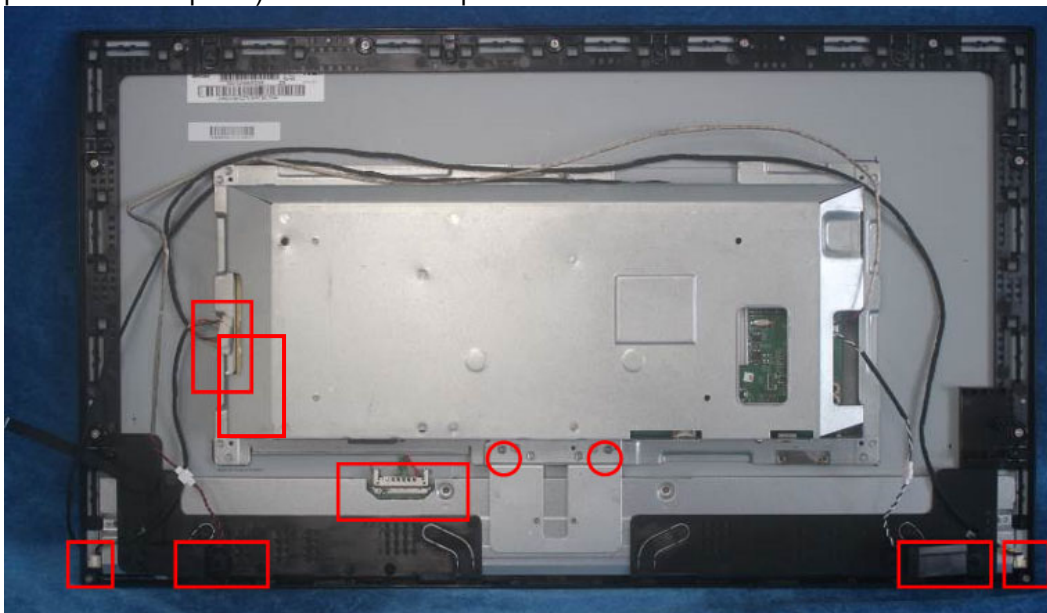


S3. Assemble the MIDDLE FRAME, DECO bezel, LED board and the panel. Use a screwdriver to tighten the screws.

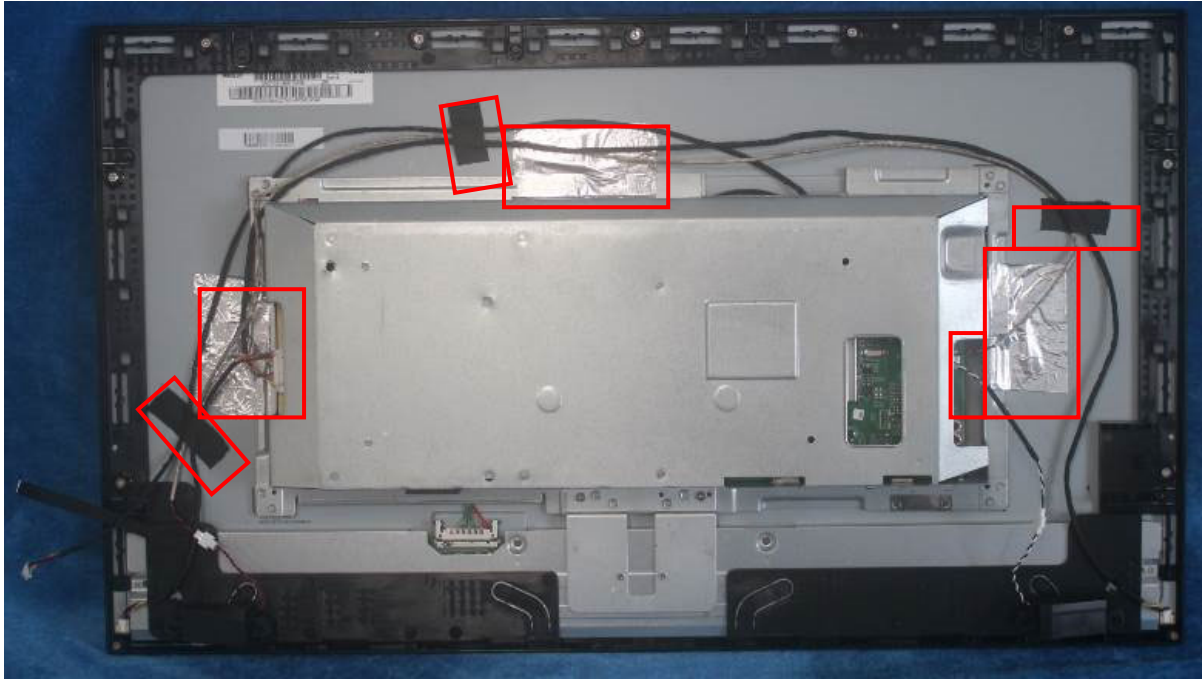




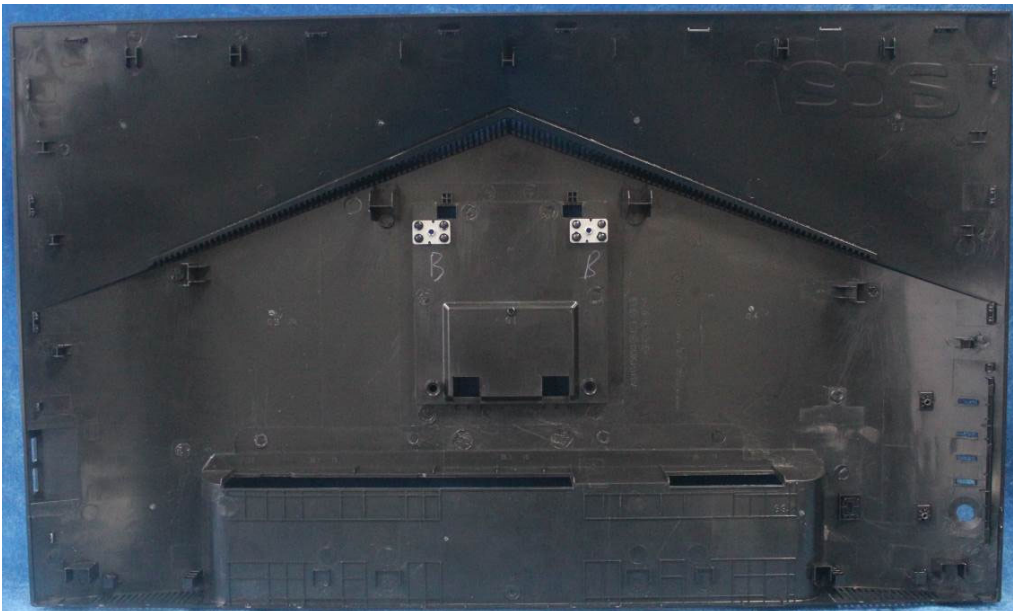
S4. Put the shield on panel, Use a screwdriver to tighten the screws. Connect cables (mainboard to panel and the power board to panel). Assemble the speakers.

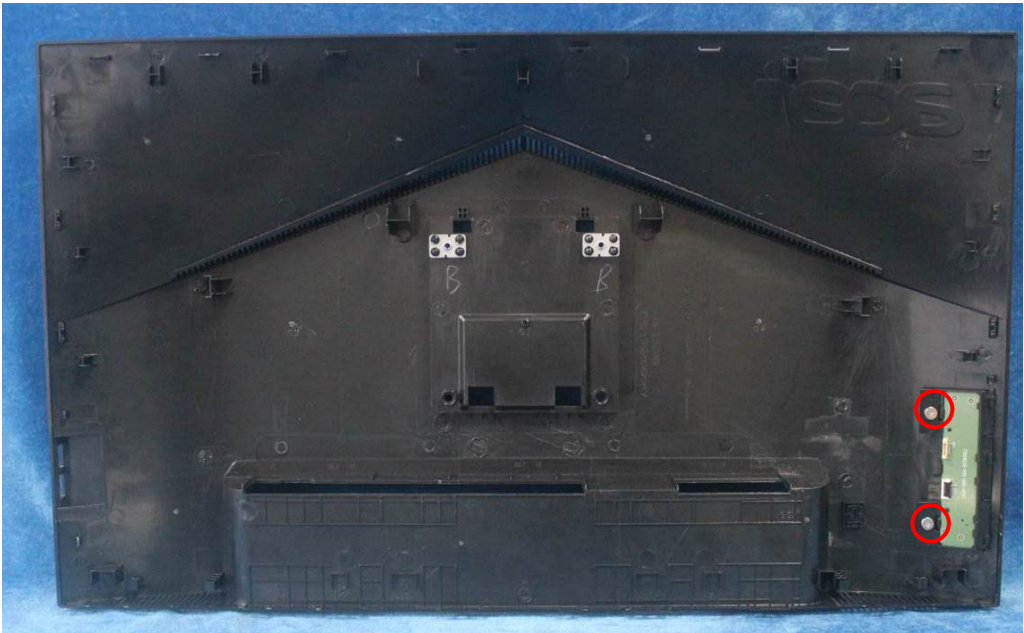


S5. Pasting the tapes.

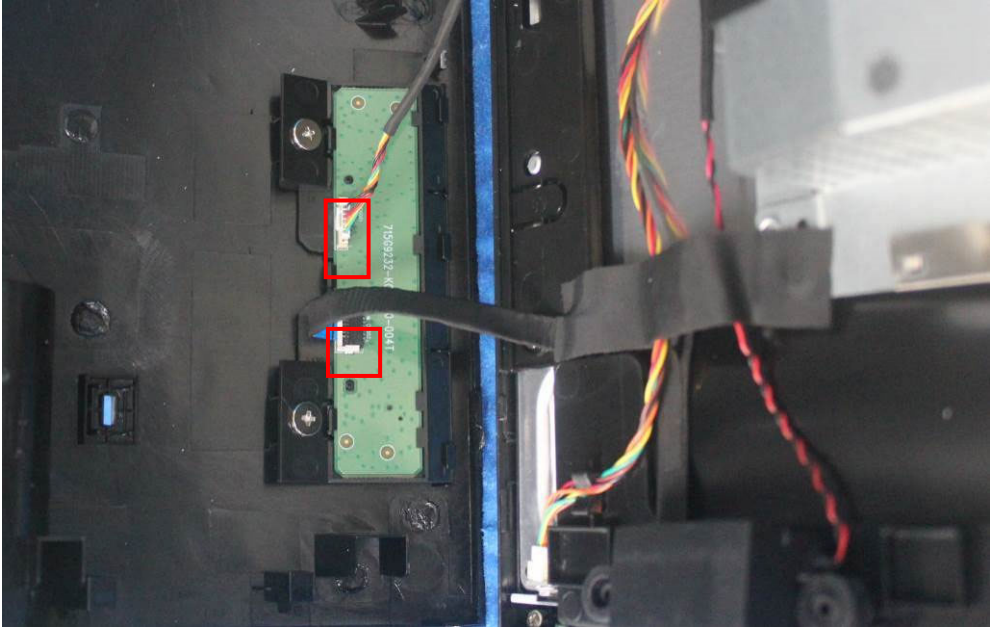


S6. Prepare a rear cover, Assemble the key board.

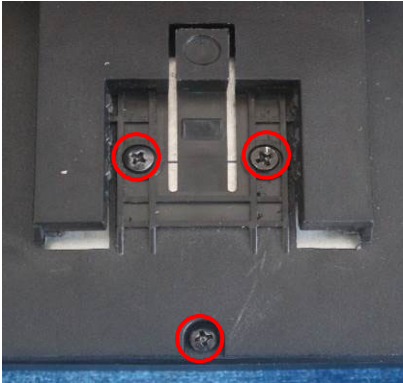




S7. Connect the pins.

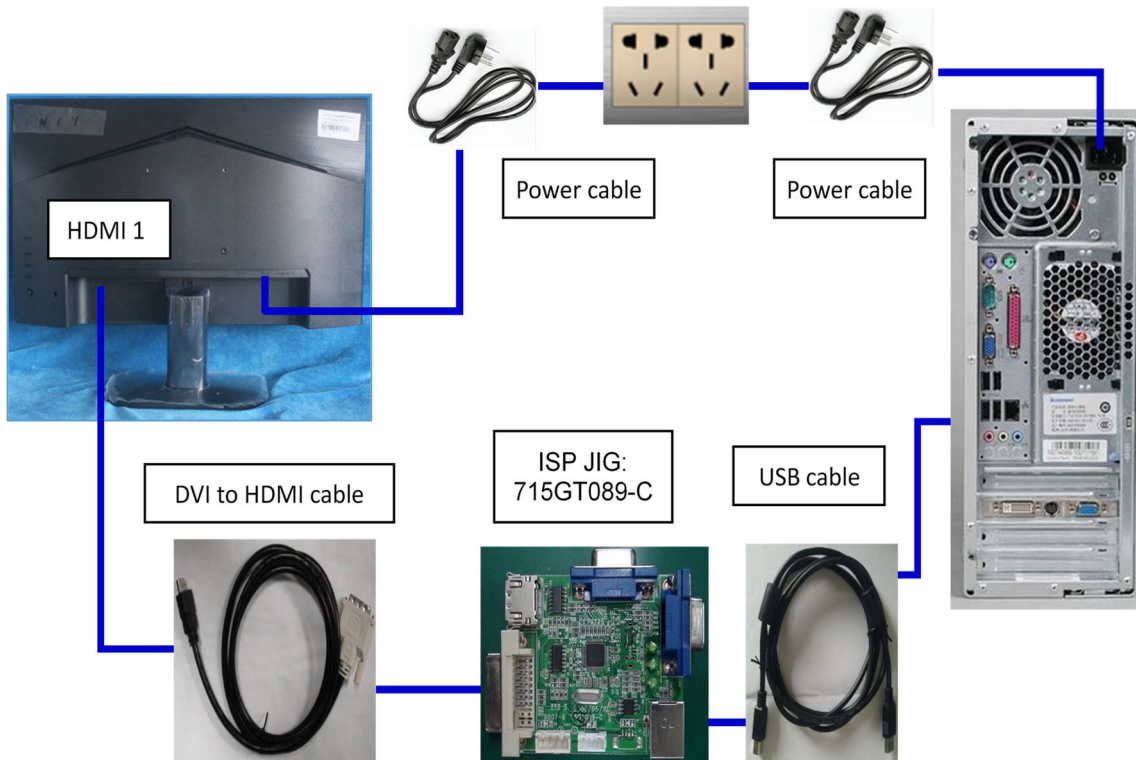


S8. Use a screwdriver to tighten the screws then assembly the stand ass'y.



