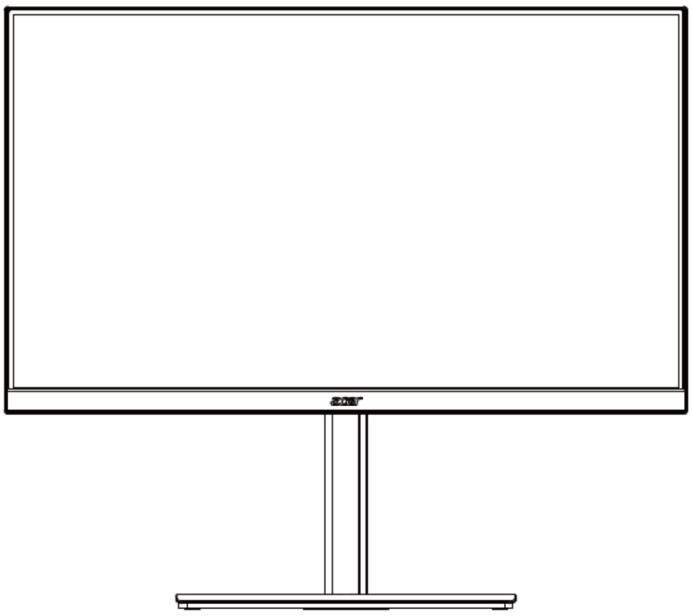
Service
Service
Service



Acer Monitor B277U Ebmiiprzx

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.

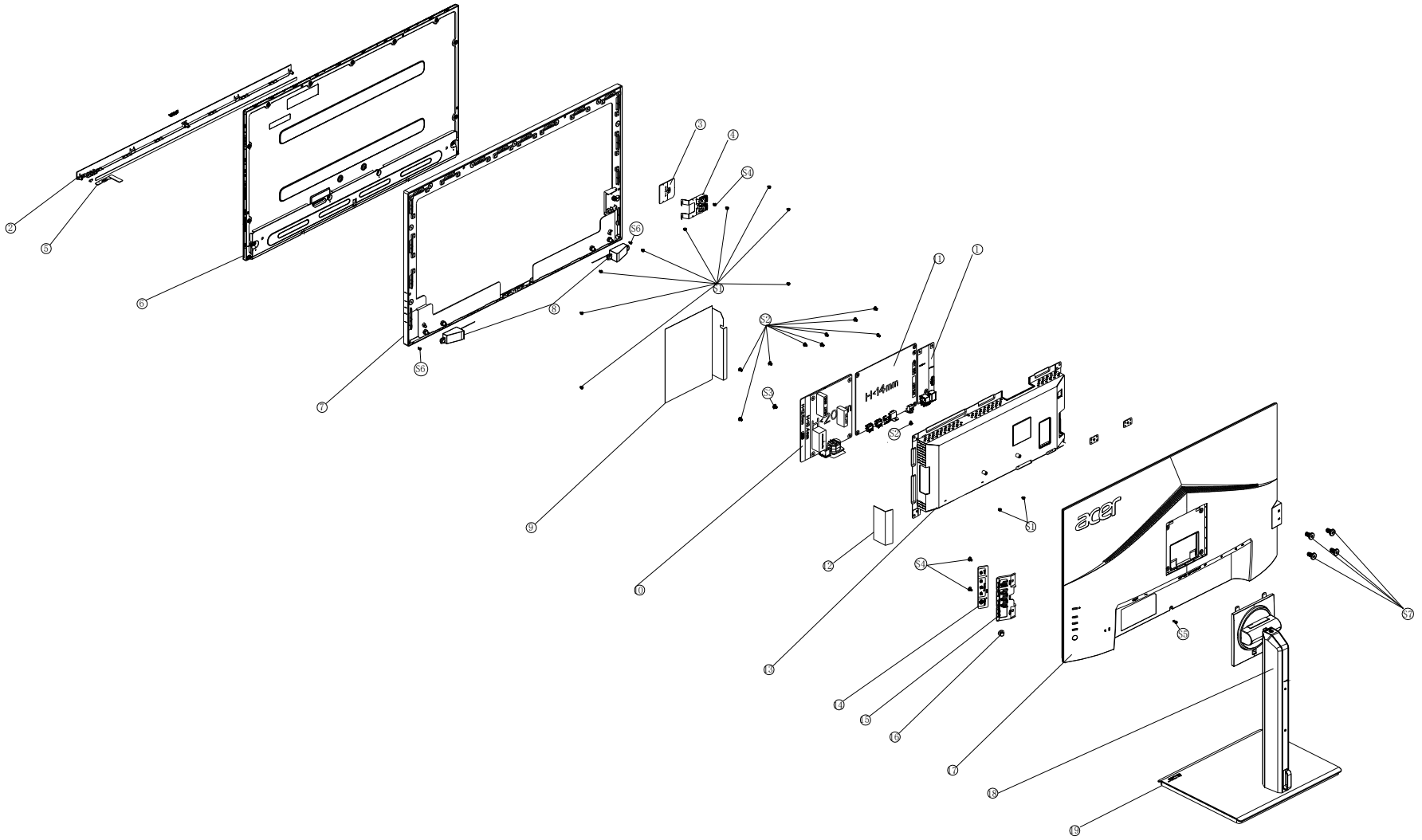
Servicer assumes all liability.

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.
1	USBPQC1	USB BOARD	N/A
3	USBLQA6	USB BOARD	N/A
5	LEPCLQA2	LED BOARD	N/A
6	750GBN270KC913N000	PANEL	N/A
10	PLPCMH541KUE4	POWER BOARD	N/A
11	CBPR3TEC0Q3	MAIN BOARD	N/A
14	KEPCLQA6	KEY BOARD	N/A
	395G279M51G511M000	V-by-One FFC 51P 350mm 0.5mm(MB TO PANEL)	N/A
	395G279M41G504M000	V-by-One FFC 41P 430 0.5mm(MB TO PANEL)	N/A

2. Mechanical Instruction

Tools Required

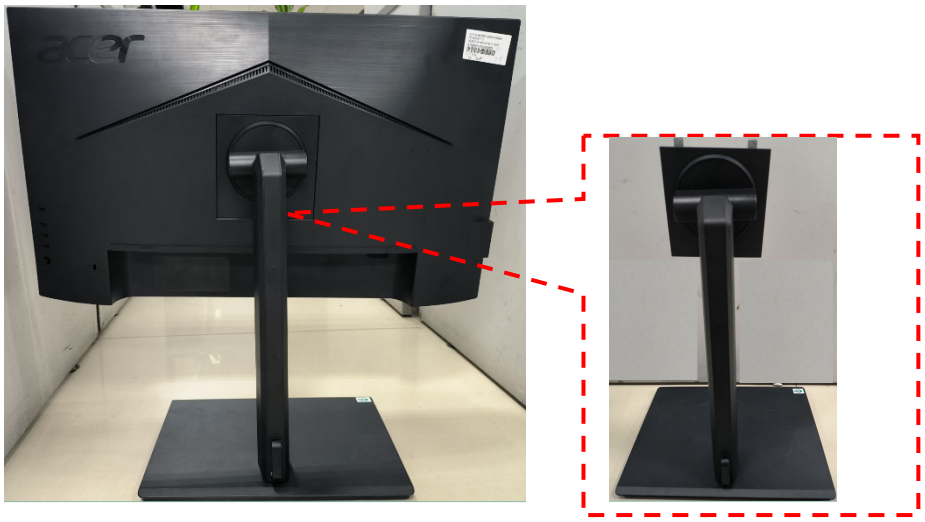
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

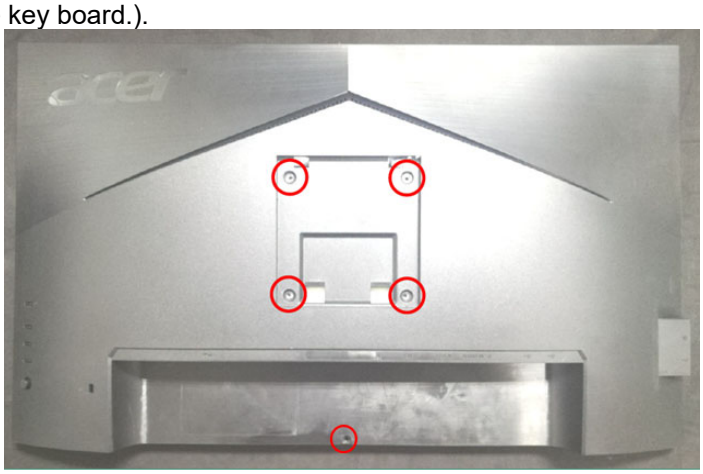
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

2.1 Disassembly Procedures:

S1. Press the button to remove the stand-base ass'y.

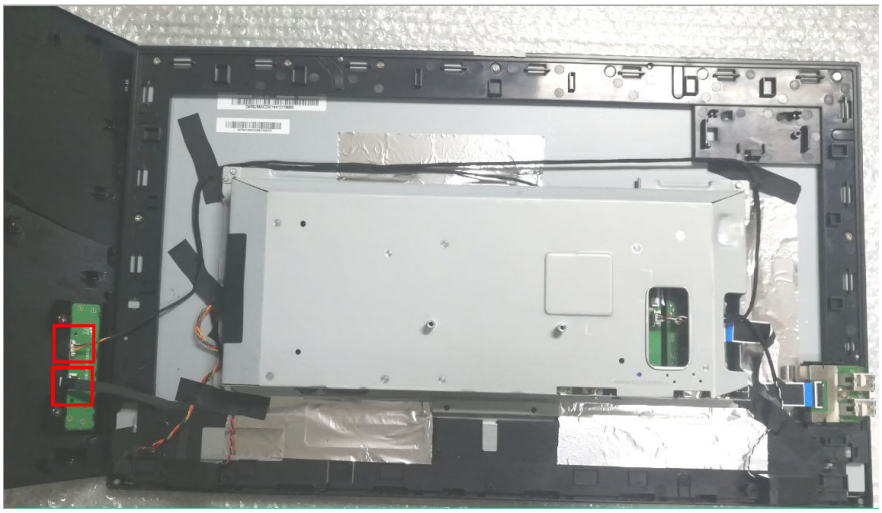


S2. Unscrew the screws then use a tool (shown as below) to open all latches for removing the REAR COVER. (Be careful the position of the key board.).



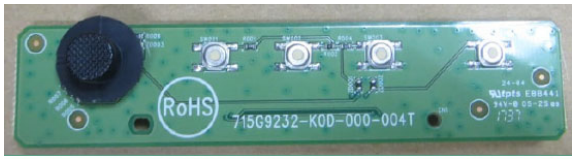


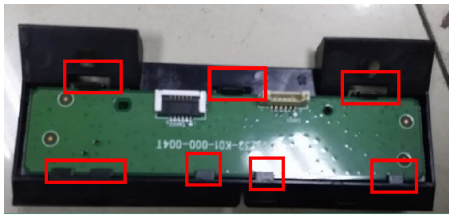
Disconnect the cables to remove the rear cover.



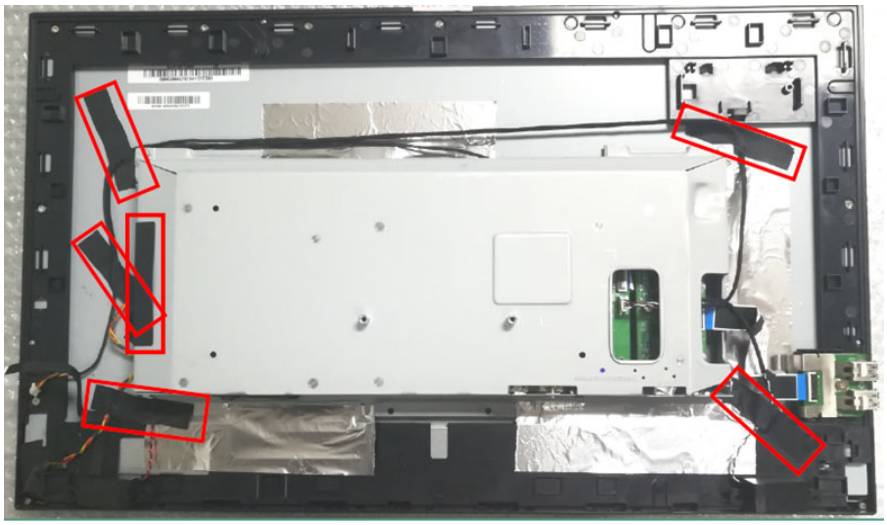
S3. Unscrew the screws to remove the key board.