3. Firmware Upgrade Process

1. Materials list and connection



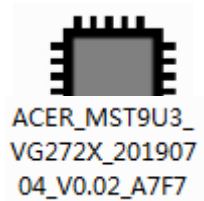
Mstar ISP Win8 and Win10 CDM v2.12.18 WHQL Certified



FTC100103(MSTAR) usb drive
USB port driver



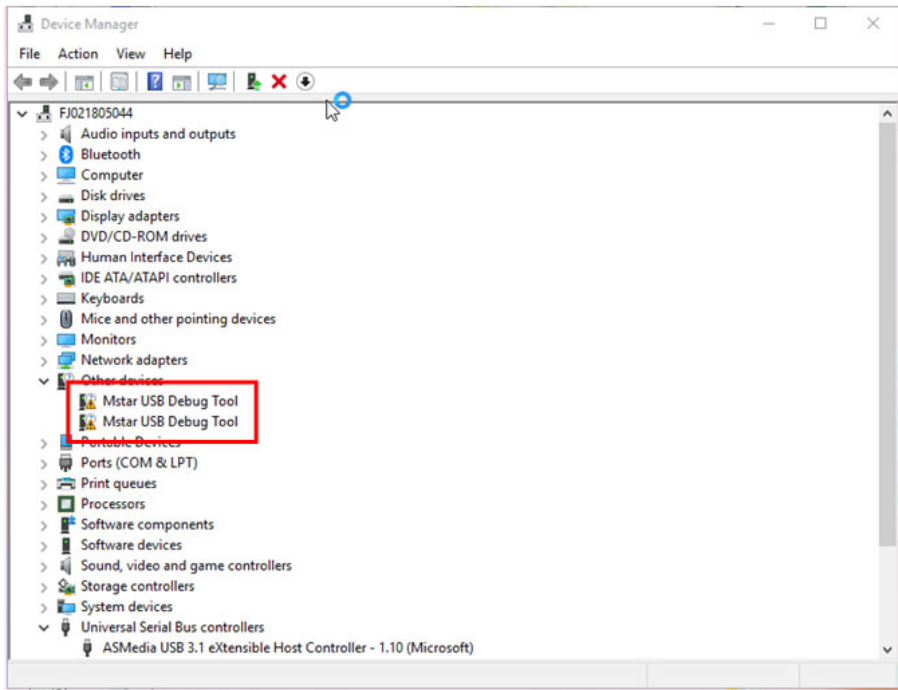
ISP_Tool

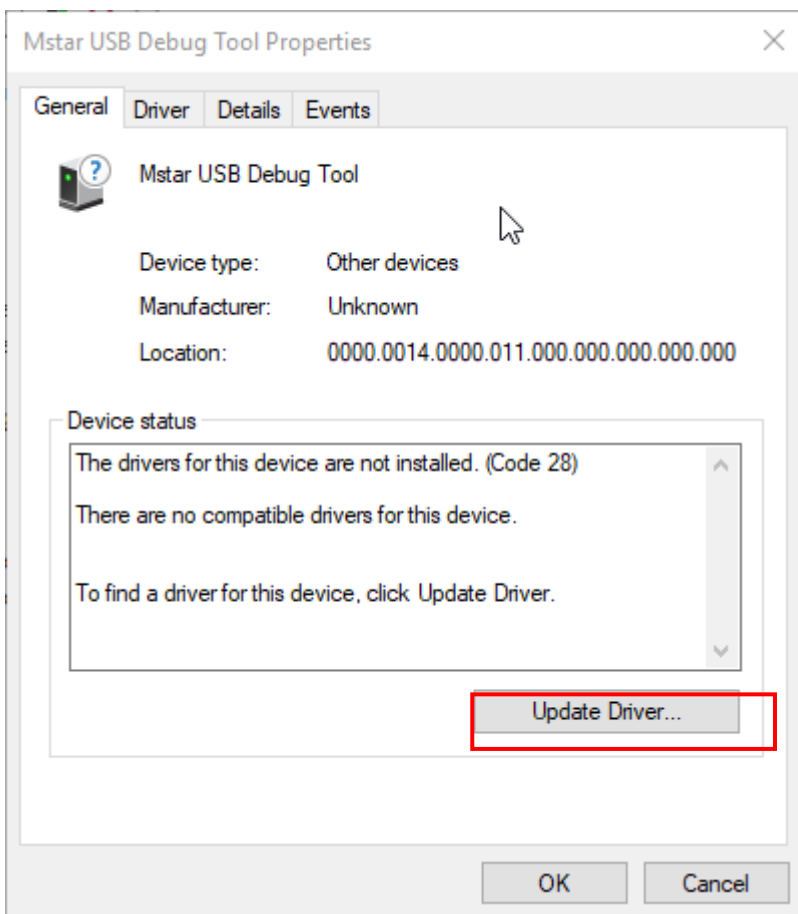
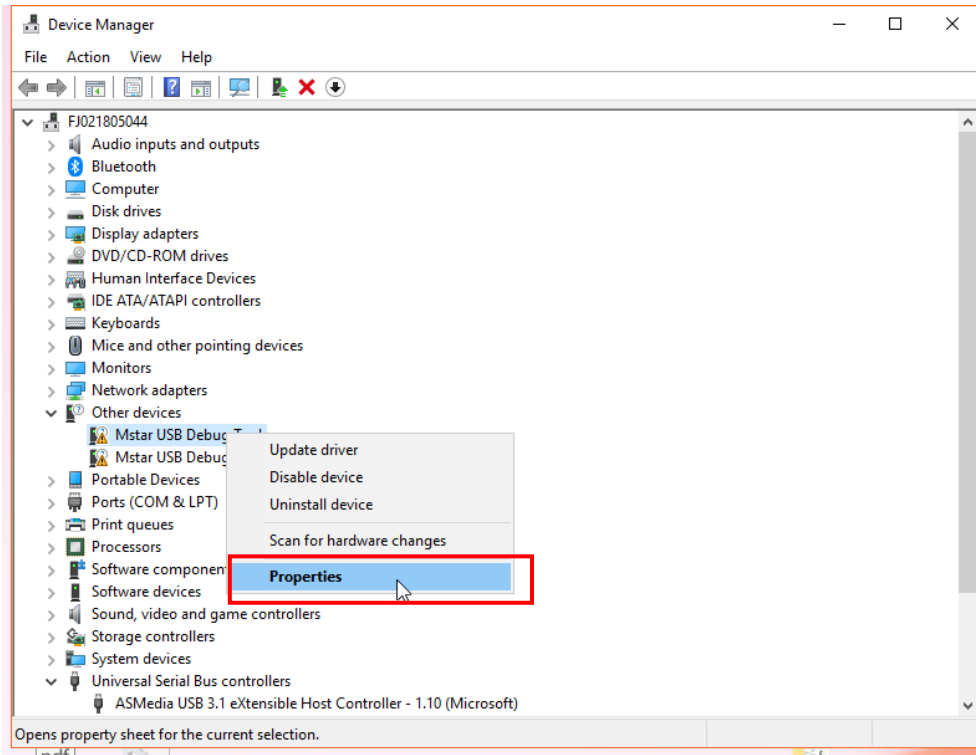


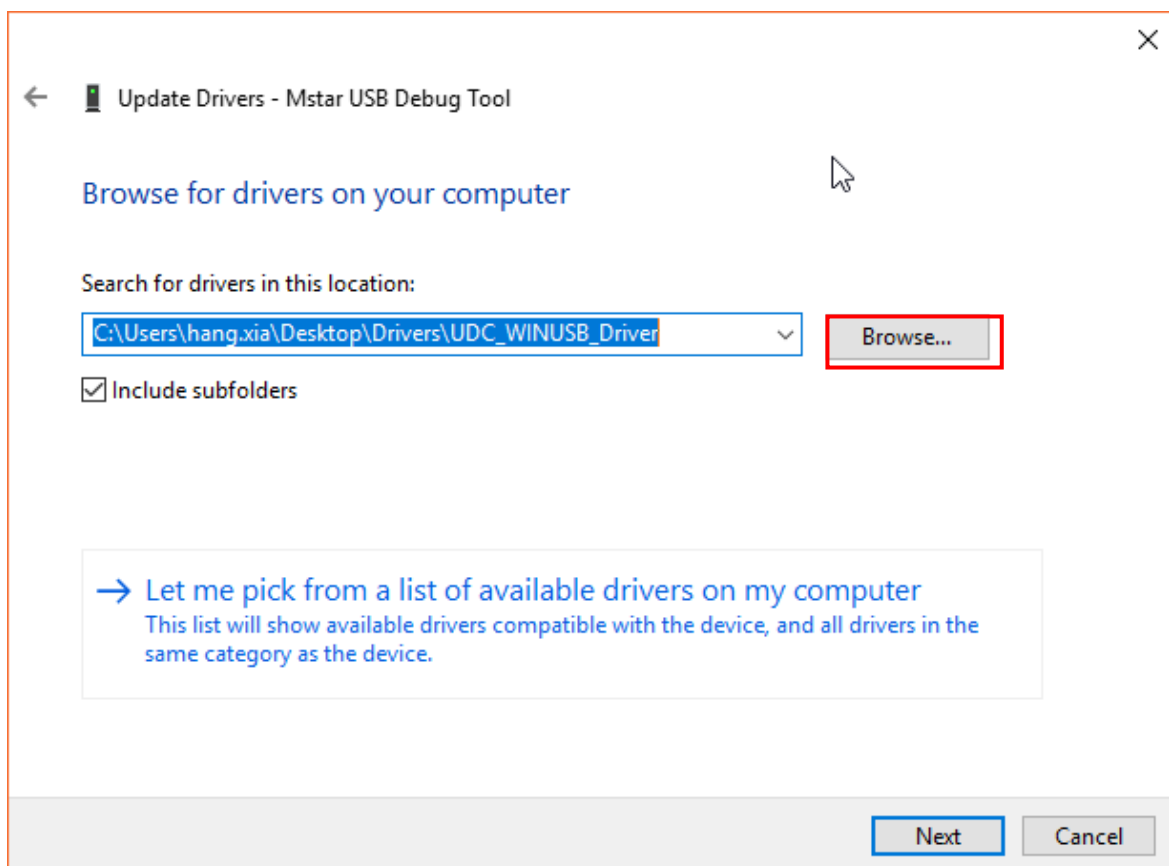
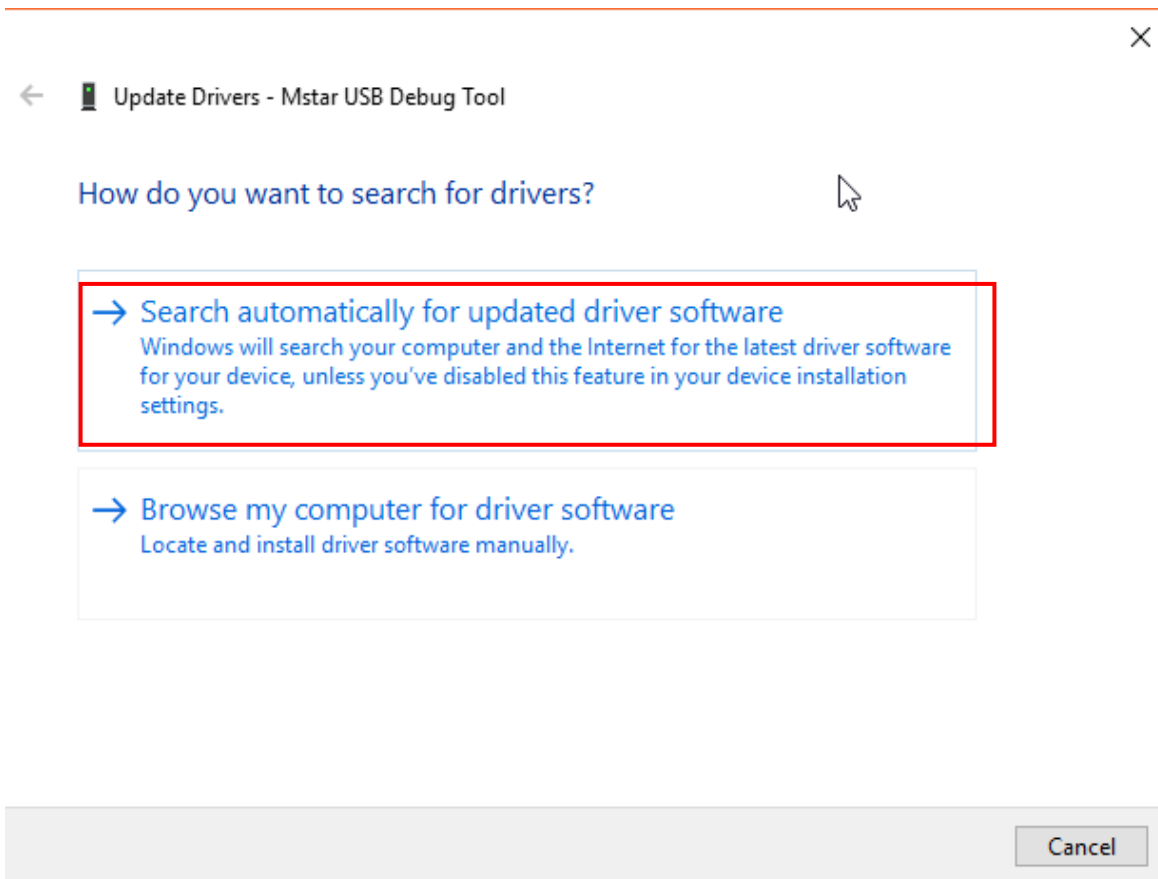
ACER_MST9U3_VG272X_201907_04_V0.02_A7F7
FW