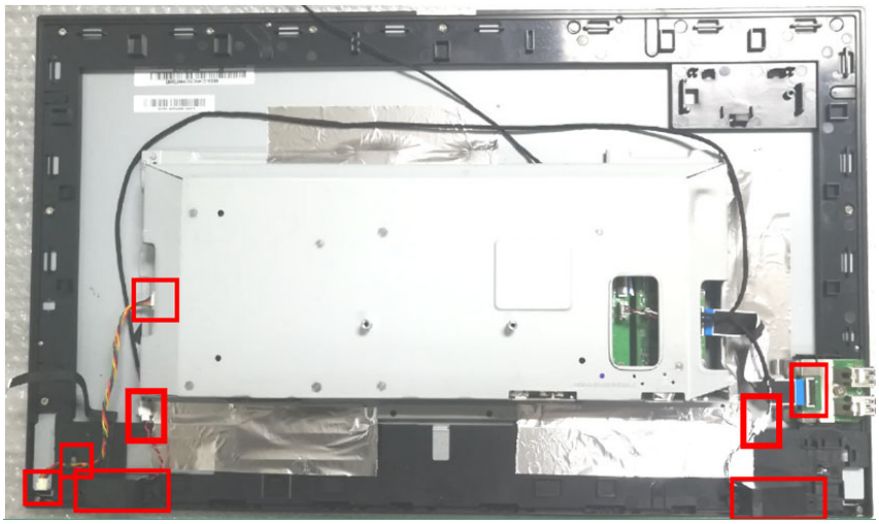




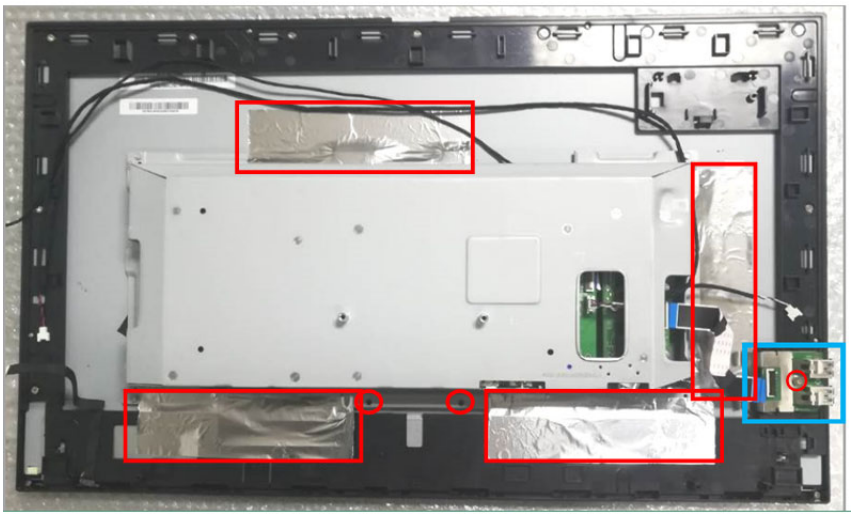


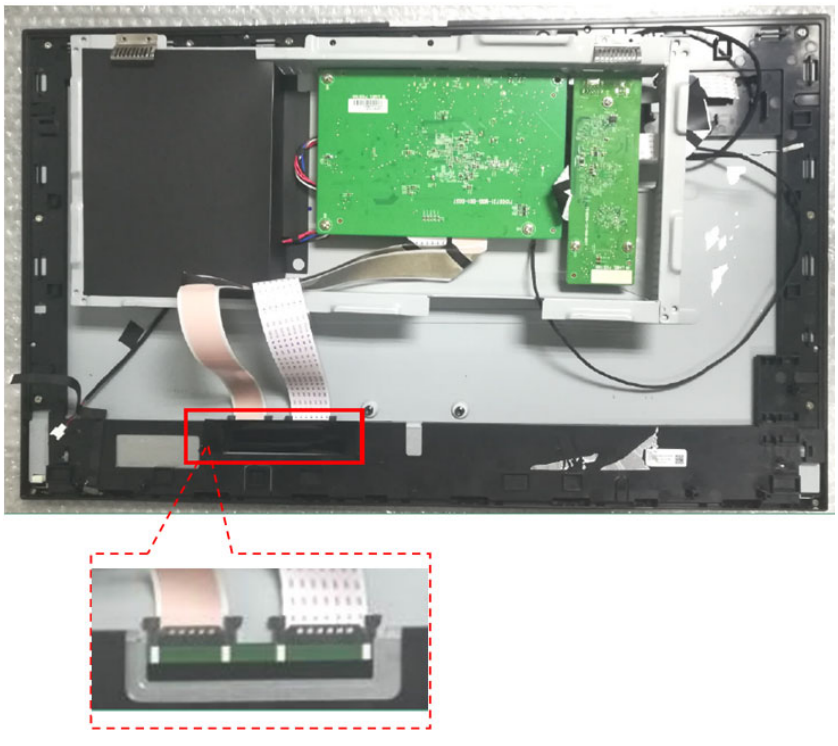
S4. Tear off the tapes and disconnect the pins. Remove the speakers.





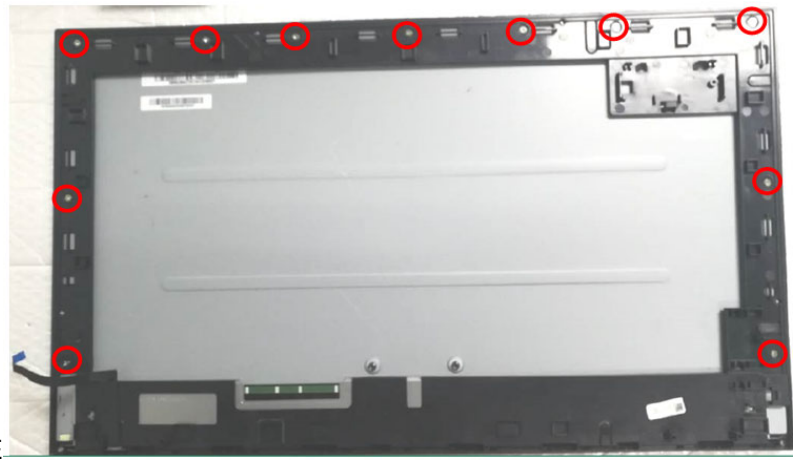
S5.Tear off the tape and release screws of main frame and USB board. Disconnect the pins to remove the main frame.





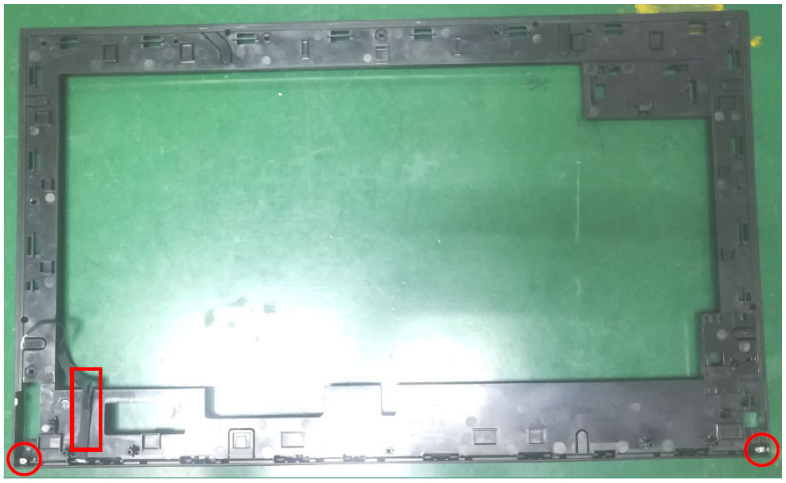
S6. Remove the screws to separate the panel and the Middle Frame. Remove the Deco Bezel and take out the LED board.

E



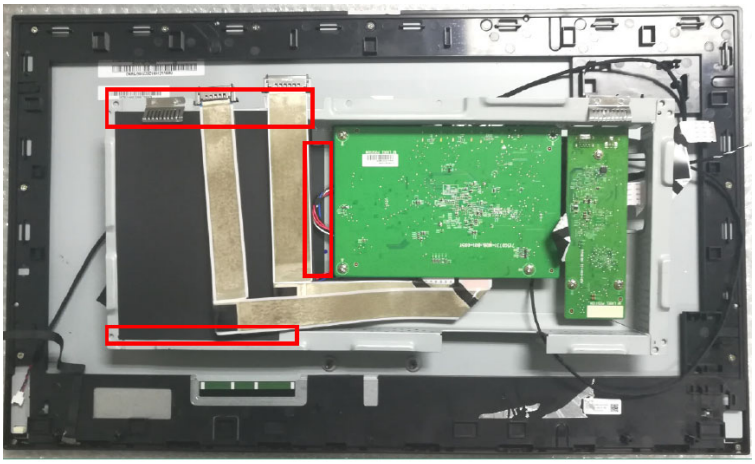




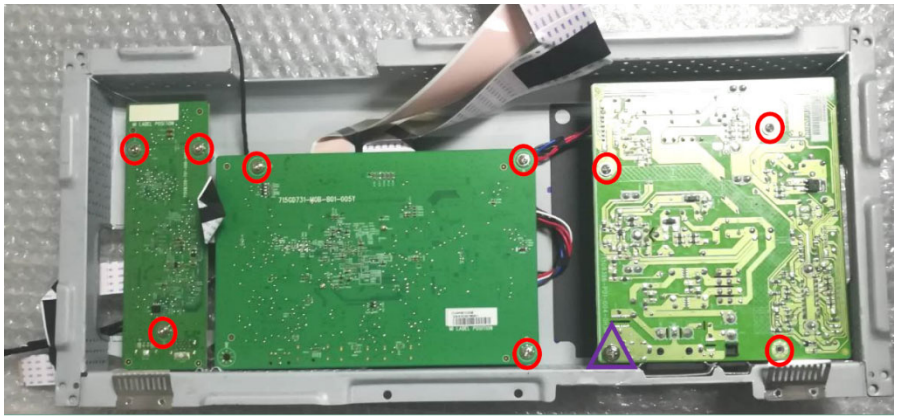




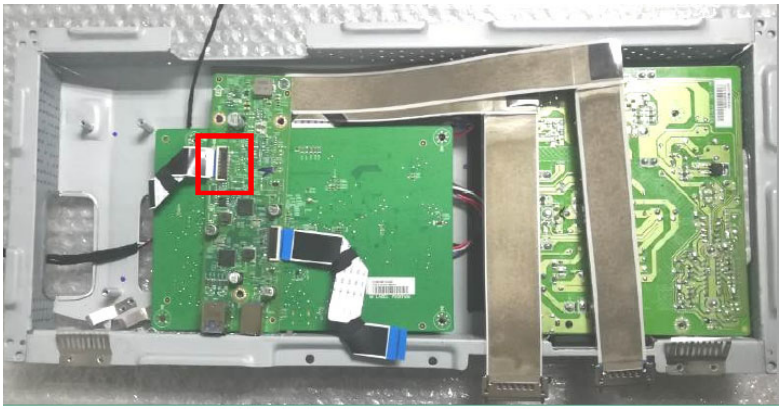
S7. Remove the Mylar and unscrew all of the screws to remove the power board, main board and USB board from mainframe.

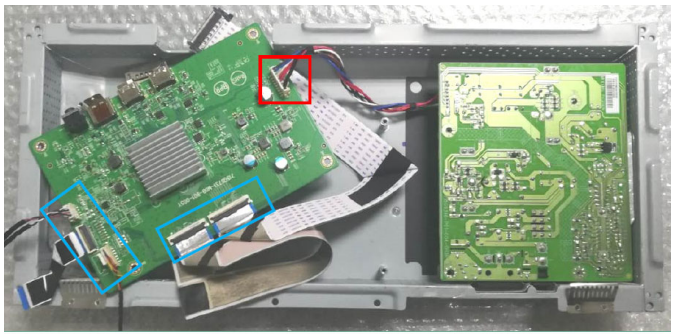


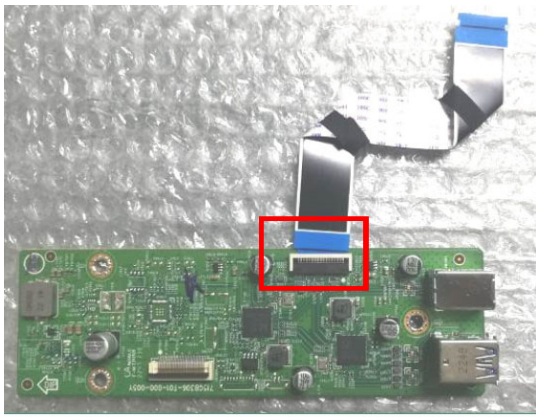


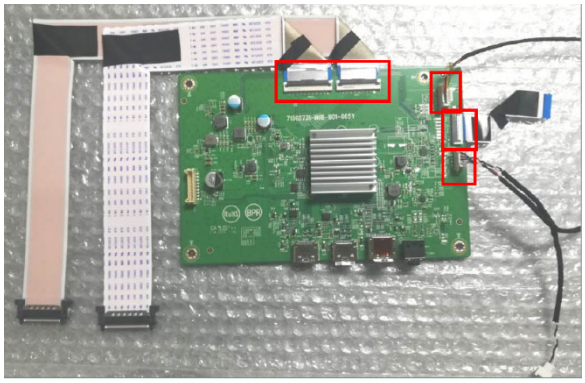


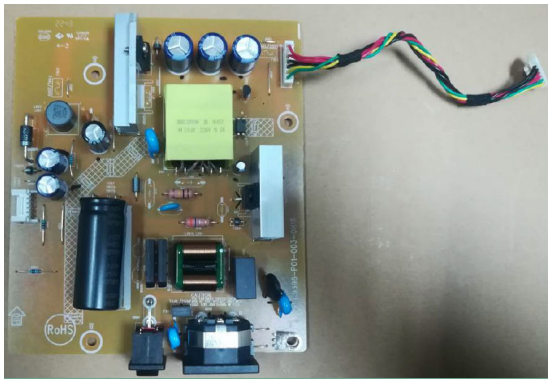
S8. Disconnect the cables.