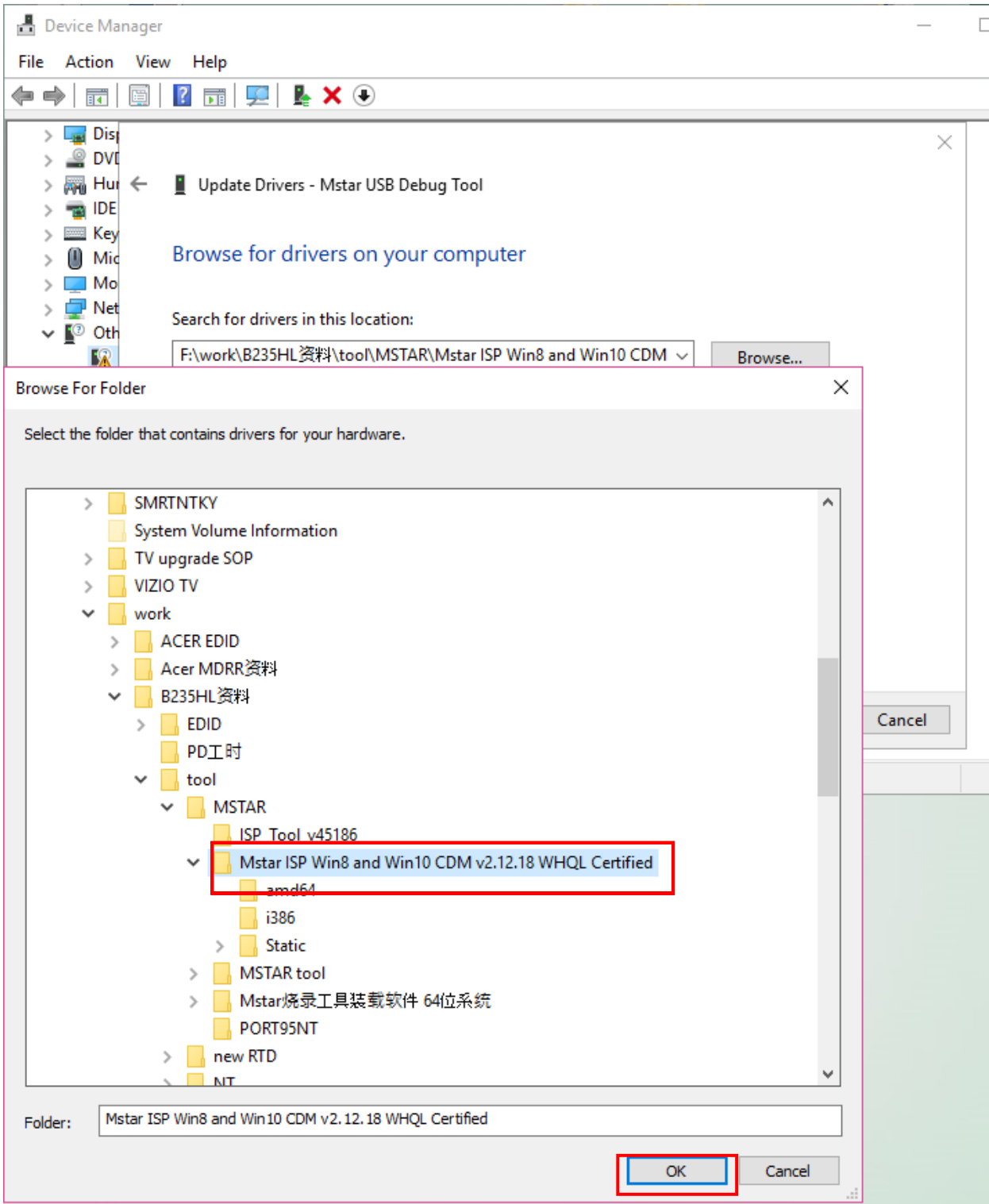
2. Install USB driver.

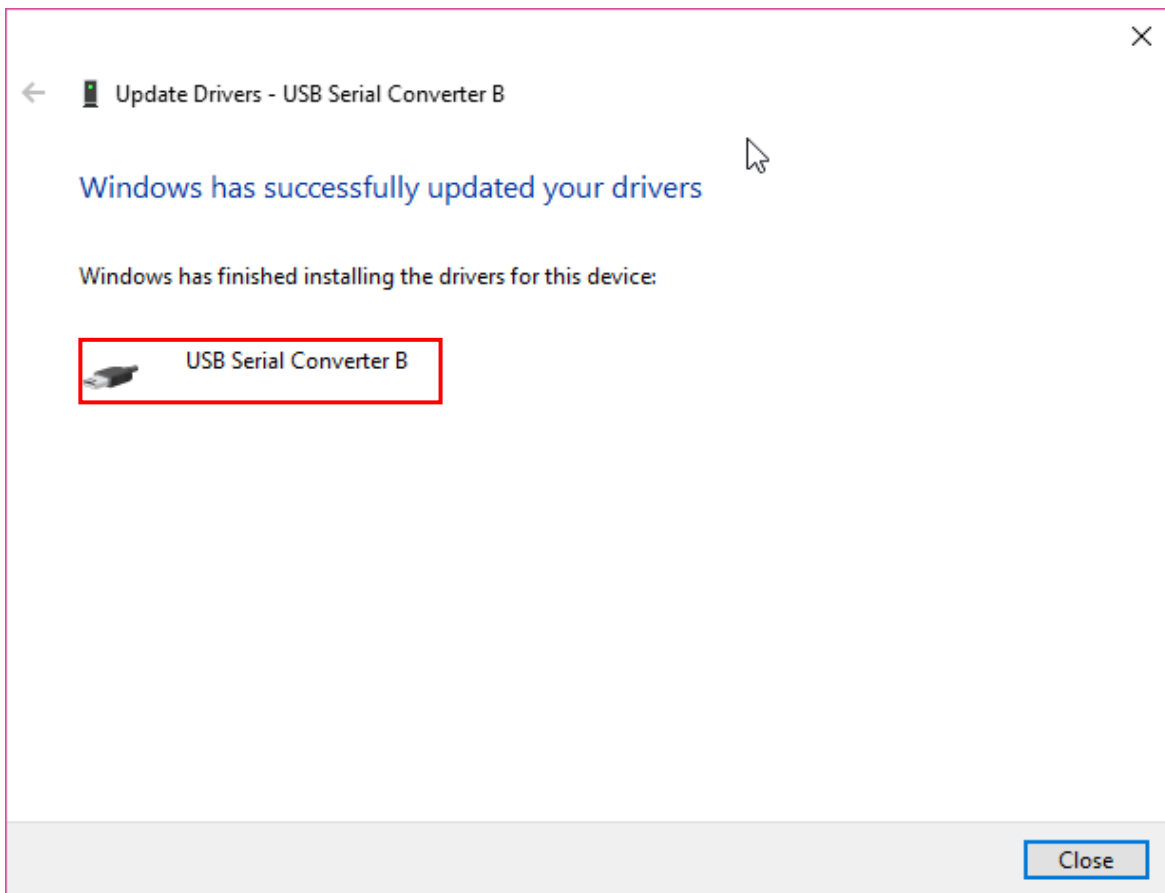
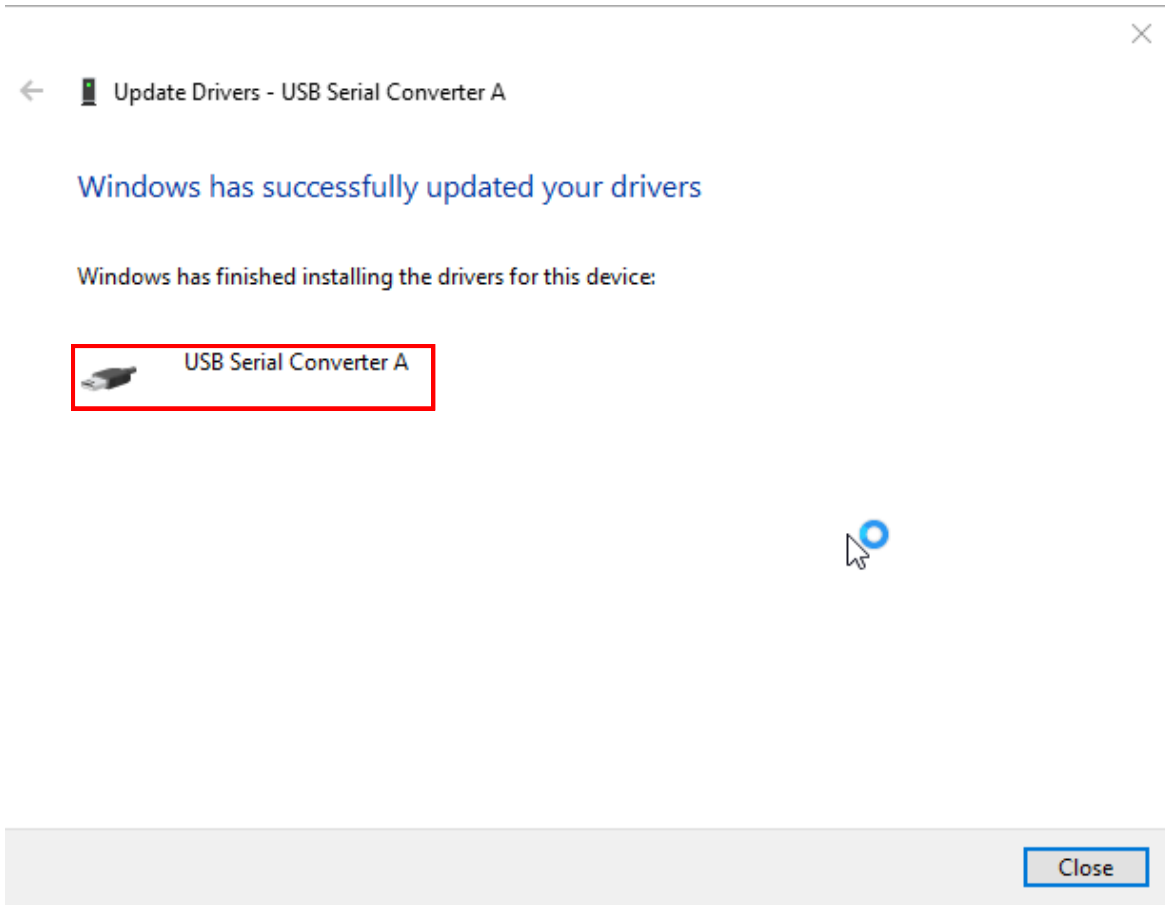
2.1 If you use this ISP board first time, you need to install mstar driver, open the device manager.