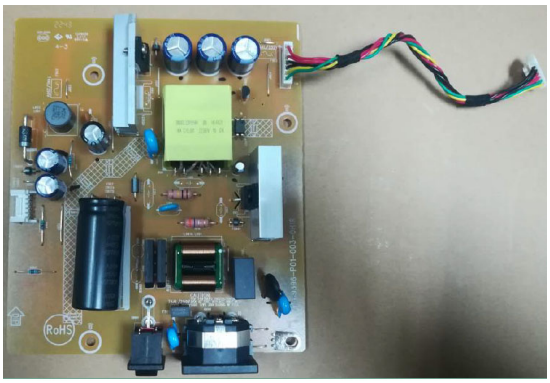


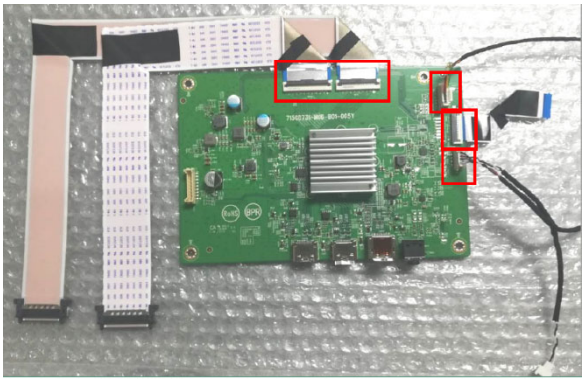


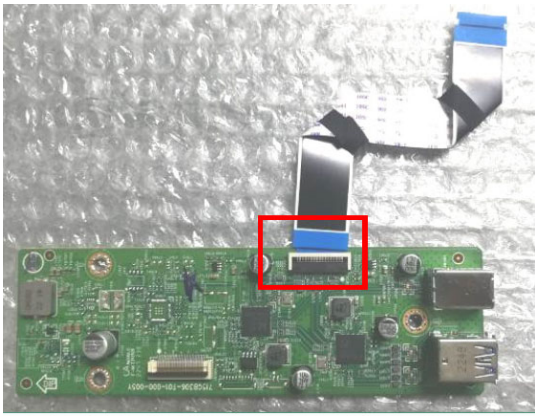


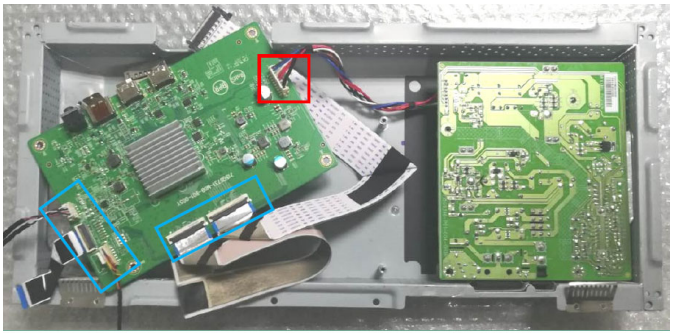
2.2 Assembly Procedures:

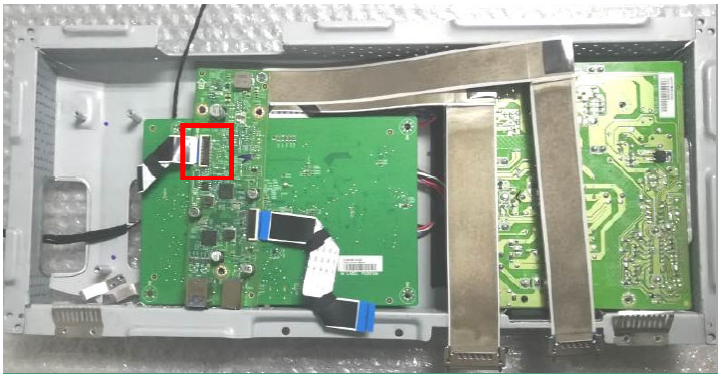
S1. Prepare a main board, a power board, an USB board, a main frame and some essential cables. Connect every cable as below.



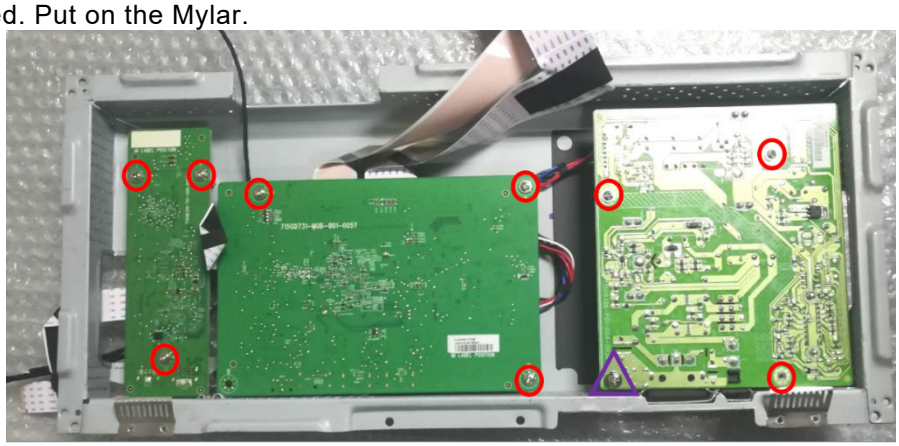




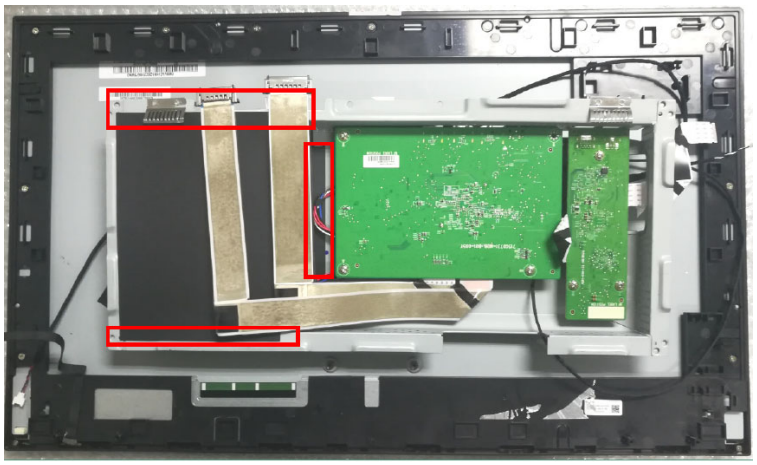




S2. Use a screwdriver to tighten the screws till the power board, main board and USB board with shield are firmly attached. Put on the Mylar.



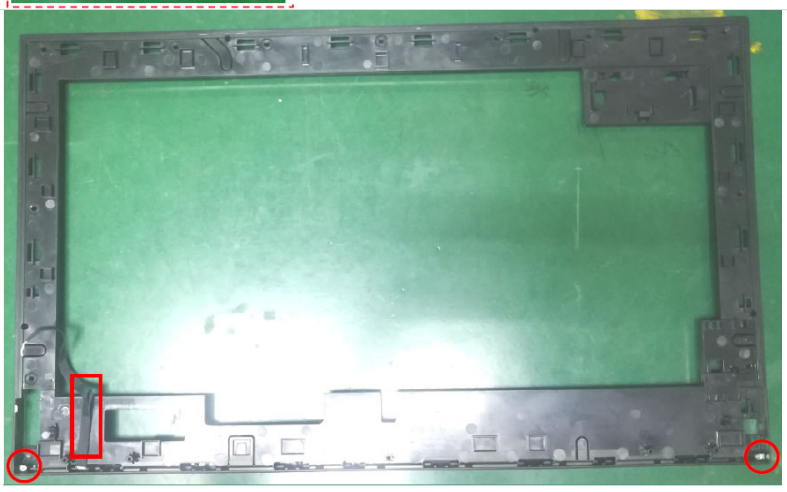




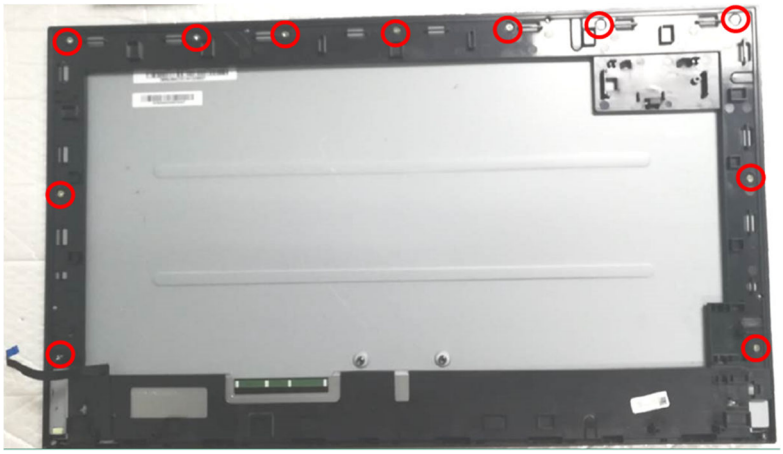
S3. Assemble the MIDDLE FRAME, bezel, LED board and the panel. Use a screwdriver to tighten the screws.