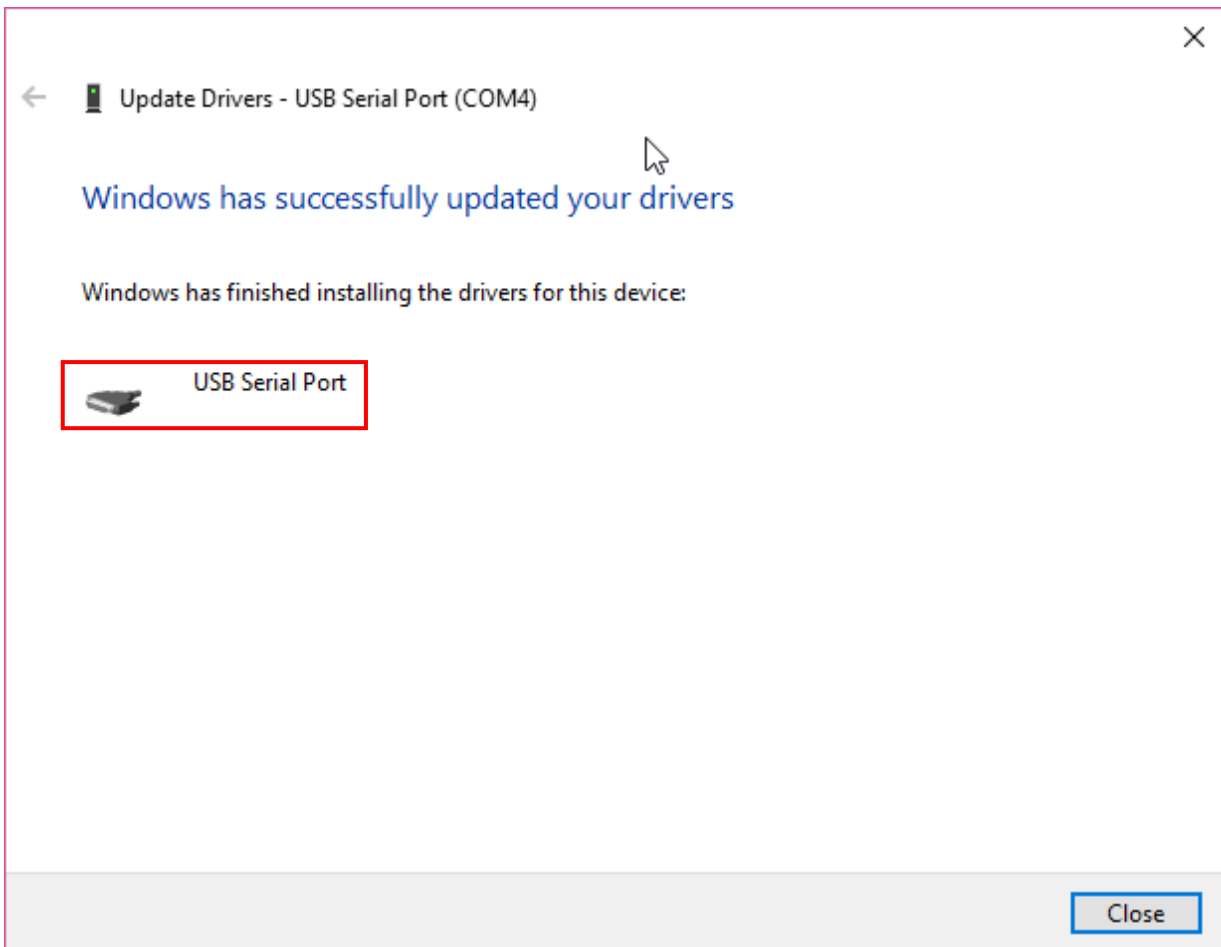
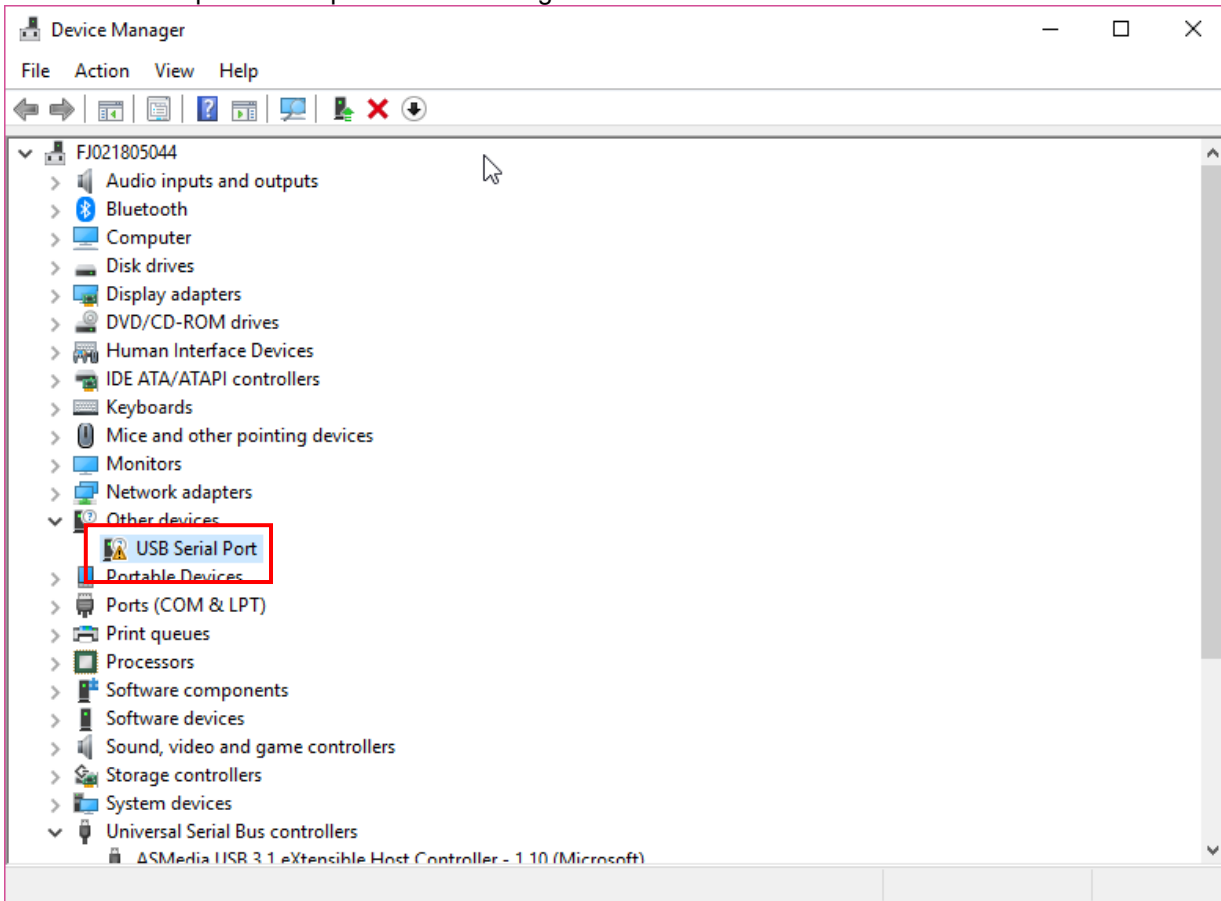








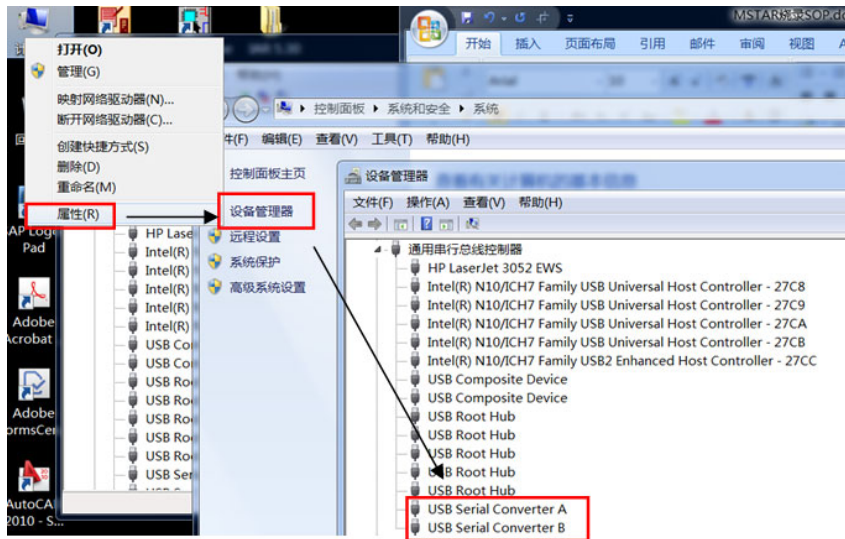
This USB serial port need update the driver again.



2.2 When insert the USB cable to PC USB port, will pop up a Hardware Wizard to help you install the USB driver if you use this ISP board first time.it can auto install success by itself

Remark: The USB driver files path: D:\FTC100103(Mstar)\FTCUSB.INF

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



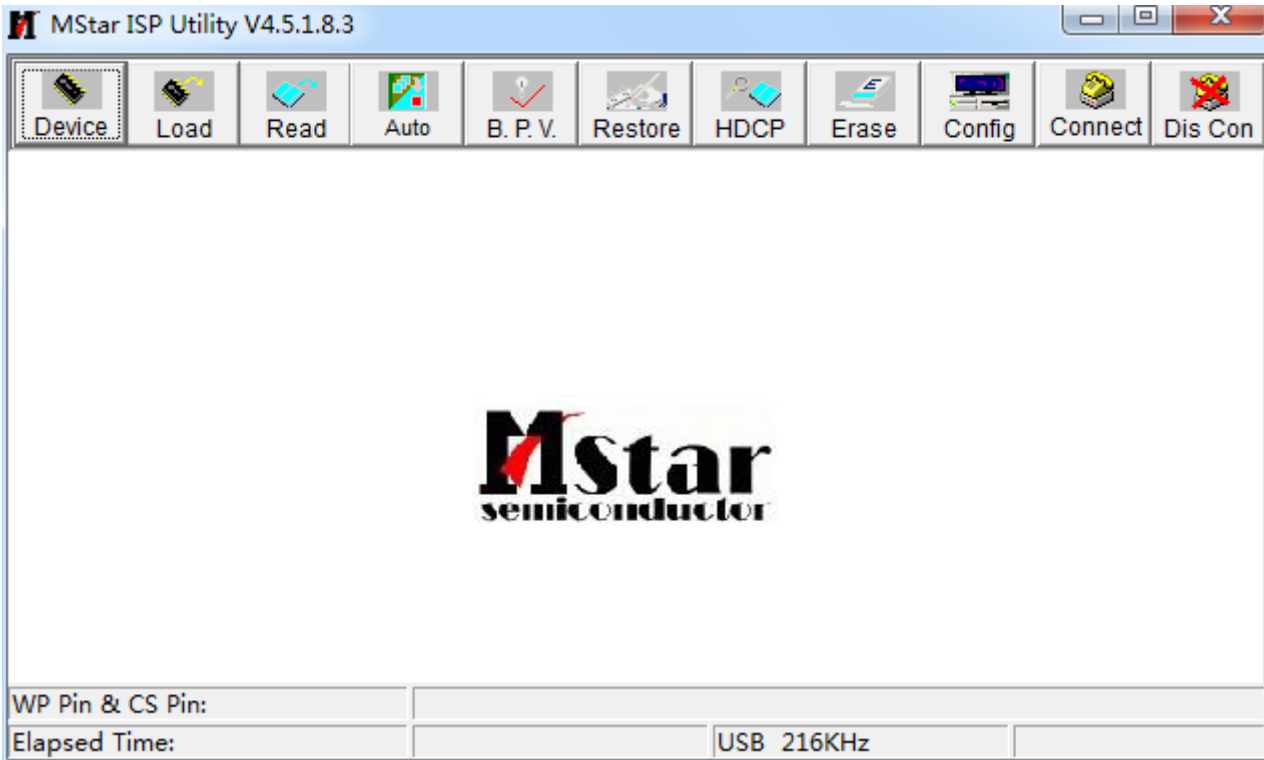
3. Install the ISP tool.

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

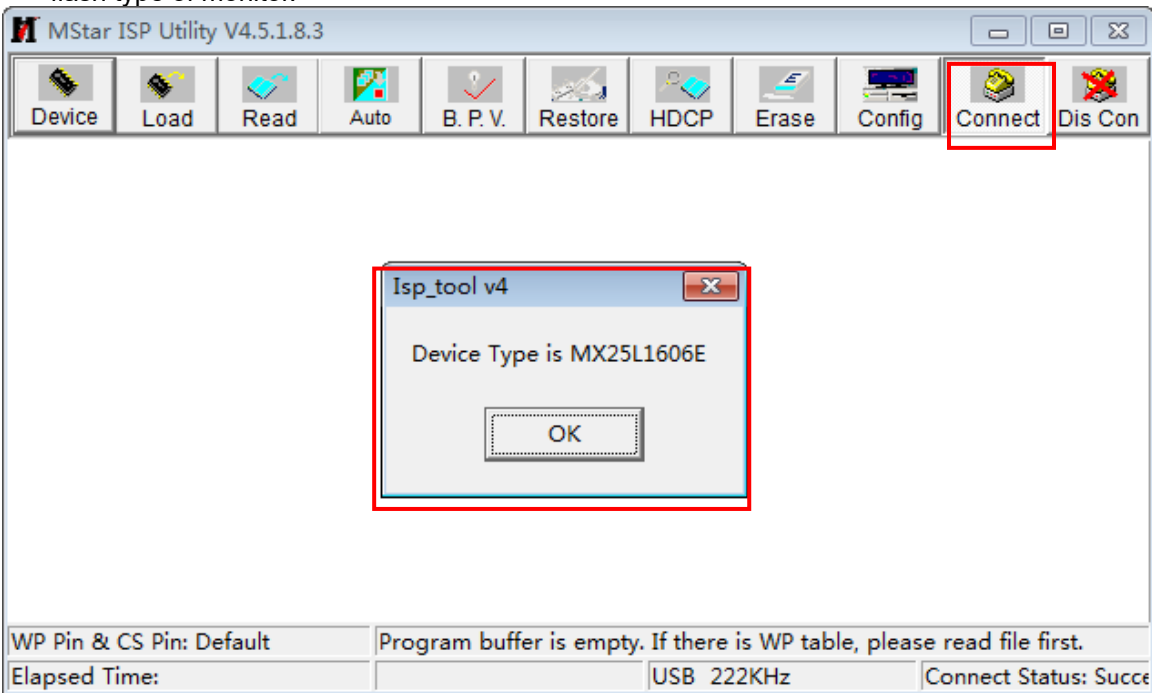
3.1 Copy the three file in one folder.