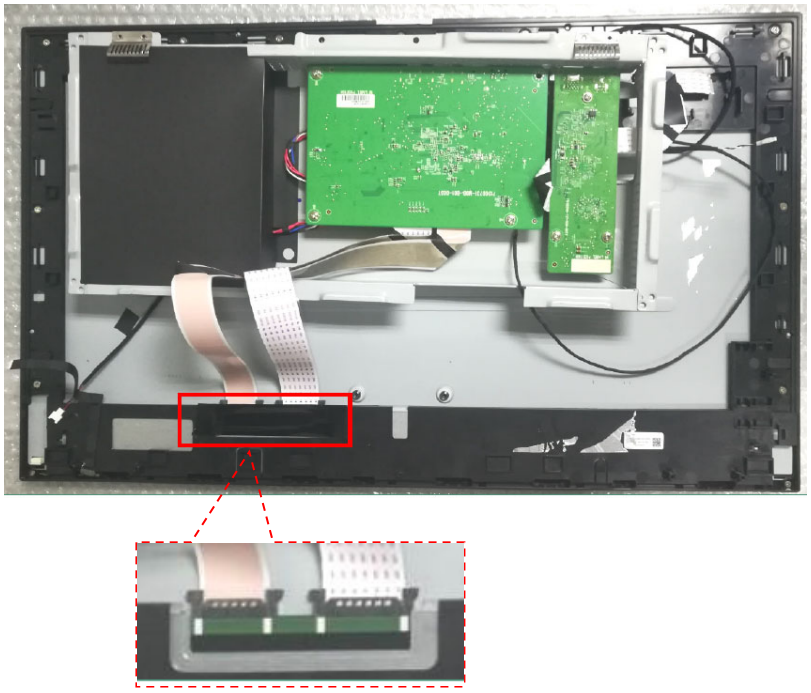


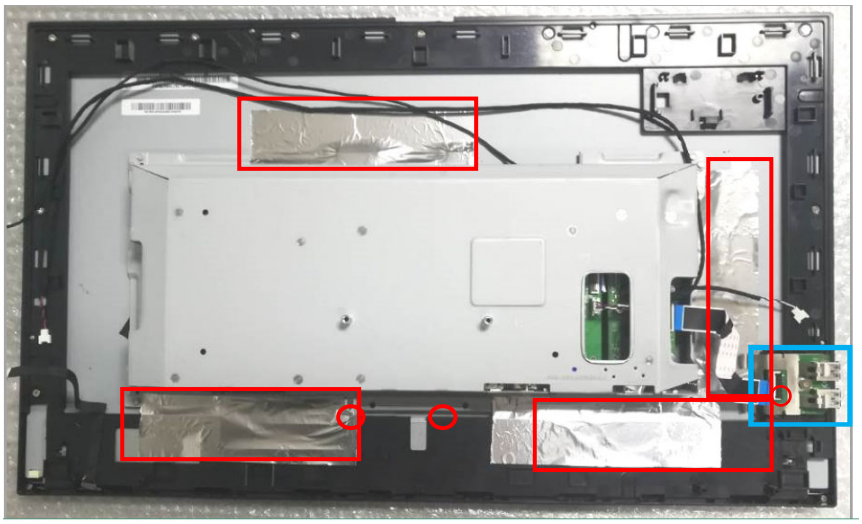




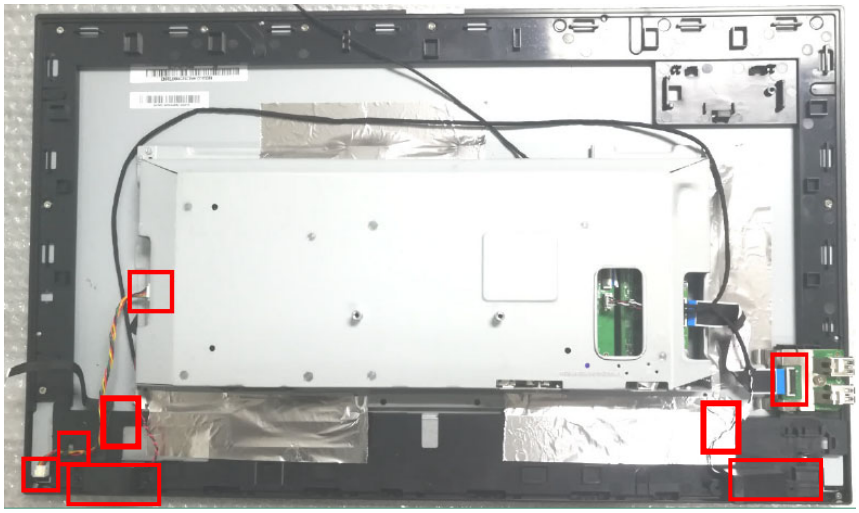


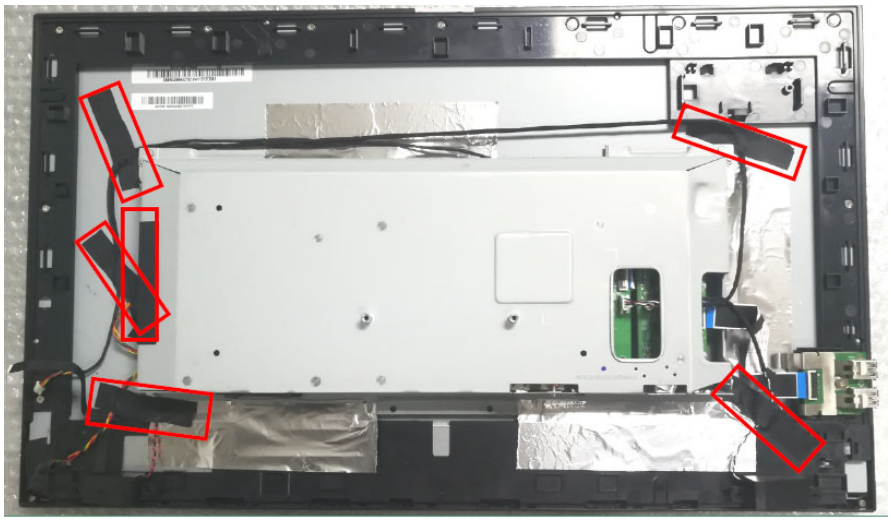
S4. Connect cables (mainboard to panel; power board to panel). Put the shield on panel, Use a screwdriver to tighten the screws. Paste the tapes and tighten the screw to assemble the USB board.



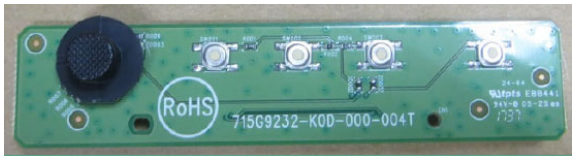


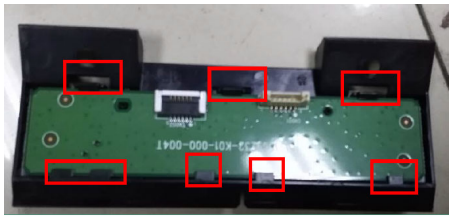
S5. Assemble the speakers and connect all pins. Paste all the tapes and mylar.

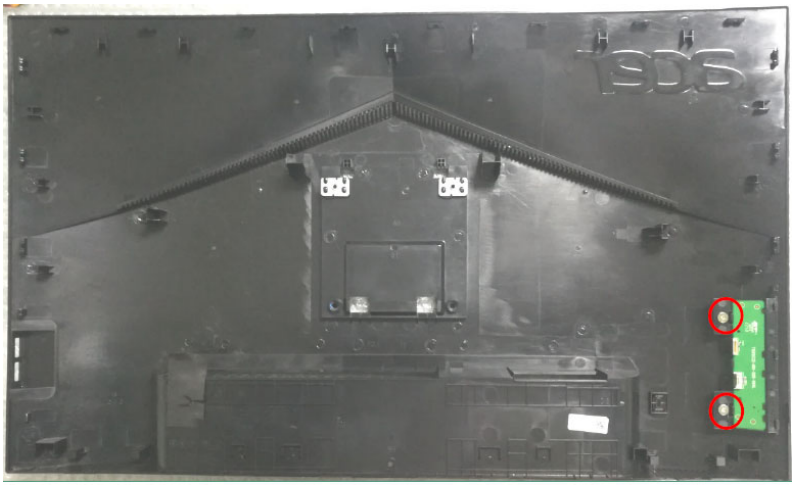




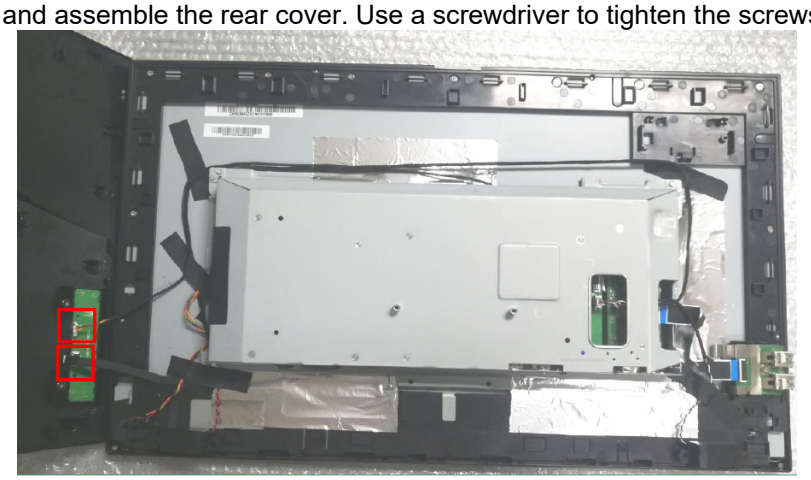
S6. Prepare a rear cover. Assemble the key board.

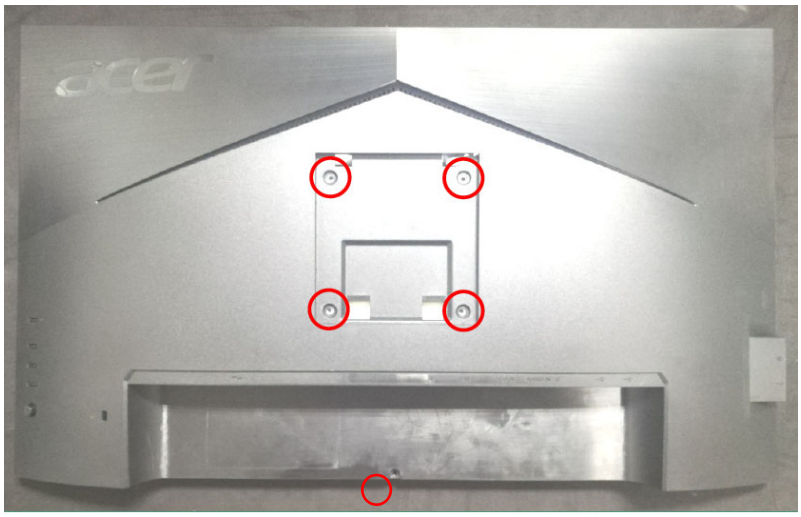






S7. Connect the pins and assemble the rear cover. Use a screwdriver to tighten the screws.





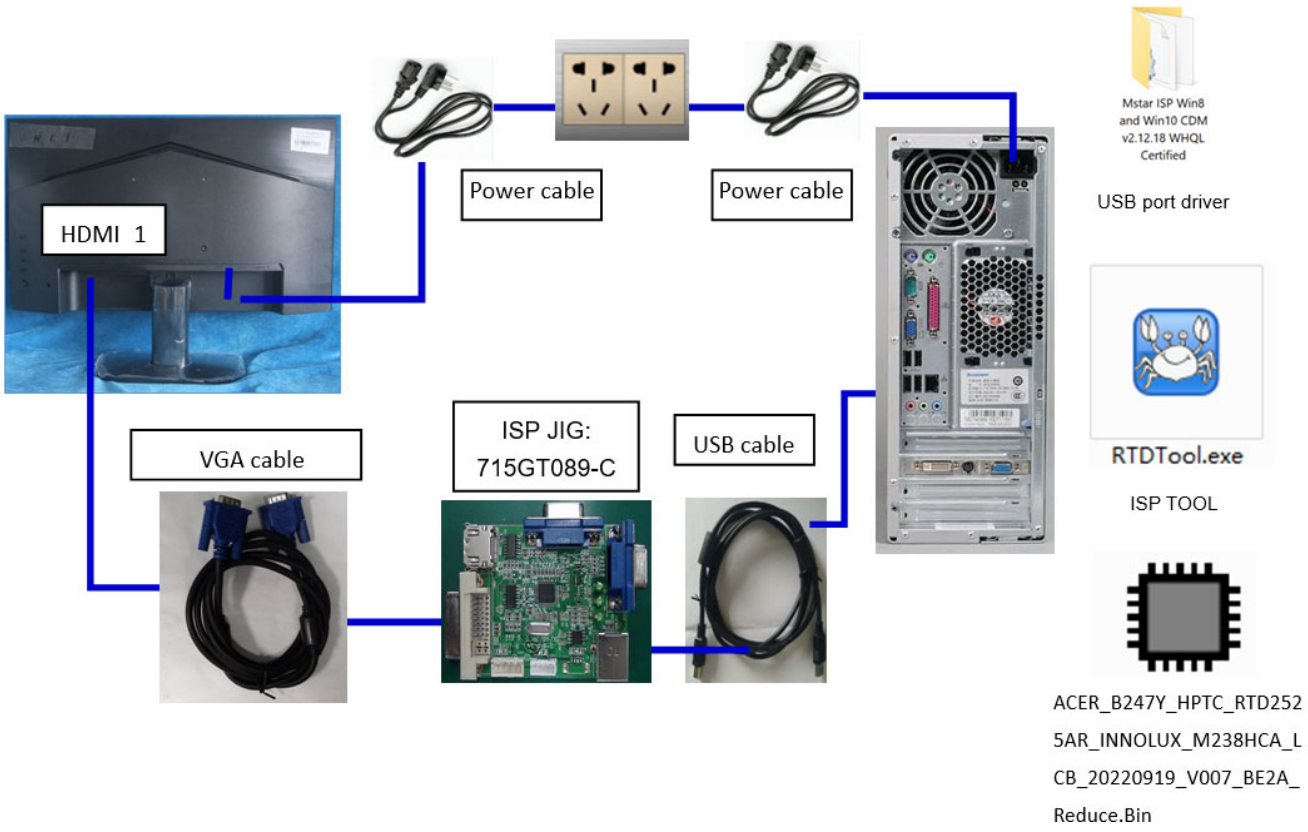
S8. Assemble the stand base ass'y.





3. Firmware Upgrade Process

1. Materials list and connection

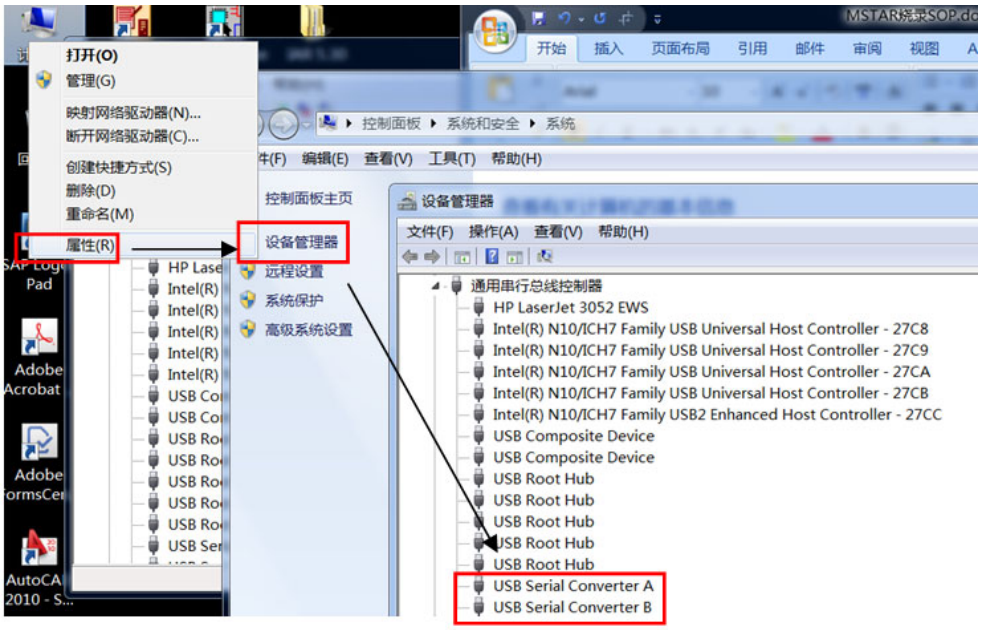


2.Install USB driver.

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



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



3. Install RTD tool.

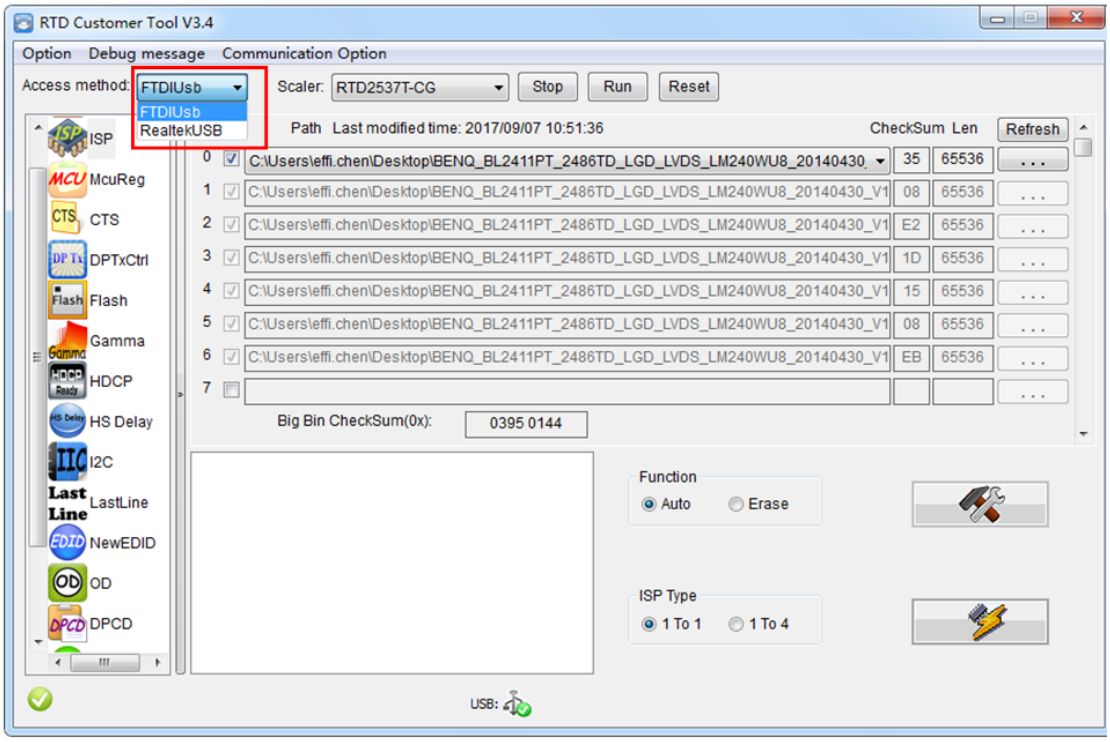
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the EDID writing tool before running the F/W Upgrade tool.



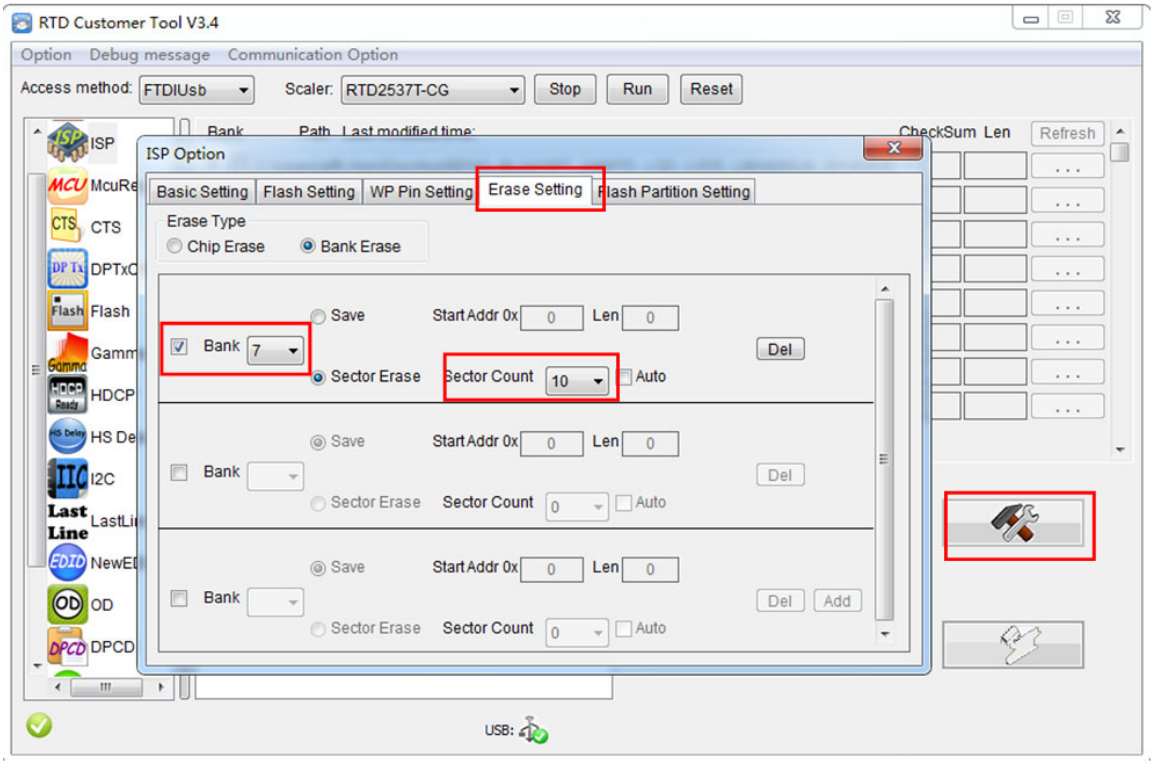
3.1. `RTDTool.exe` double- clicks the icon to run it.

Note: Must to install driver firstly

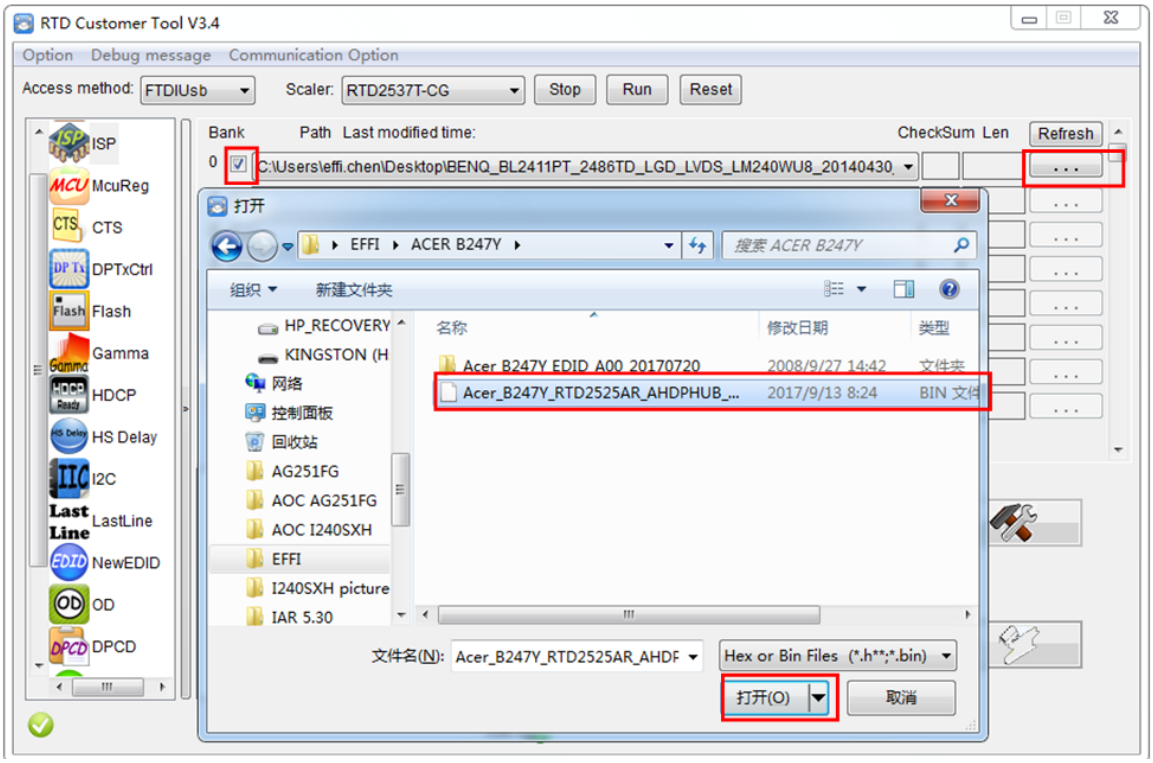
3.2. Choose the FTDIUSB communication way.

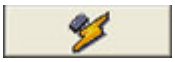


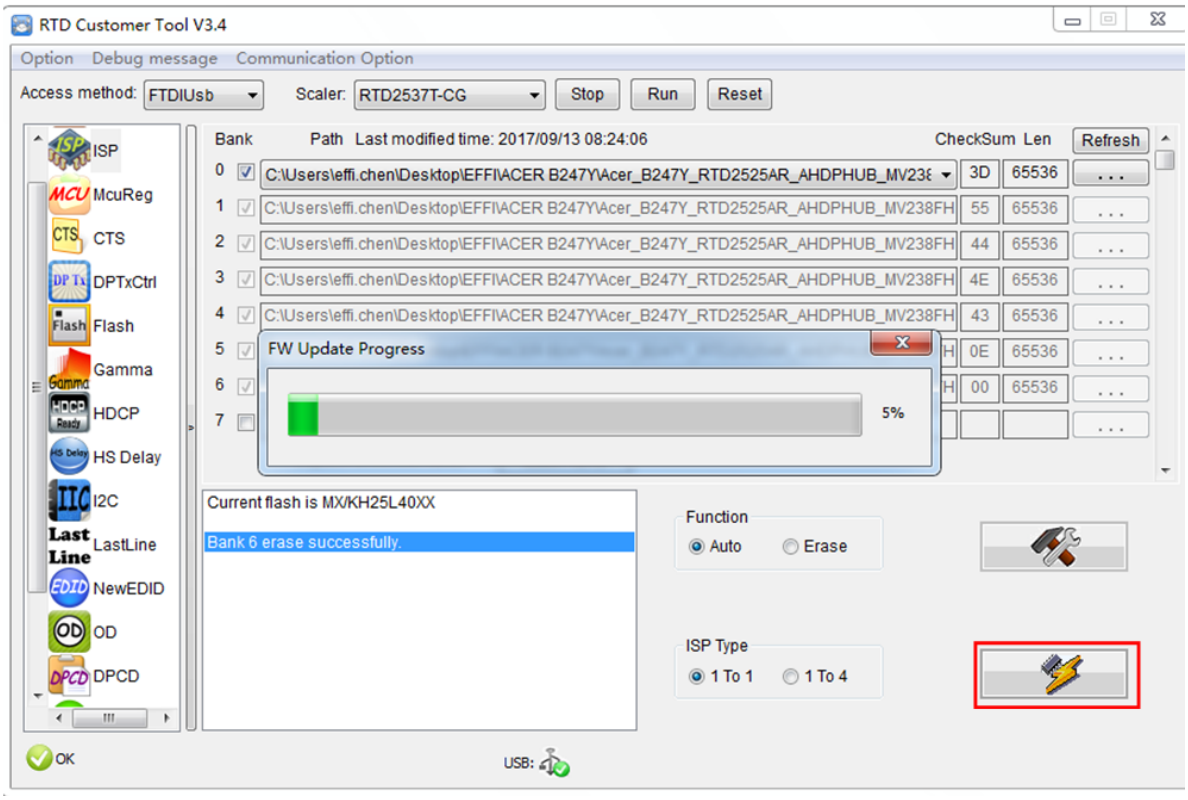
3.3 Click “ISP” and “ISP Option” to set the “Erase Setting” as below.



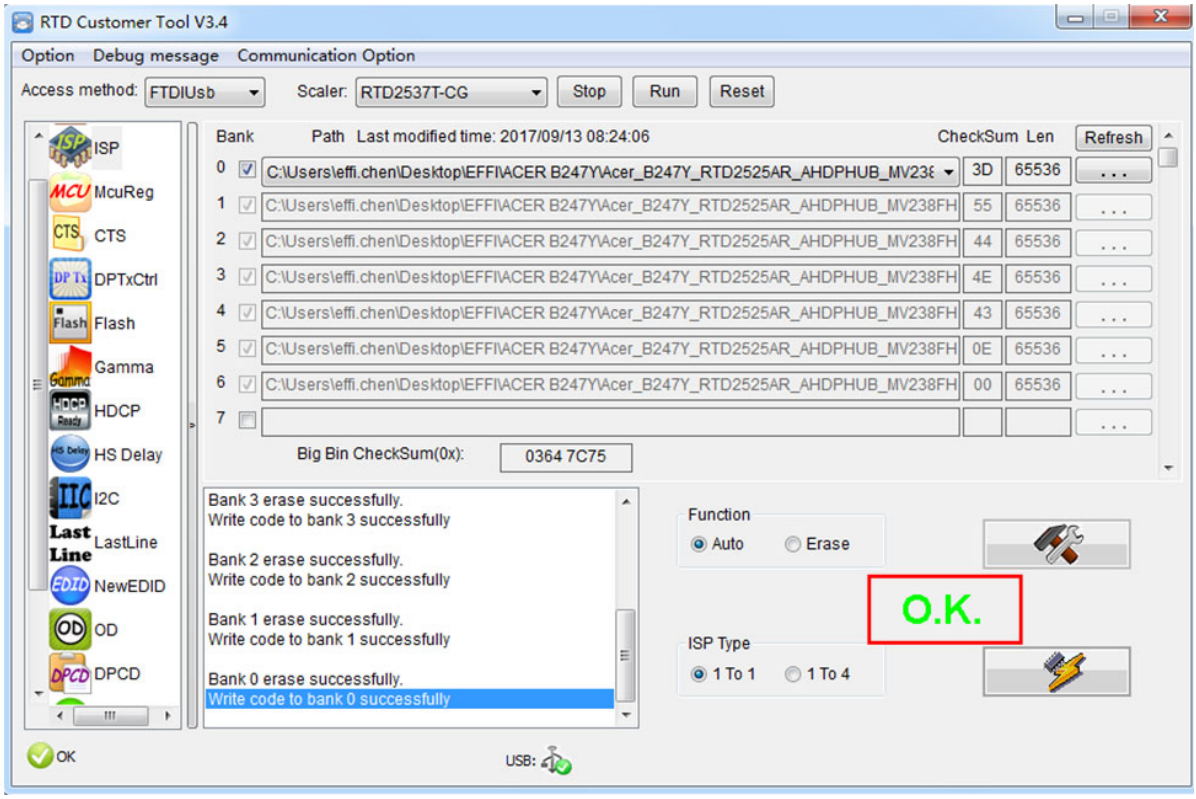
3.4 Close the “ISP Option” window and click the “BigBin” to load the correct F/W.