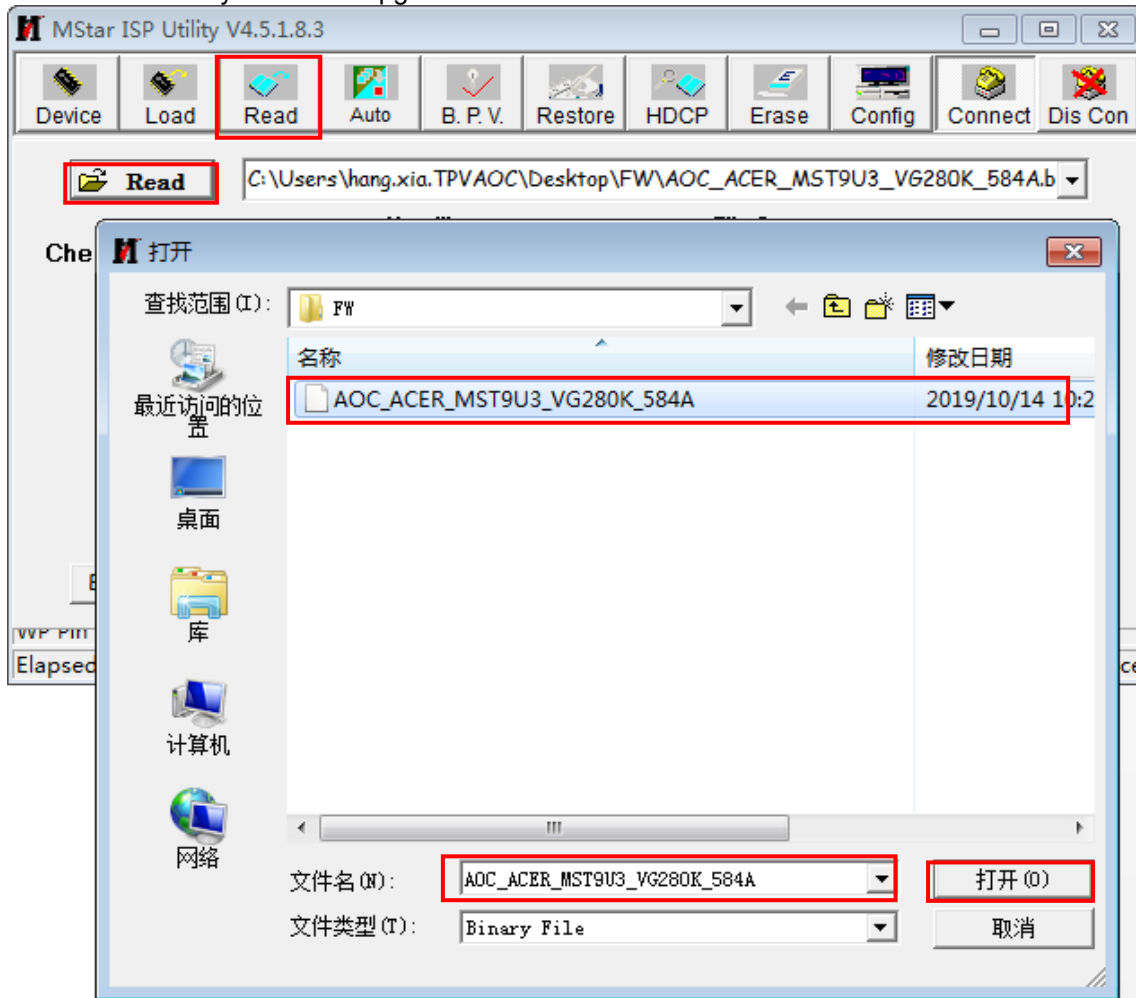
3.2 Double-click  to run the ISP tool.



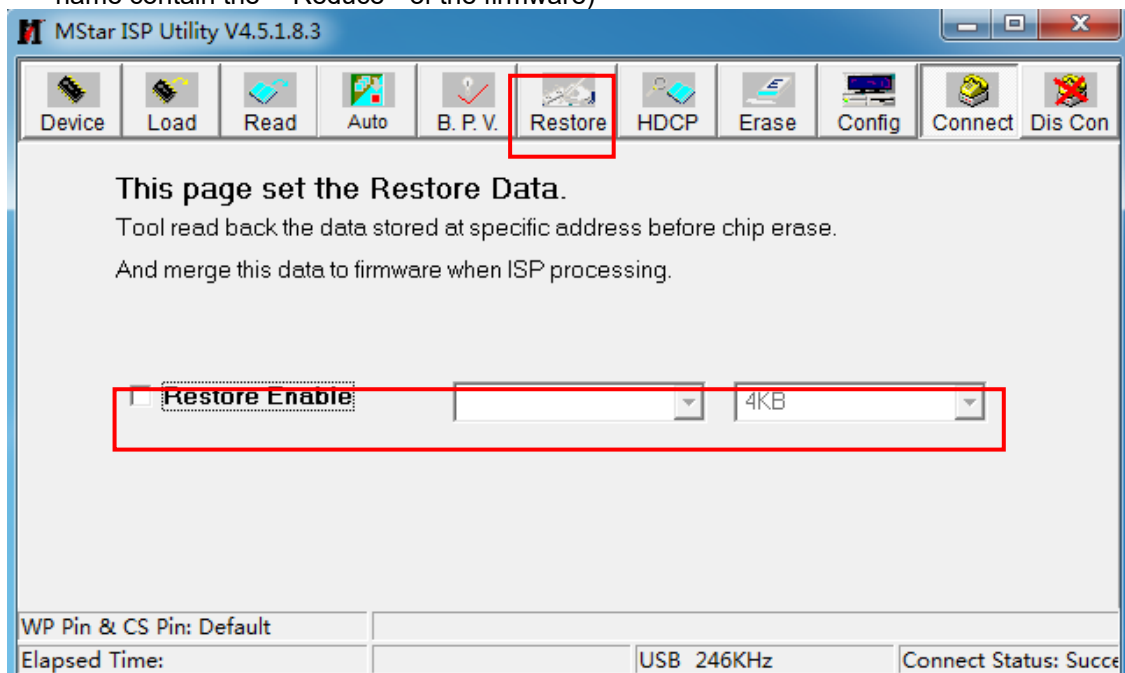
3.3 Connect to the monitor. Click "Connect". If the tool communicate with monitor successfully, the tool will detect the flash type of monitor.



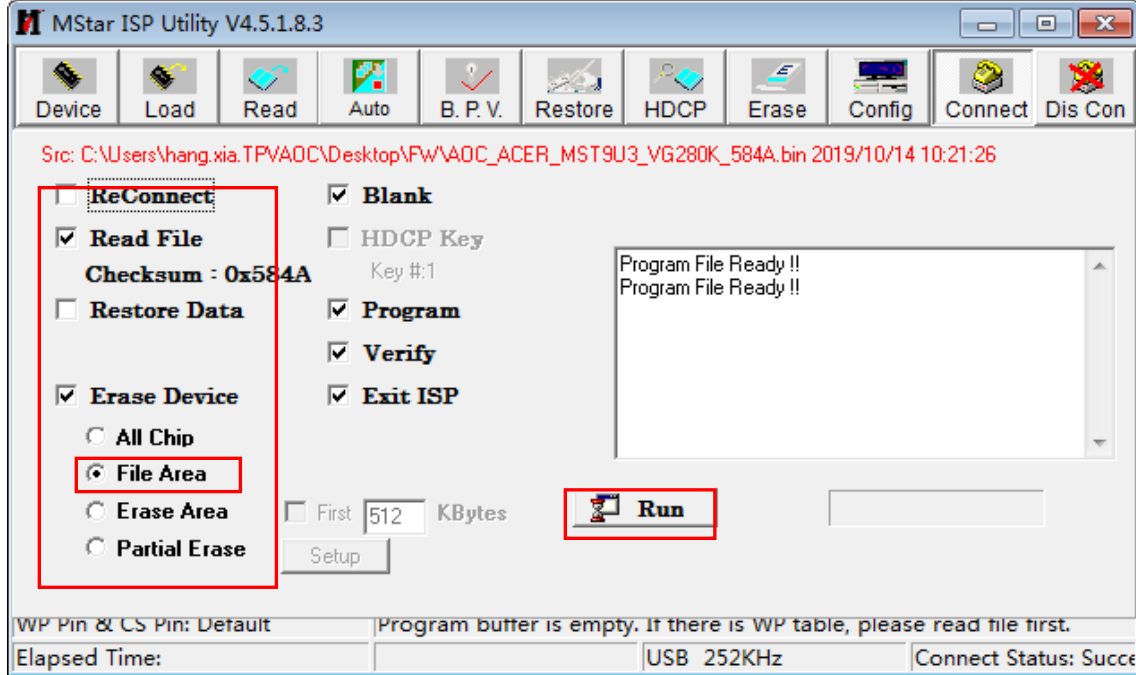
3.4 Load the FW you want to upgrade.



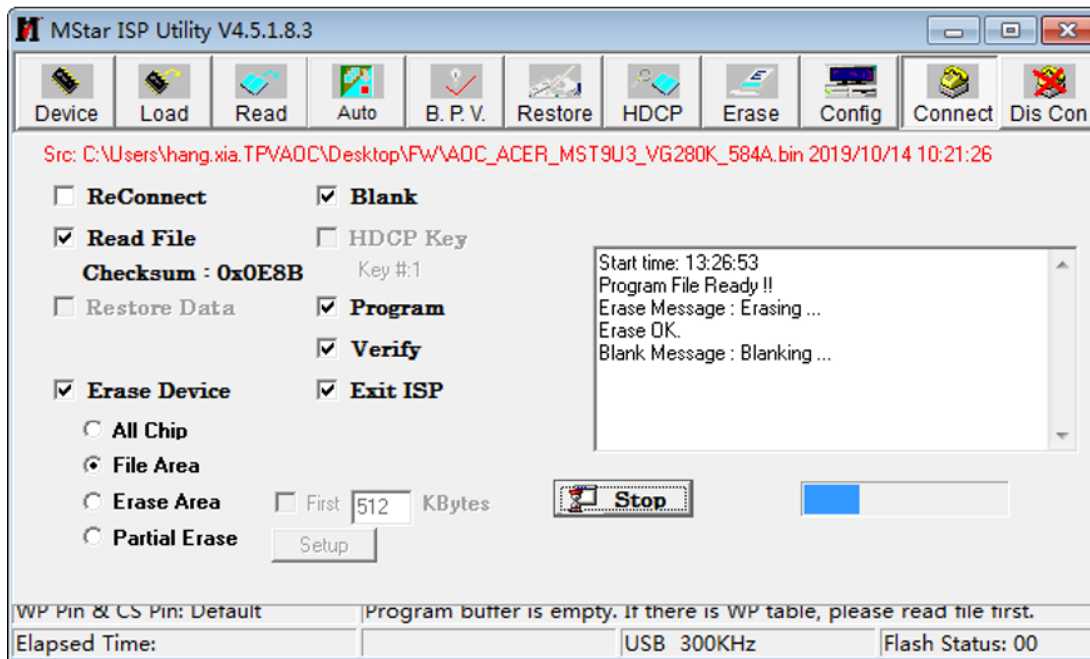
3.5 Set the restore address and Config as below. (In order to prevent HDCP KEY data loss, please must load the file name contain the "" Reduce"" of the firmware)



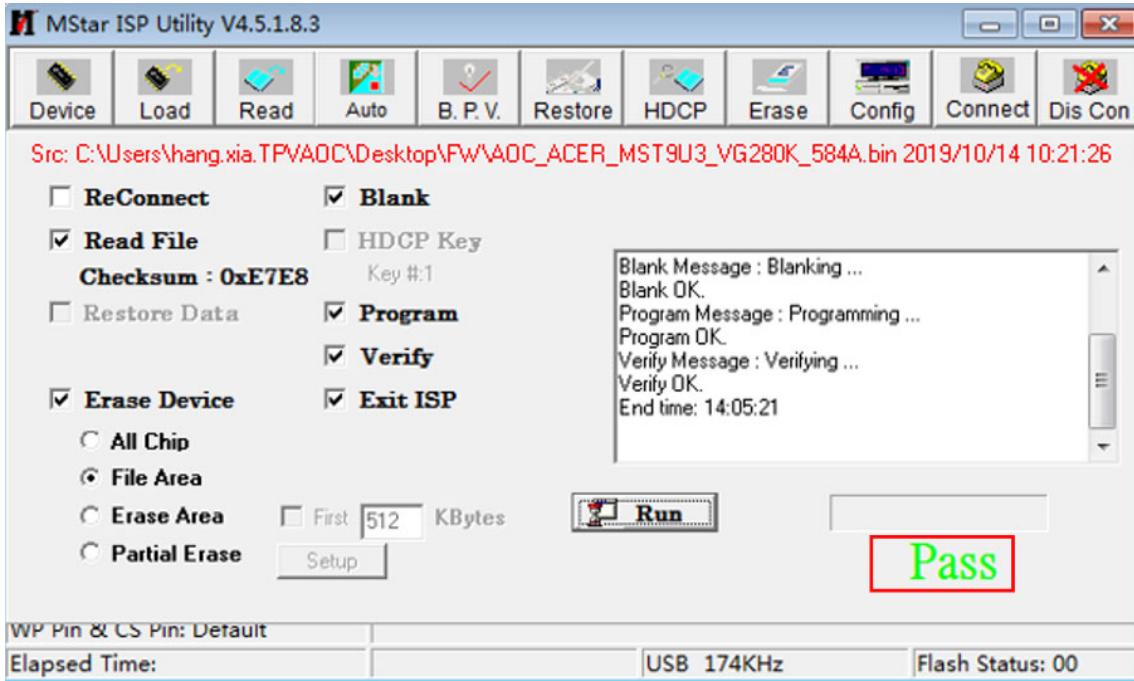
3.6 Set parameter in “Auto” window. If you have set “Restore address”, please tick “Restore Data”.



3.7 Processing of upgrade. After clicking “Run”, the tool start to program. It is forbidden to power off monitor or switch off connection during programming.



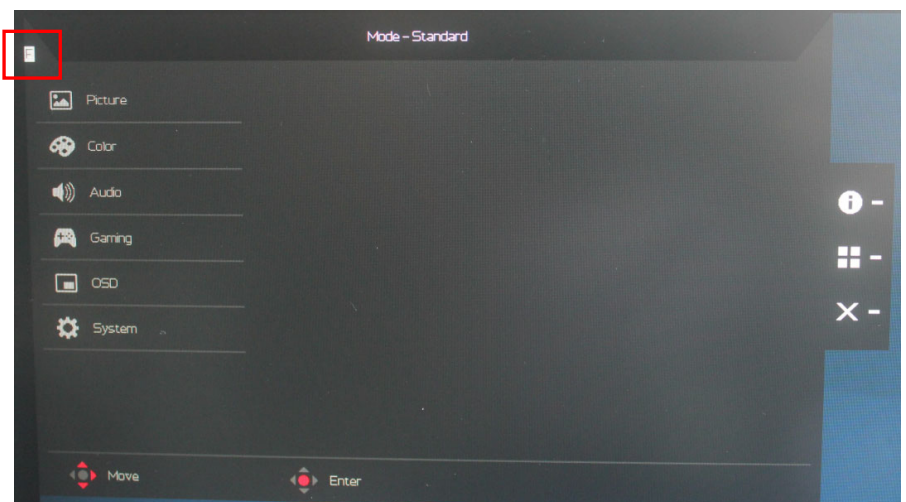
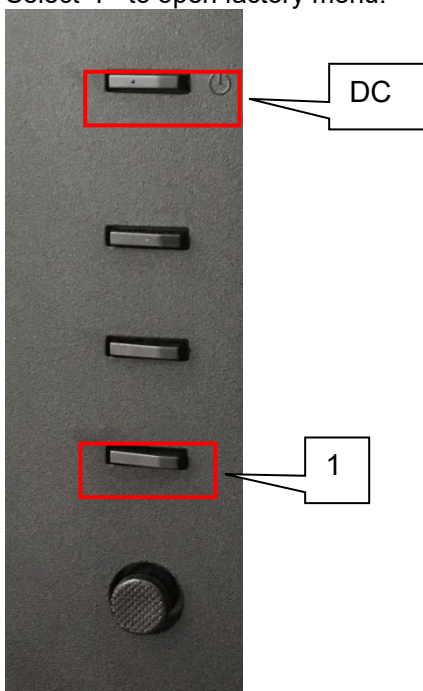
3.8 Successful upgrade. When upgrade successful, there will be green Pass letter appearing.

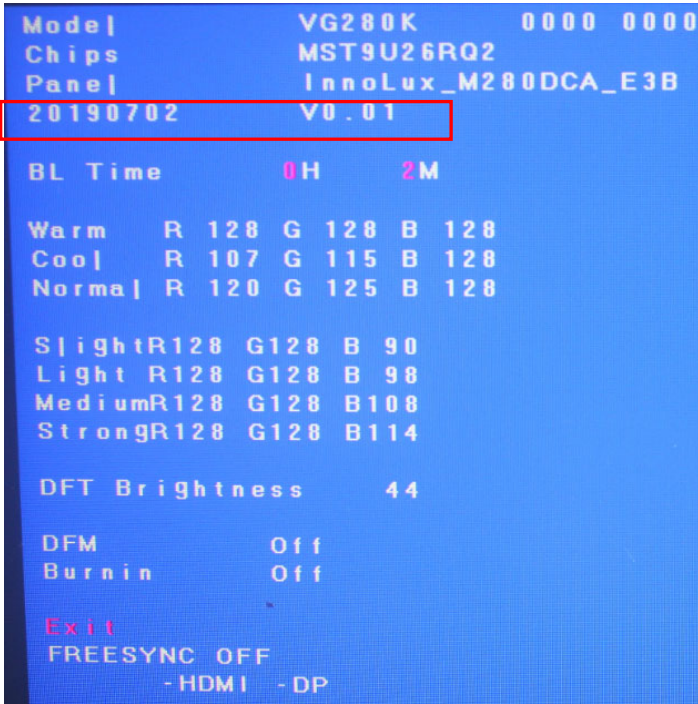


4. Check the FW version after upgrade.

4.1. The way to open factory menu.

- (1) Connect signal source to monitor and turn it on.
- (2) The way to factory menu: DC off and pressing the "1" key and DC on, when the screen lights, release the "1" key to open the menu with "F" and sele
- (3) Select "F" to open factory menu.

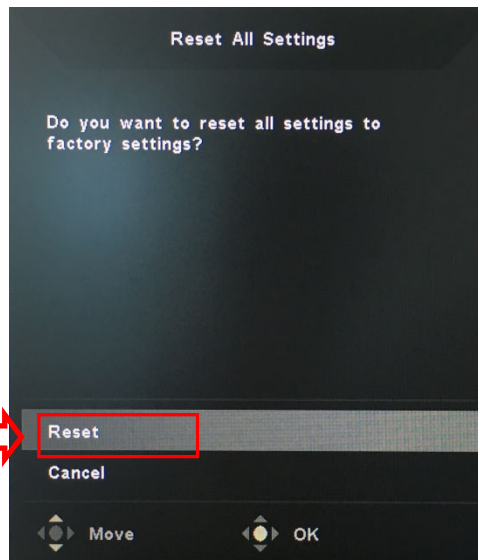
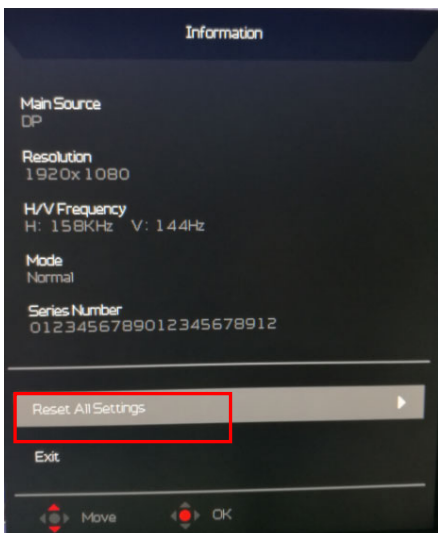
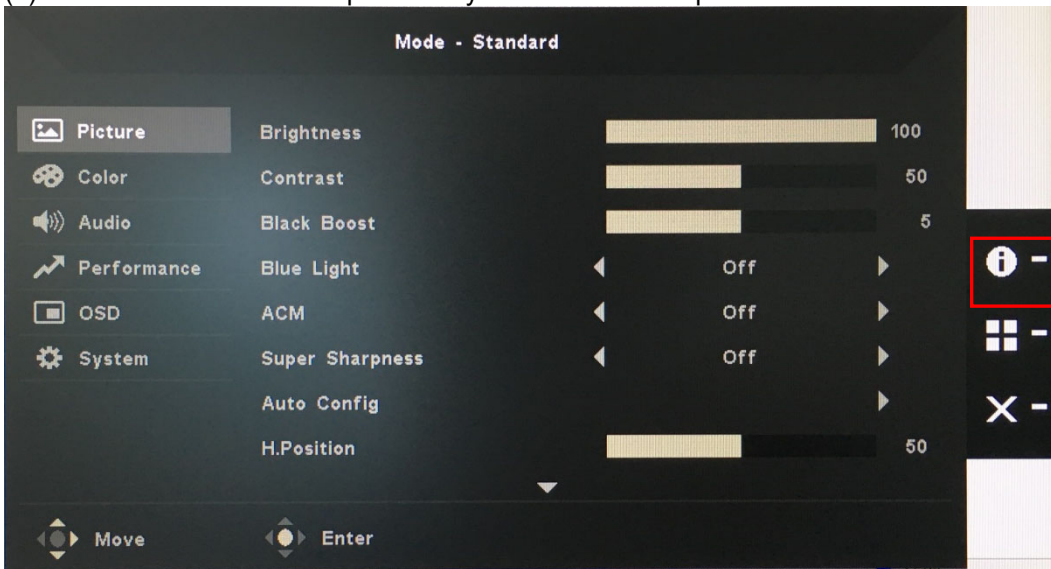




Check this F/W version.

4.2. Do factory reset in user menu.

(1) Restart the monitor after open factory menu. And then open the user menu.



(2) Factory reset will turn off "Burn in" mode which screen color switches among red, green, blue and black.

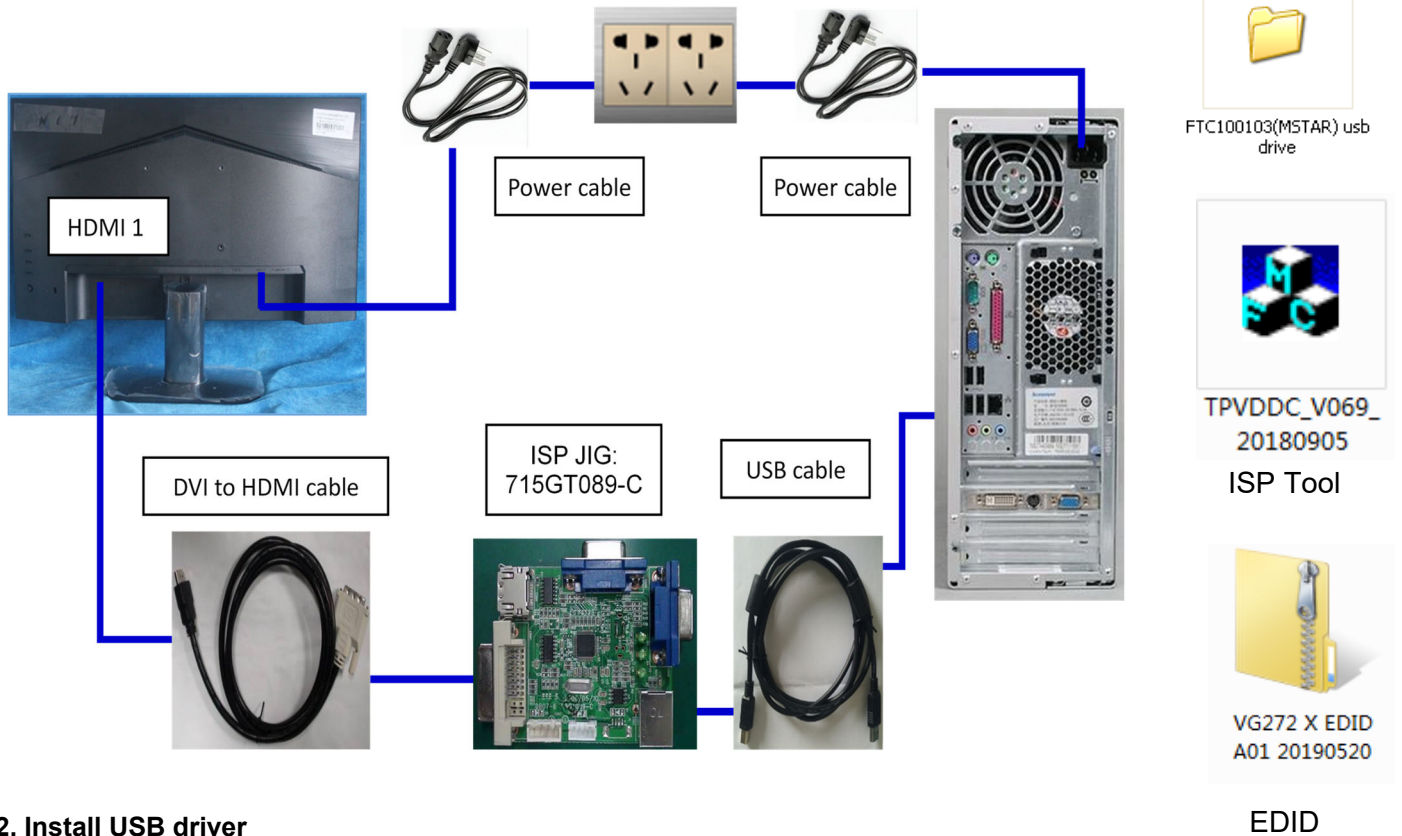
5. Troubleshooting.

5.1. Can't Entry ISP Mode!!

- (1) Check the cables and ISP JIG are connected fluently.
- (2) Click the "Dis Con" and click "Connect" again.
- (3) AC off the monitor for a while and retry it.
- (4) Change other version ISP program.
- (5) Change ISP JIG or cable.
- (6) Change PC.

4. Writing EDID Process

1. Materials list and connection



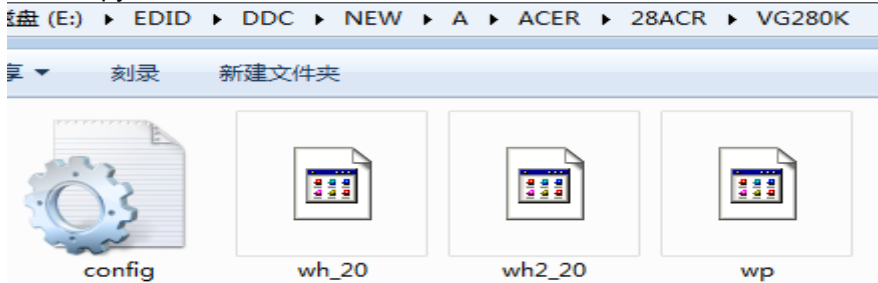
2. Install USB driver

3. Prepare the EDID written.

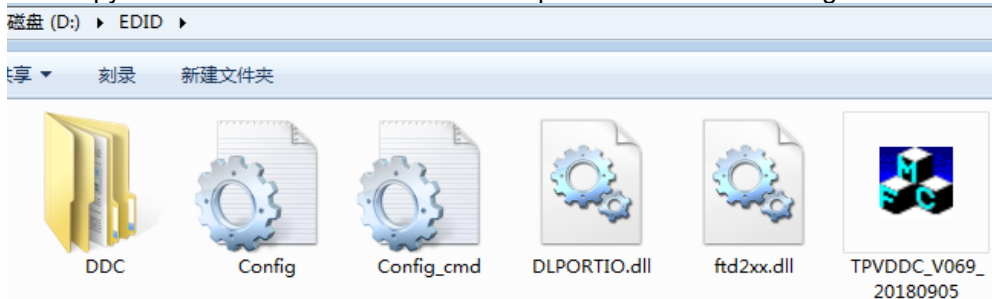
3.1. Change the EDID files name as below rule.