3.5 Click  to start programming.



3.6 After about 20 minutes, there will pop up message as below figure which promotes the upgrade successful.

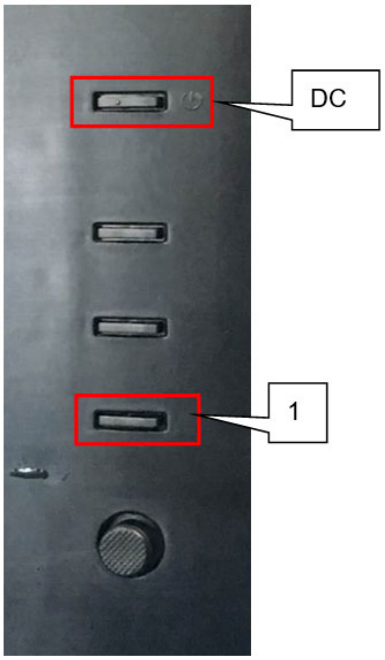


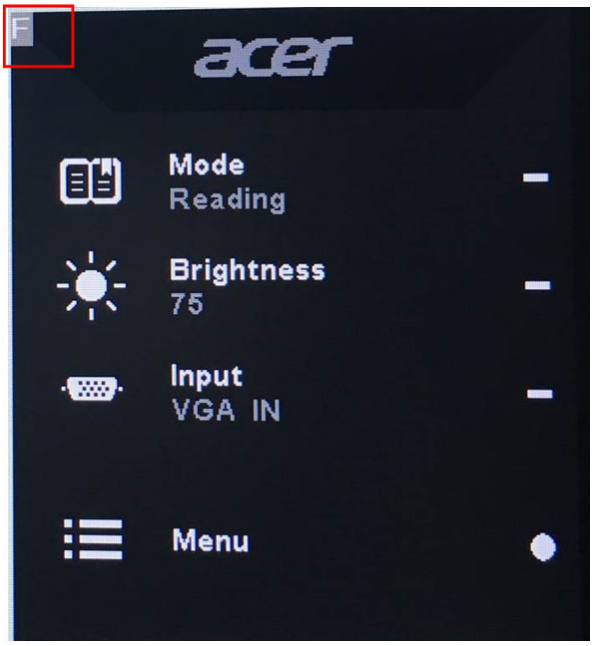
4. Check the FW version after upgrade.

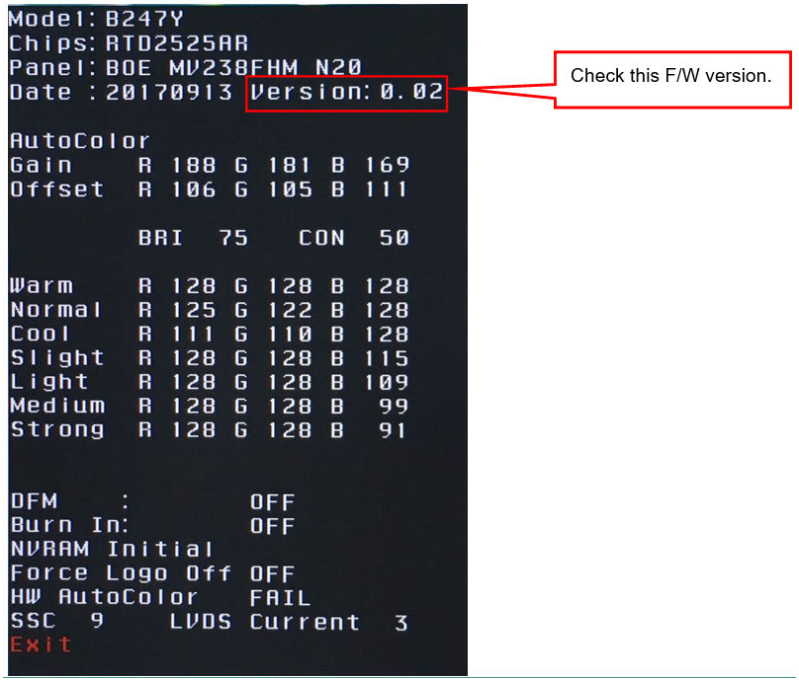
4.1. The way to open factory menu.

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

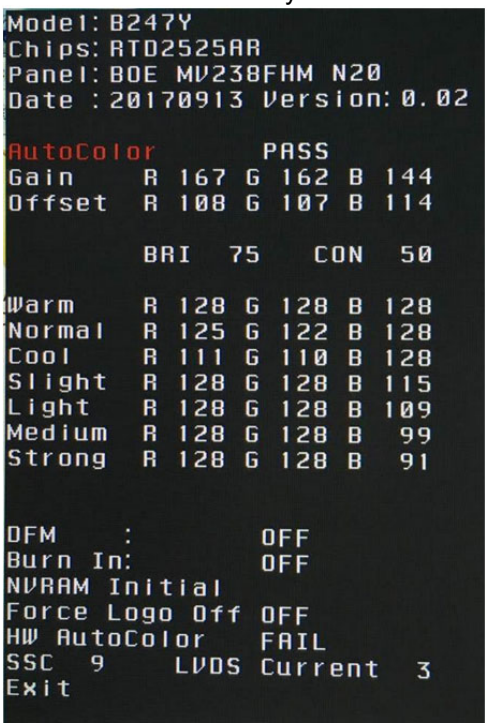
(2) The way to factory menu: DC off and pressing the “1” key and DC on, when the screen lights, release the “1” key to open the menu with “F” and select “F” to open factory menu.





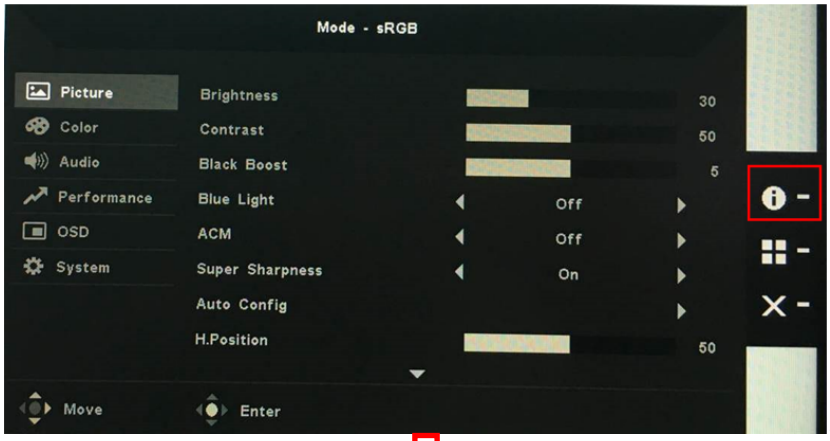


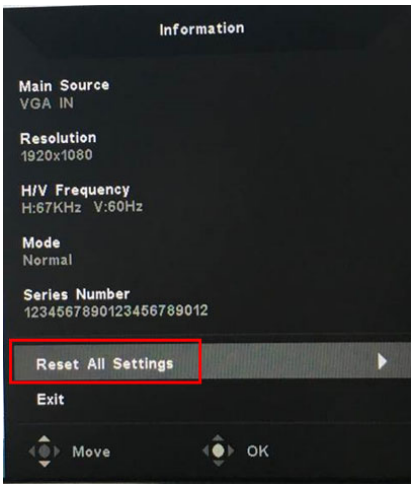
(3) Do “Auto Color” in factory mode.

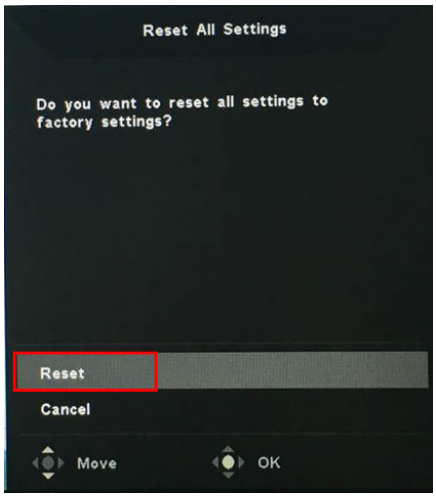


4.2. Do factory reset in user menu.

(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.

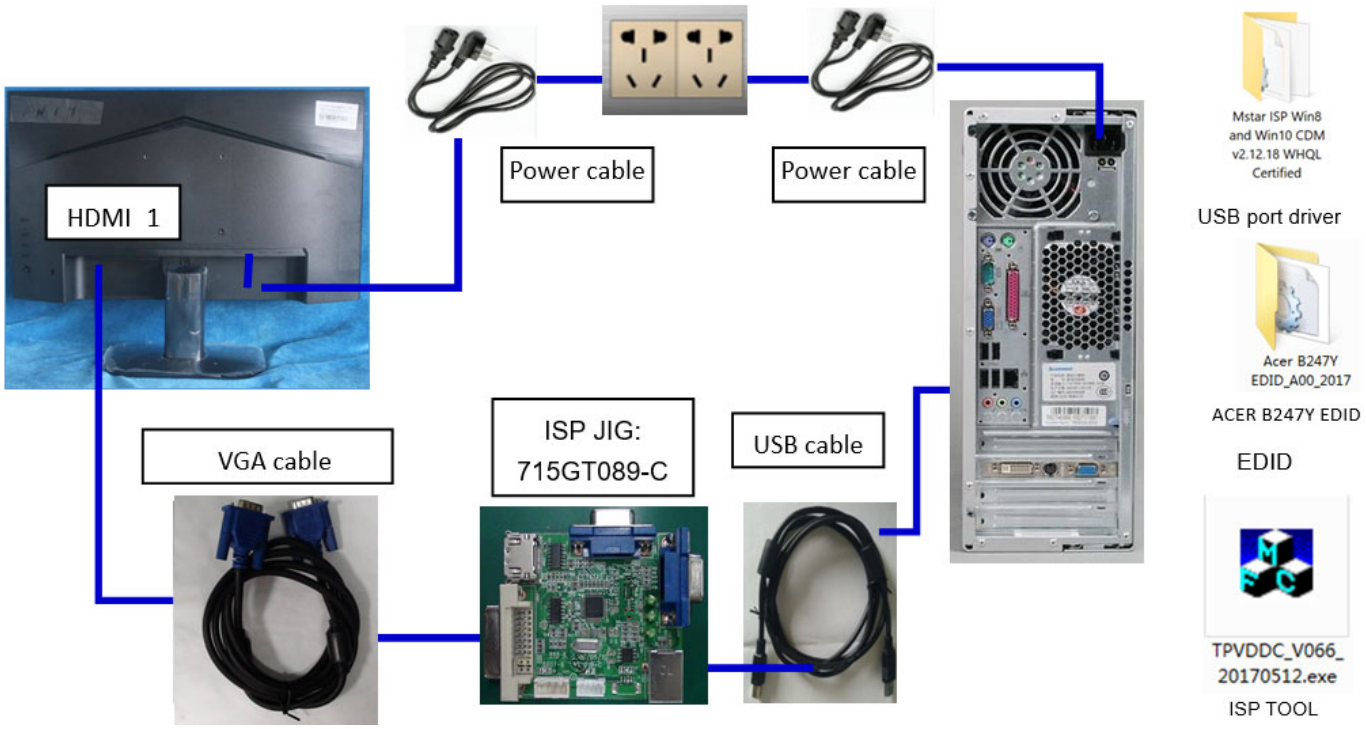
(4) Change other vervion ISP program.

(4)Change ISP JIG or cable.

(5)Change PC.