DP EDID → WP.dat HDMI2.0 EDID → WH_20.dat
HDMI2_2.0 EDID → WH2_20.dat

3.2. Copy these files to one folder named as ACER VG280K must contains "config.ini" file.



3.3. Copy ACER VG280K to DDC folder and put DDC and ISP tool together.

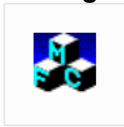


3.4 Set the config as below.



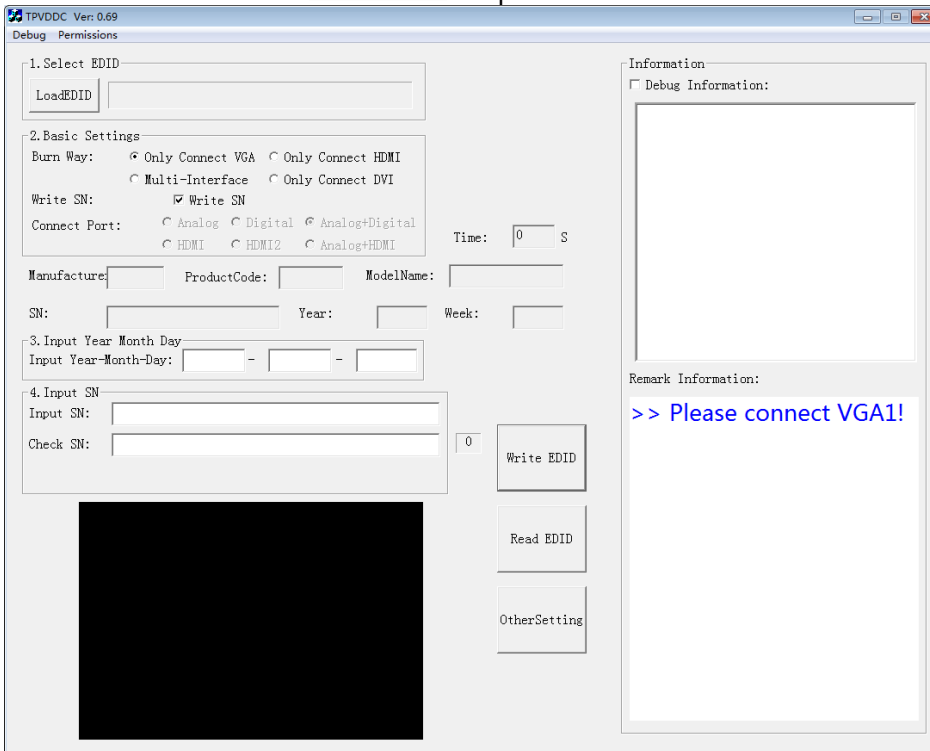
4. Run the ISP tool

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.

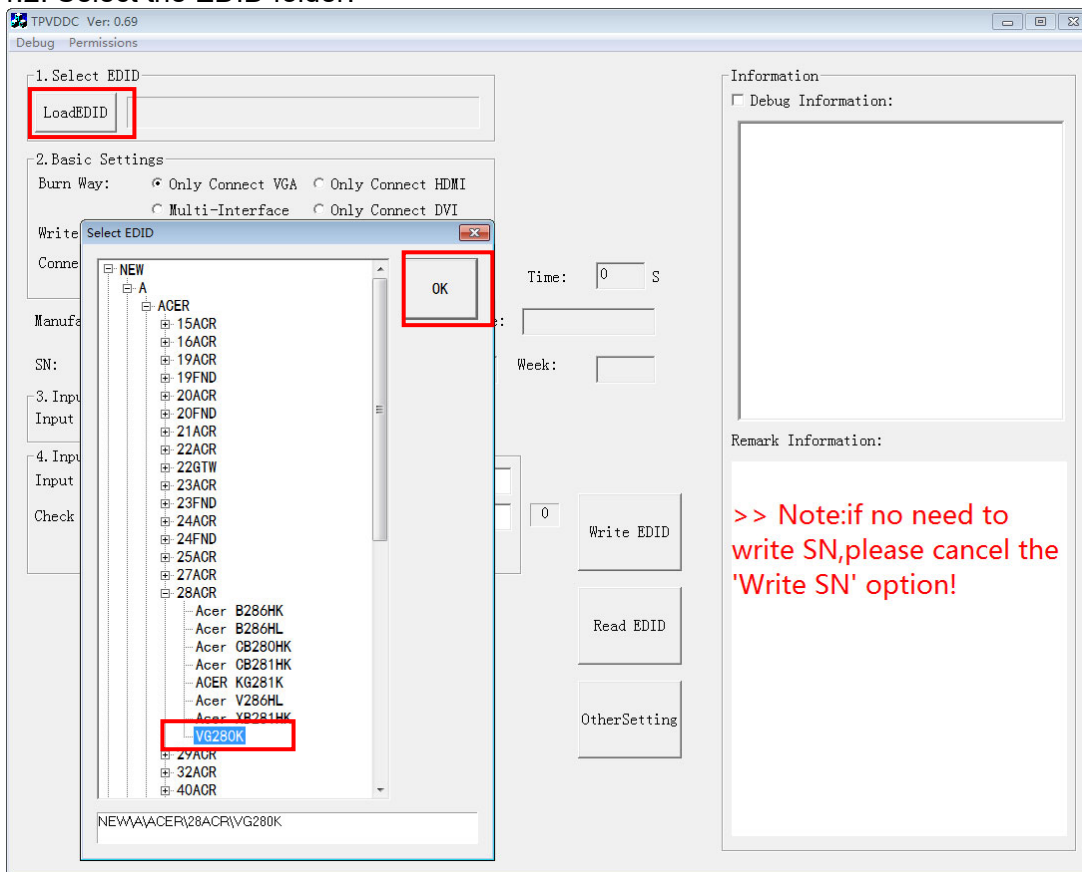


TPVDDC_V069_20180905

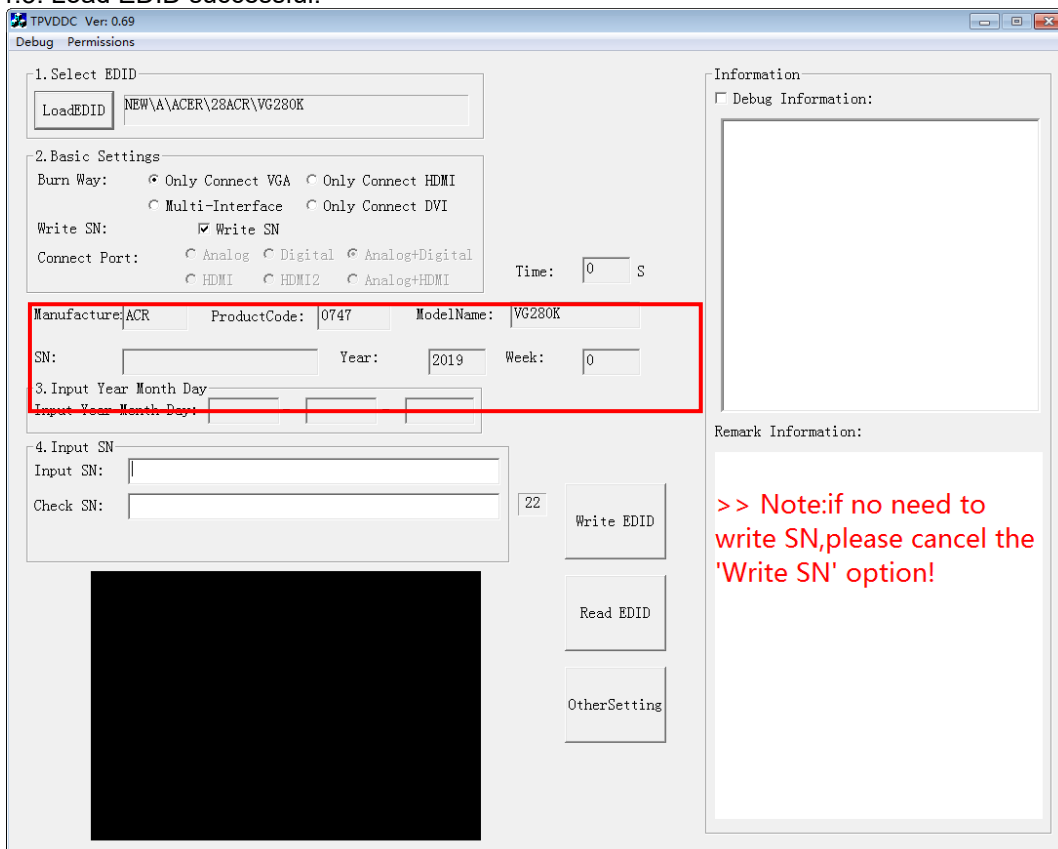
4.1. Double-click the icon to open the tool.



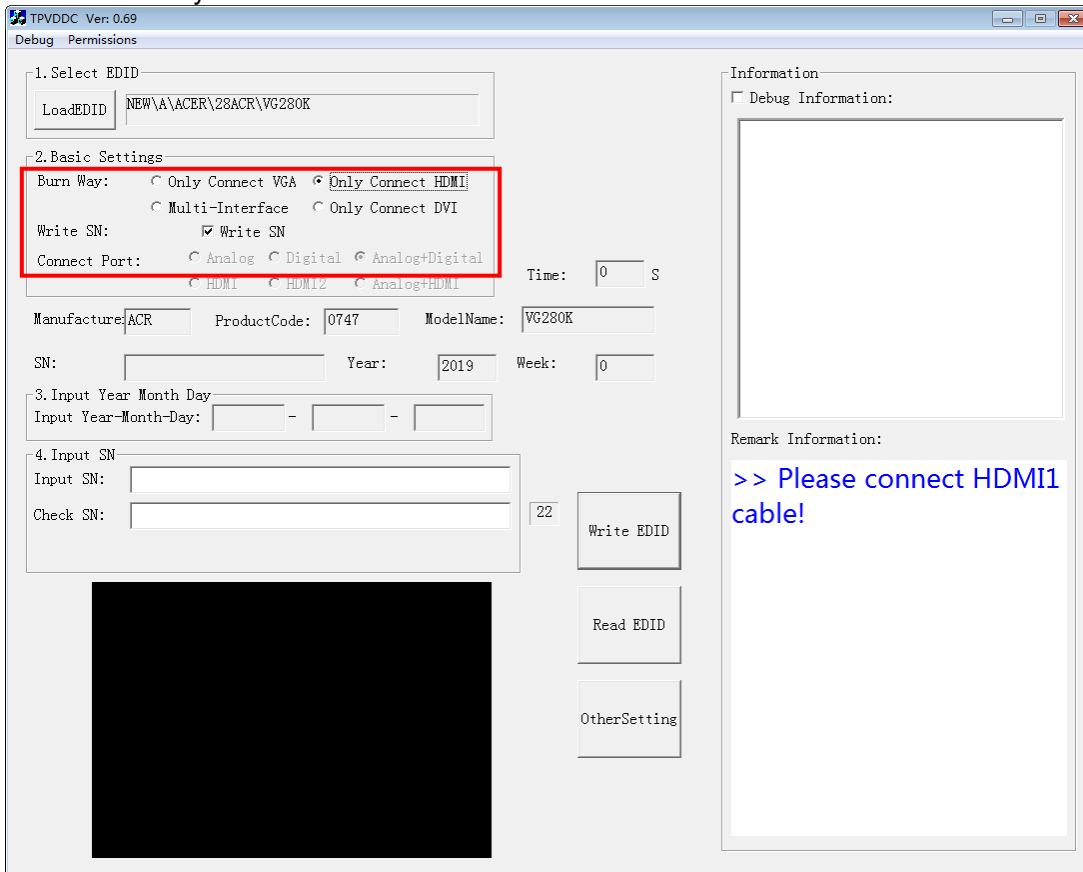
4.2. Select the EDID folder.



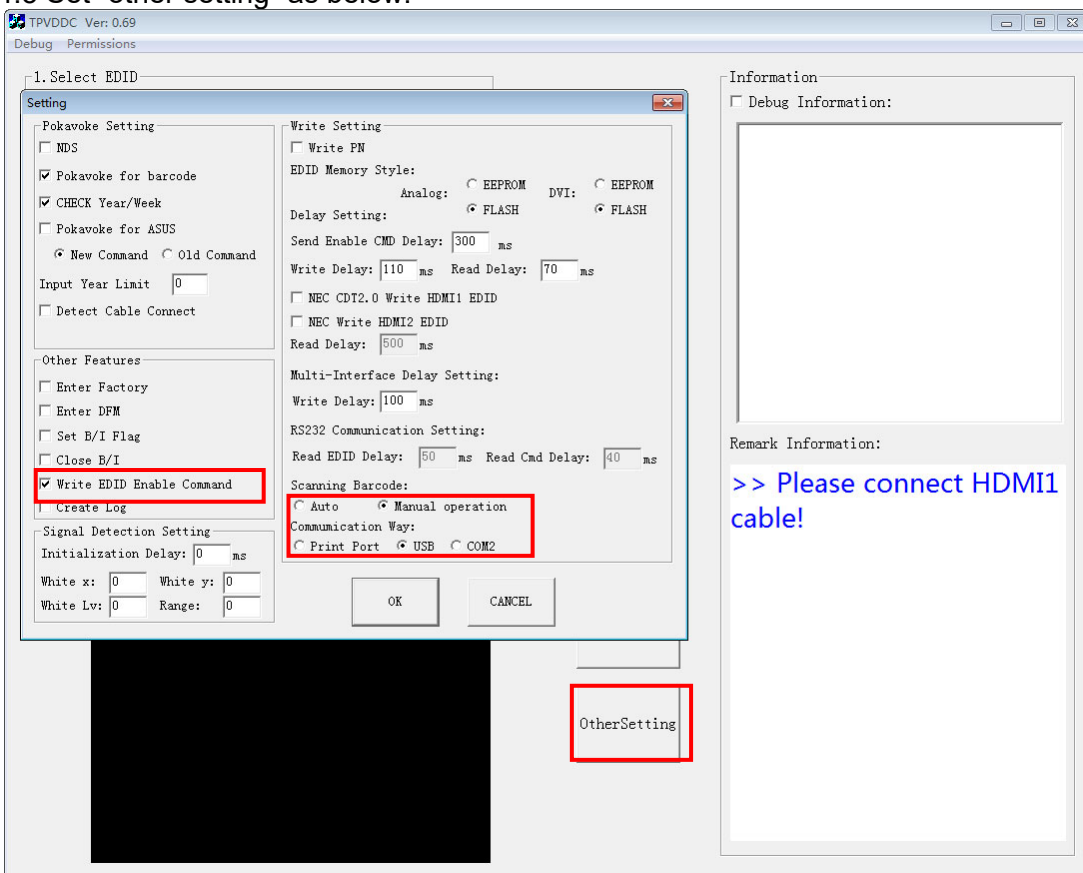
4.3. Load EDID successful.