Writing EDID Process

1.Materials list



2. Install driver.

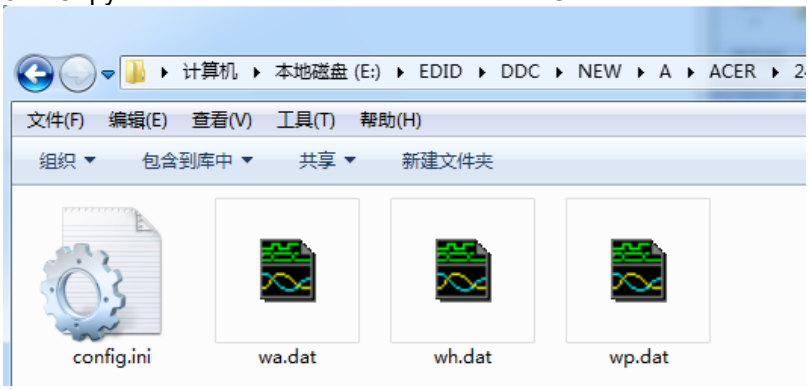
3. Prepare the EDID written.

3.1. Change the EDID files name as below rule.

VGA EDID ⟶ WA.dat

DP EDID ⟶ WP.dat HDMI EDID ⟶ WH.dat

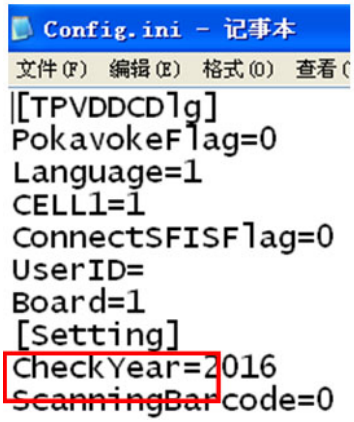
3.2. Copy these files to one folder named as ACER B247Y E must contains “config.ini” file.



3.3. Copy ACER B247Y E to DDC folder and put DDC and ISP tool together.

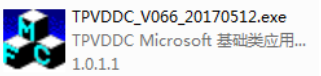


3.4 Set the config as below.

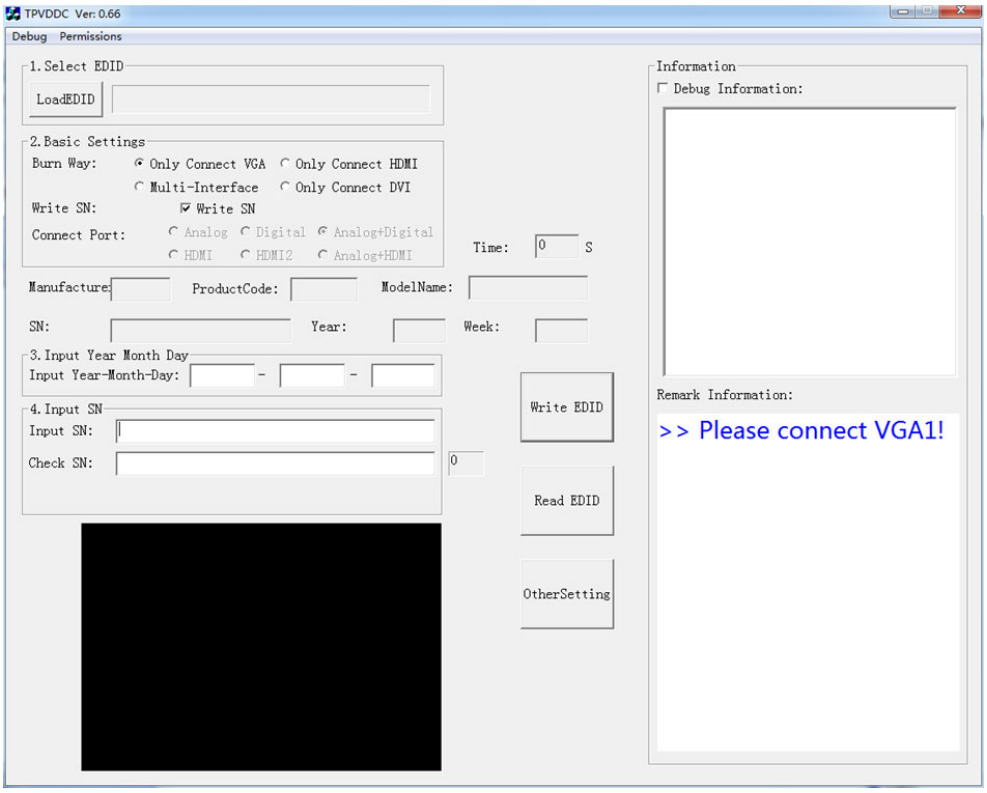


4. Run the ISP tool

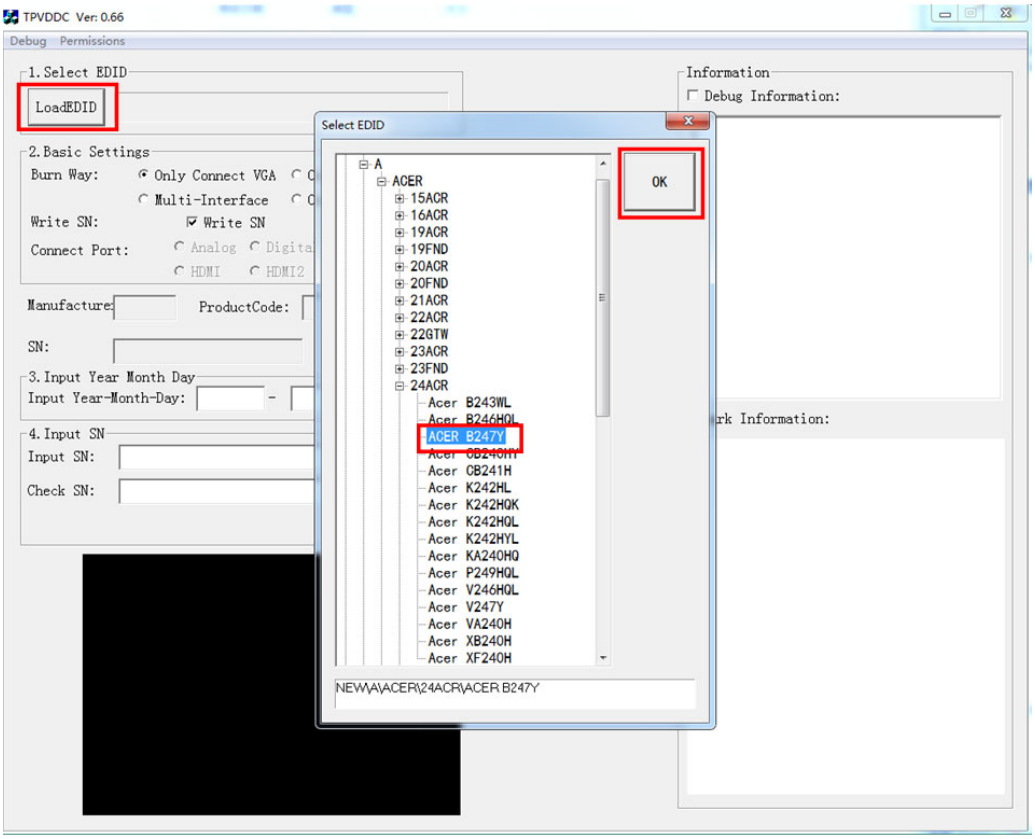
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.

4.1. Double-click the icon 

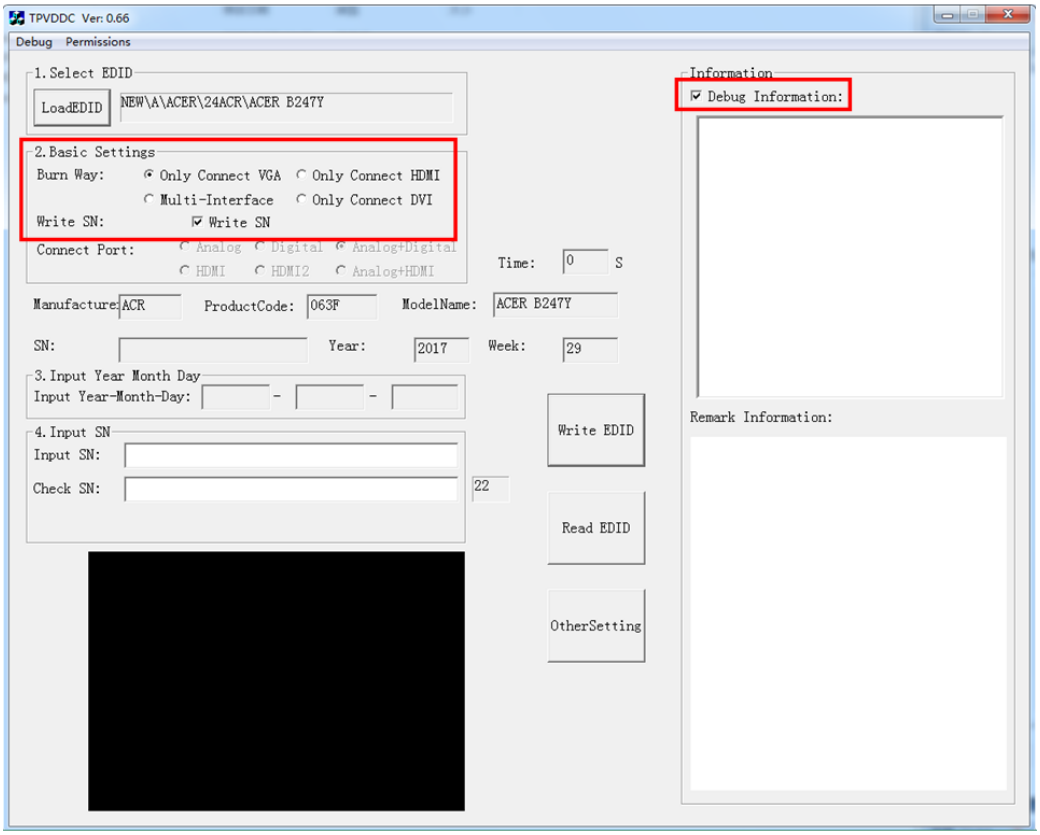
to open the tool.



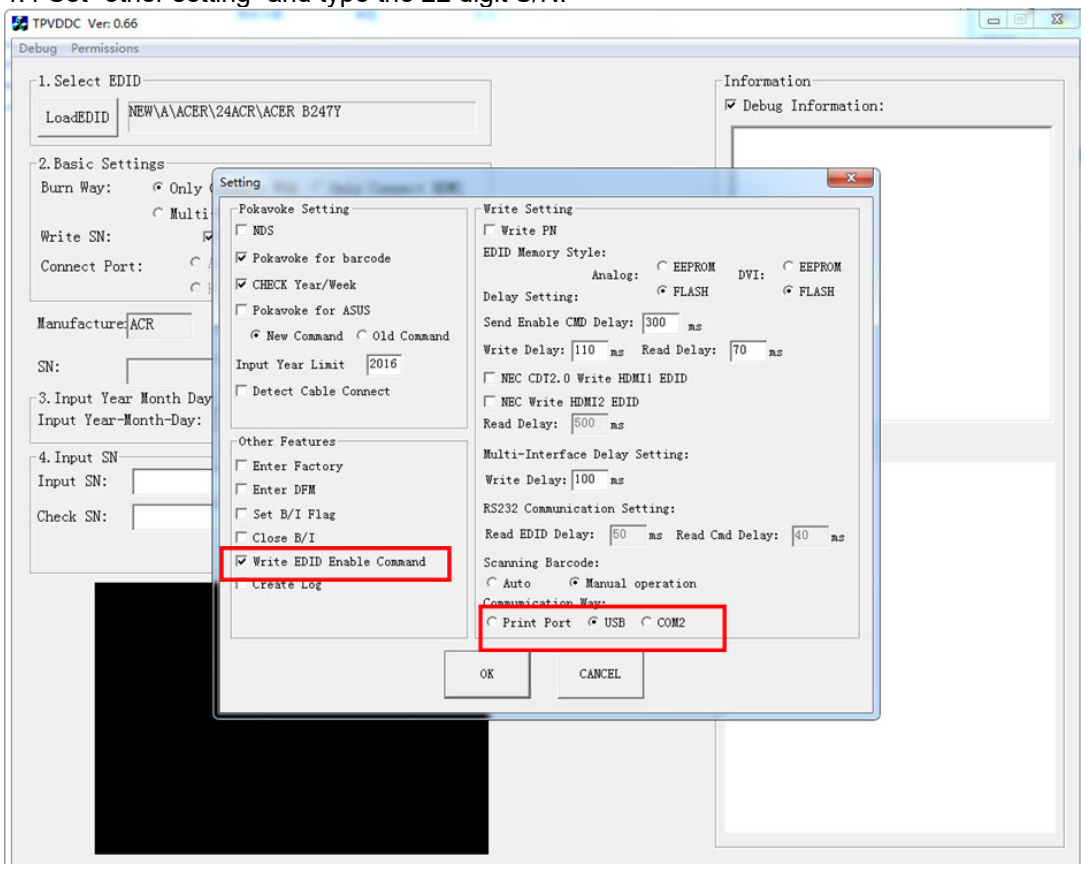
4.2. Select the EDID folder.

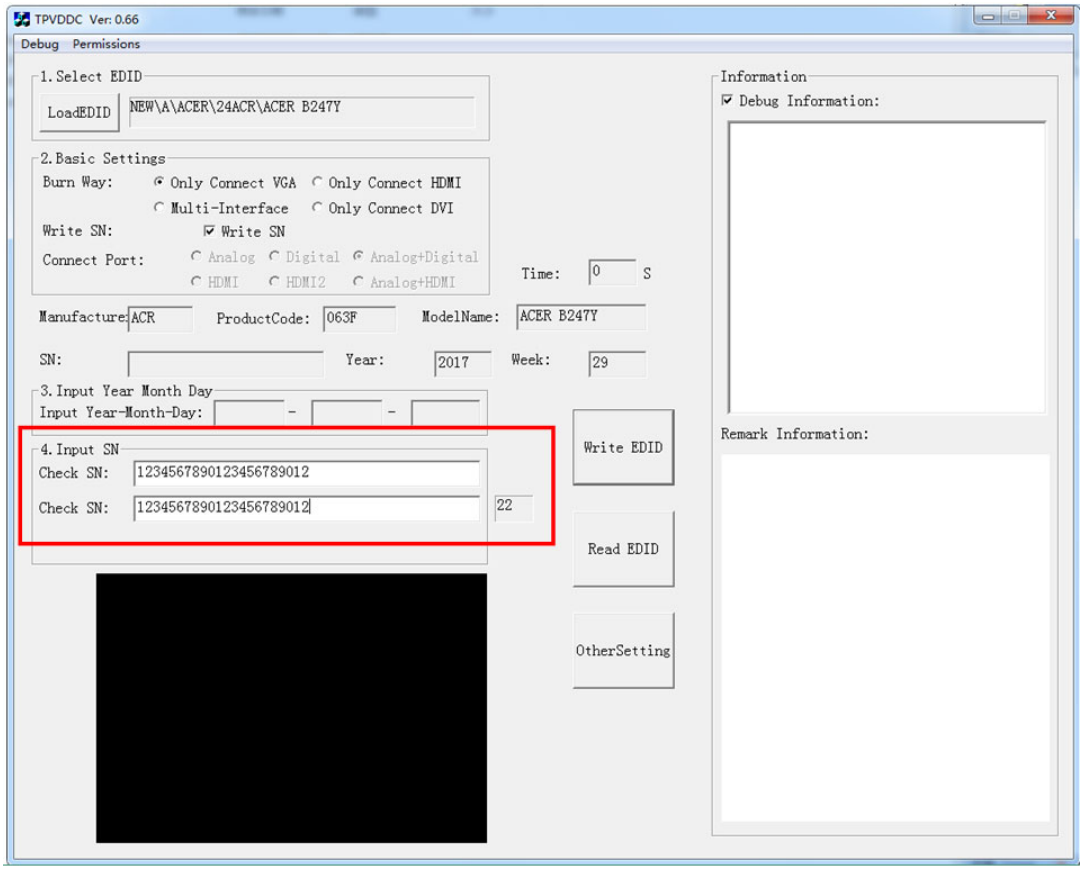


4.3 Tick the “Only connect VGA and “Write SN”, and then click “Debug Information”.

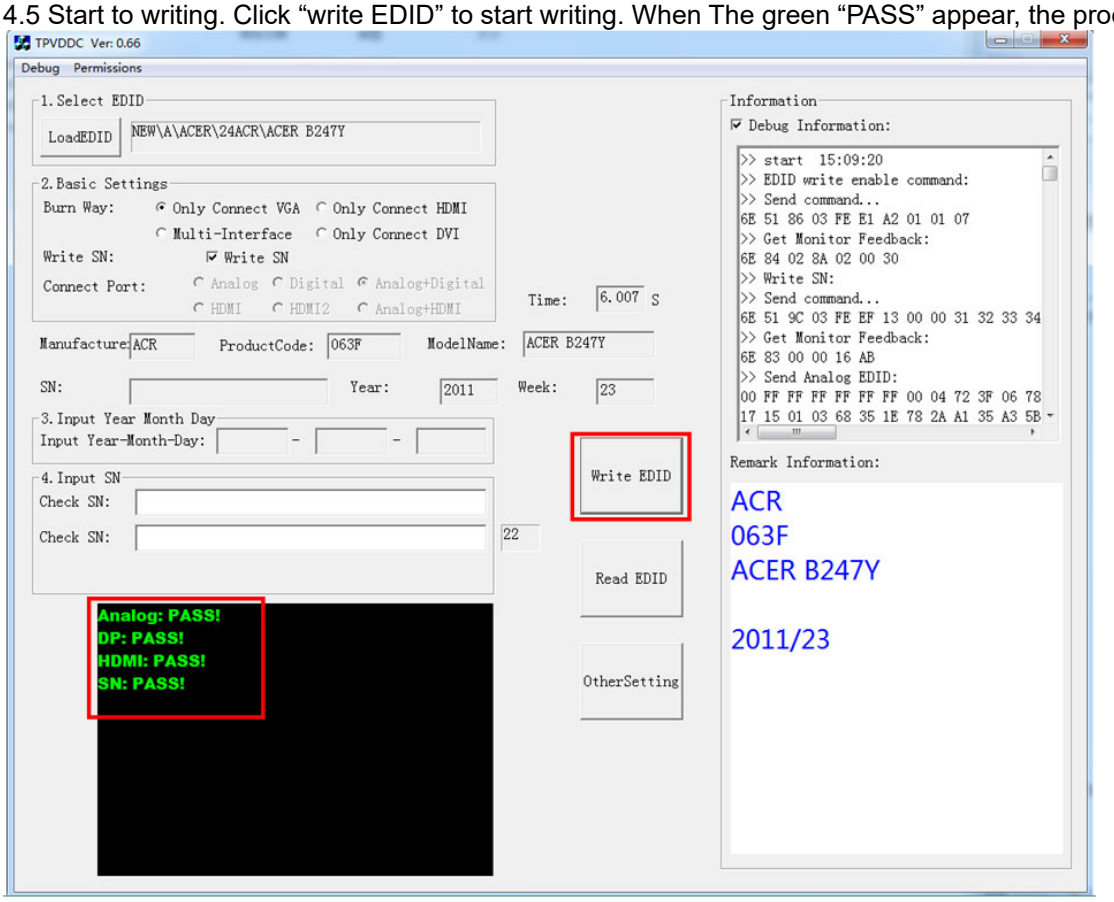


4.4 Set “other setting” and type the 22 digit S/N.

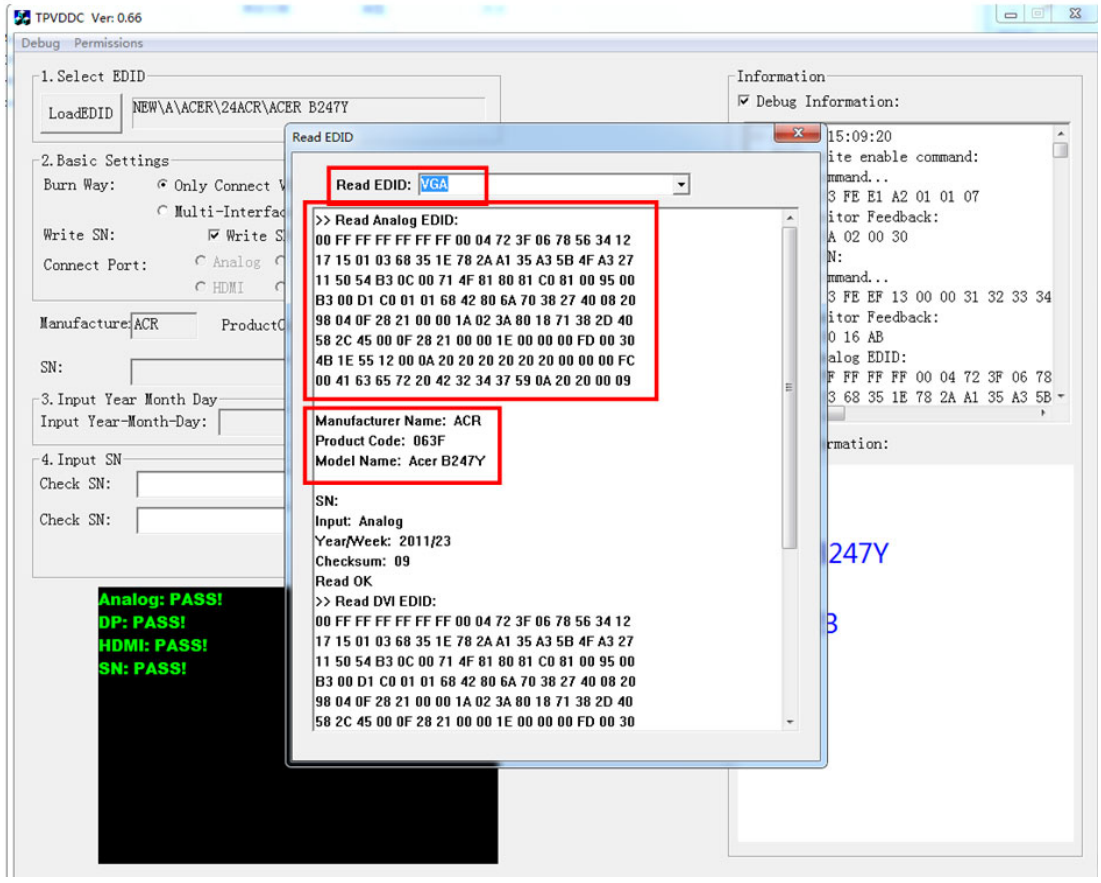




4.5 Start to writing. Click “write EDID” to start writing. When The green “PASS” appear, the process is finished.



4.6 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!

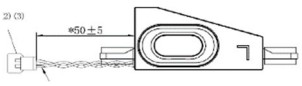
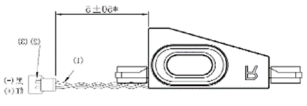
(1) AC on the monitor and turn on it.(Restart the monitor)

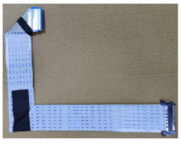
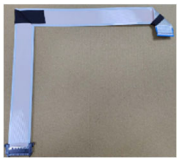
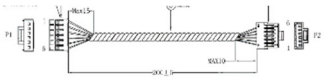
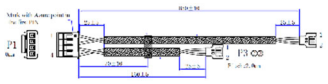
(2)Take apart the monitor and connect the 7pin of EEPROM to GND to diable write protection then write EDID one by one.

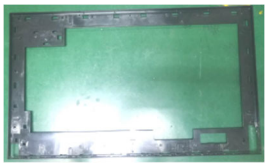
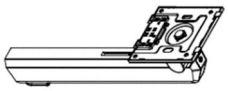
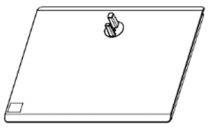
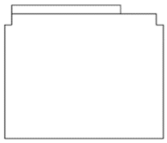
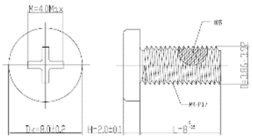
(3) Set the Burn in on last to try again

4. FRU (Field Replaceable Unit) List

This list is for reference only, please contact Acer local service center to order the correct replacement part and availability.

Category	Picture	Description
BOARD		MAIN BOARD FOR LCD M270KCJ-L9B C1 NH INX W DP+HDMI+SPK+USB-CBPR3TEC0Q3(100GBRDG092N11SXXY)
		POWER BOARD FOR LCD M270KCJ-L9B C1 NH INX W DP+HDMI+SPK+USB
		KEY BOARD
		LED BOARD
		USB BOARD
		USB BOARD
LCD		panel TPM270WR1-QAN06.U 000E FQ
SPEAKER		SPEAKER 2.5W 63*22*20mm BOX 50mm 4 R
		SPEAKER 2.5W 63*22*20mm BOX 50mm 4 R

CABLE		FFC CABLE 30P 135mm 0.5mm(MB TO USBPQC1)
		FFC CABLE 30P 80mm 0.5mm(MB TO USBLQA6)
		V-by-One FFC 51P 350mm 0.5mm(MB TO PANEL)
		V-by-One FFC 41P 430 0.5mm(MB TO PANEL)
		HARNESS 6P(2008)-6P(CI1406SL) 200mm(PB TO PANEL)
		HARNESS 6P(A1253)-6P(2008) 600mm(MB TO KEY)
		HARNESS 4P(2008)-2P(C2003HM)/2P(C2003HM)(MB TO SPK)
CASE/COVER/BRACKET ASSEMBLY		KEY_FUNCTION
CASE/COVER/BRACKET ASSEMBLY		KEY
CASE/COVER/BRACKET ASSEMBLY		DECO_BEZEL L27W-Bacer4C-Gp1

CASE/COVER/BRACKET ASSEMBLY		REAR_COVER L27W-Bacer4C-Gp1
CASE/COVER/BRACKET ASSEMBLY		MIDDLE_FRAME L27W-Bacer6-cp1
CASE/COVER/BRACKET ASSEMBLY		stand ass'y L27W-Bacer4C-Gp1 INX M270KC
CASE/COVER/BRACKET ASSEMBLY		BASE_ASS'Y L28W-Bacer4h-Gp1 N/A
CASE/COVER/BRACKET ASSEMBLY		MAINFRAME FOR LCD M270KCJ-L9B C1 NH INX W DP+HDMI+SPK+USB
CASE/COVER/BRACKET ASSEMBLY		INSULATING SHEET 178*150*31.7mm
SCREW		SCREW M4 8

5. 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.