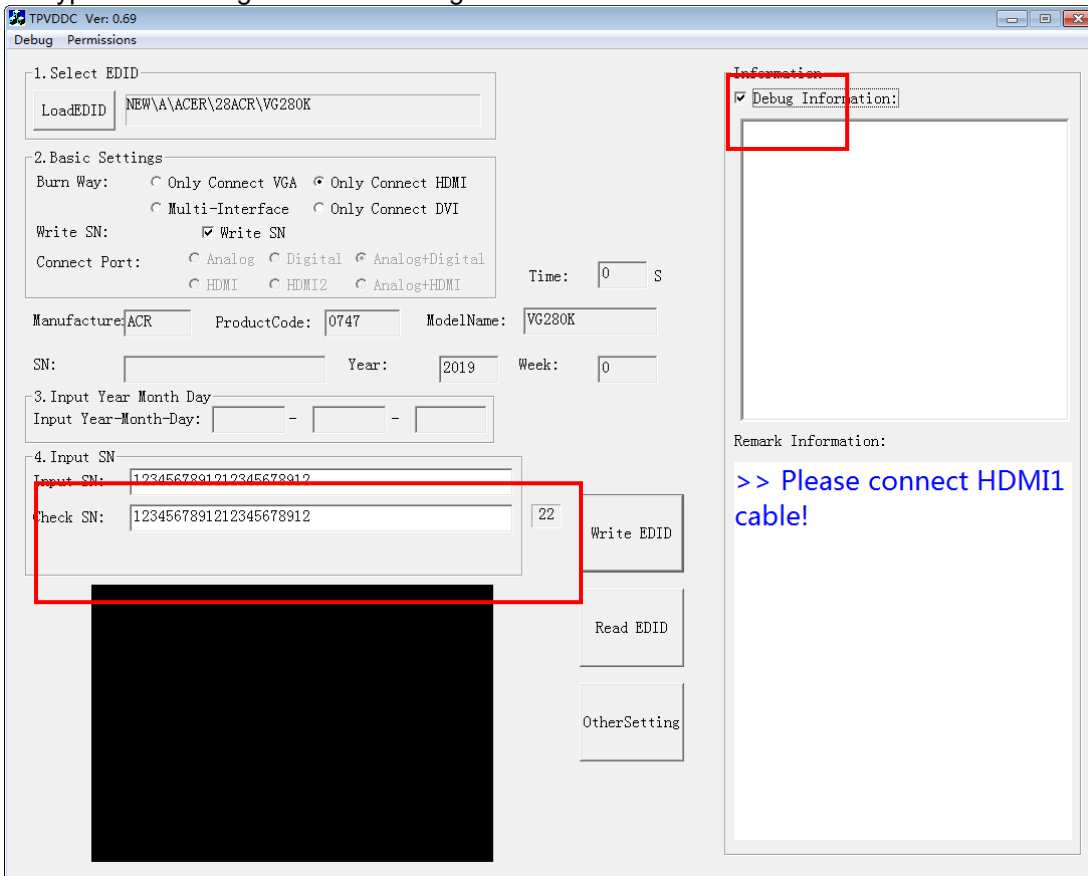
4.4 Tick the “Only connect HDMI and “Write SN”



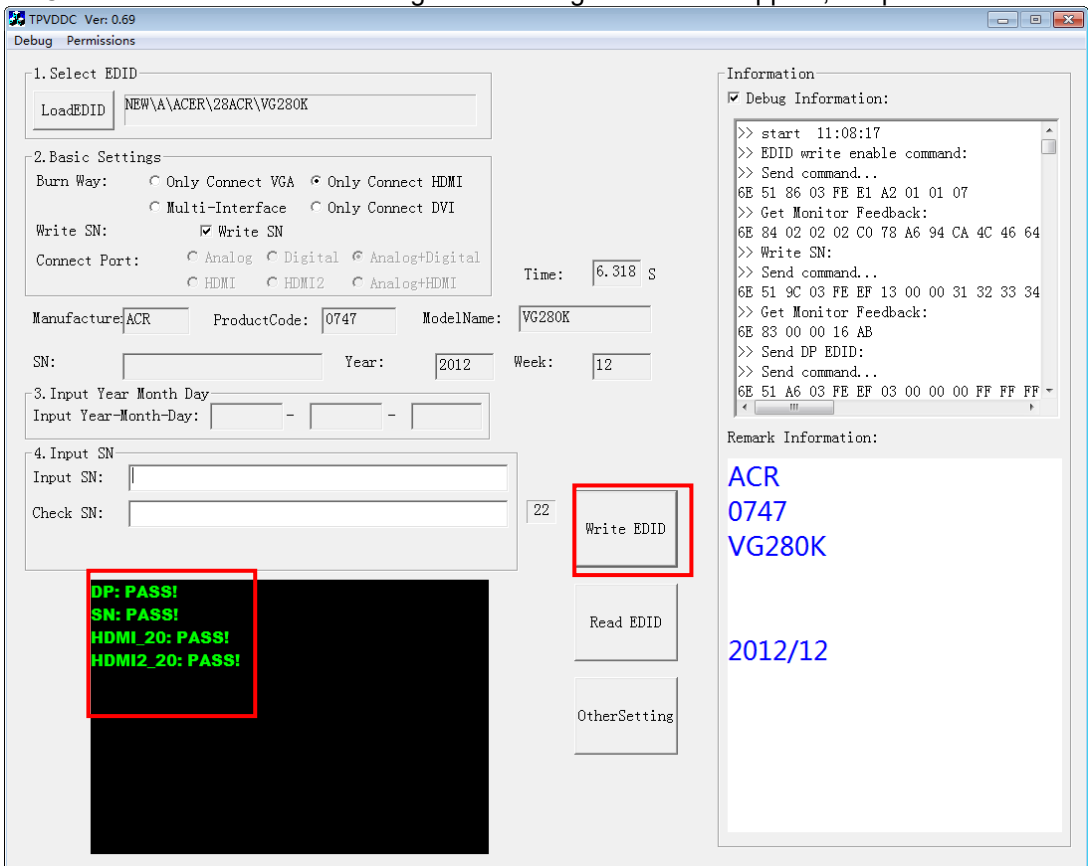
4.5 Set “other setting” as below.



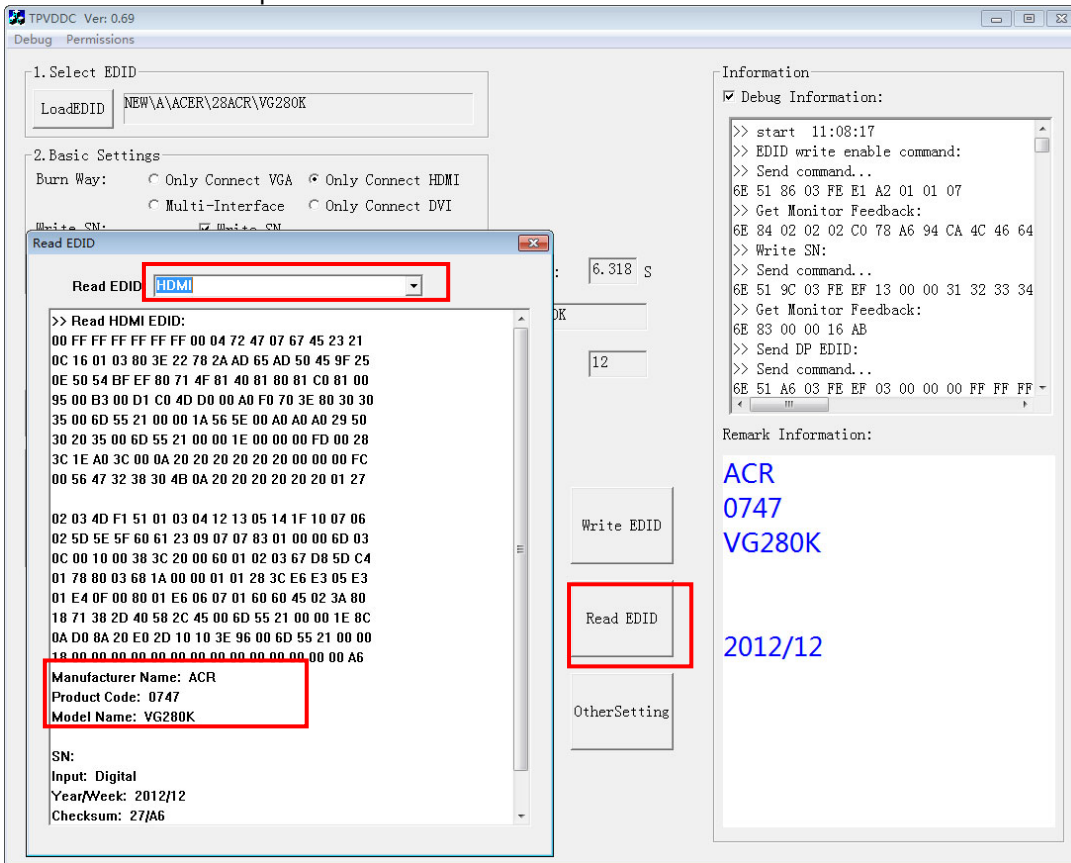
4.6 Type in the 22 digit S/N and "Debug Information".



4.7 Click "write EDID" to start writing. When The green "PASS" appear, the process is finished.



4.8 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.
2. If it appears all "FF", it shows that the EDID data of the Main board is empty, you must writing the EDID again.

5. Troubleshooting.

5.1. 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.



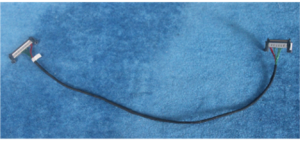
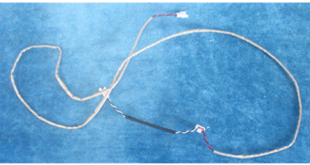




5. FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER VG280K Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your ACER office may have a DIFFERENT part number code from those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional ACER office to order FRU parts for repair and service of customer machines.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional ACER office on how to return it.

Picture	Description	TPV Part No.	ACER Part No.
	MAIN BOARD	756GQJCB0BA0500 00Q	NA
	KEY-BOARD	KEPCLQA6	NA
	LED-BOARD	LEPCLQA2	NA
	Power Board	PLPCHI541KE3B	NA
	LCD M280DCA-E3B C1 NB INX	750GBN280DCB12N 000	NA
	SPEAKER 4 OHM 2.5W 63x22mm 50mm BOX	378G0025689CRA	NA

	SPEAKER 4 OHM 2.5W 63x22mm 50mm BOX	378G0025689CLA	NA
	HARNESS 12p-6p+6p 220/900MM(POWER TO PANEL L/B)	395GH20012DM082000	NA
	HARNESS 6P-6P 650MM(MB TO KEY)	395GK20006DM026000	NA
	COAXIAL CABLE 51P-51P 320MM(MB TO PANEL)	395GLM5151T563COAX	NA
	HARNESS 4P-2P+2P 850/120MM(MB TO SPEAKER)	395GS20004GM070000	NA
	DECO LOGO ASSY	705GQZCS034772	NA
	STAND BASE ASSY	705GQZCS034773	NA
	BASE ASSY	705GQICS034565	NA
	REAR_COVER L28W-Bacer4h-s5	Q34G9441AEM01S0130	NA
	MIDDLE_FRAME L28W-Bacer4h-s5	Q34G9443AEM01S0100	NA

	KEY	A33G2236AEM01L01 00	NA
	KEY_FUNCTION	A33G2238AEM01L01 00	NA
	MAINFRAME FOR INX LCD M280DCA-E3B C1 NB W DP+HDMI+AUDIO	Q15G3316101P0100 GH	NA
	INSULATING-SHEET(WHITE)	Q52G18019290HF0A ZA	NA
	INSULATING-SHEET(BLACK)	Q52G18018550HF0A SI	NA

6. Trouble shooting instructions

Before sending your LCD monitor for servicing, please check the troubleshooting list below to see if you can self-diagnose the problem.

HDMI/DP Mode (Optional)

Problem	LED status	Remedy
No picture visible	Blue	Using the OSD menu, adjust brightness and contrast to maximum or reset to their default setting.
	Off	Check the power switch. Check if the AC power cord is properly connected to the monitor.
	Amber	Check if the video signal cable is properly connected at the back of monitor. Check if the computer system is switched on and in power saving/standby mode. If OSD Lock is On, the LED status set Amber.

Note: Acer monitor is purposed for video and visual display of information obtained from electronic devices.