Service
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Acer Monitor VG271U P

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.

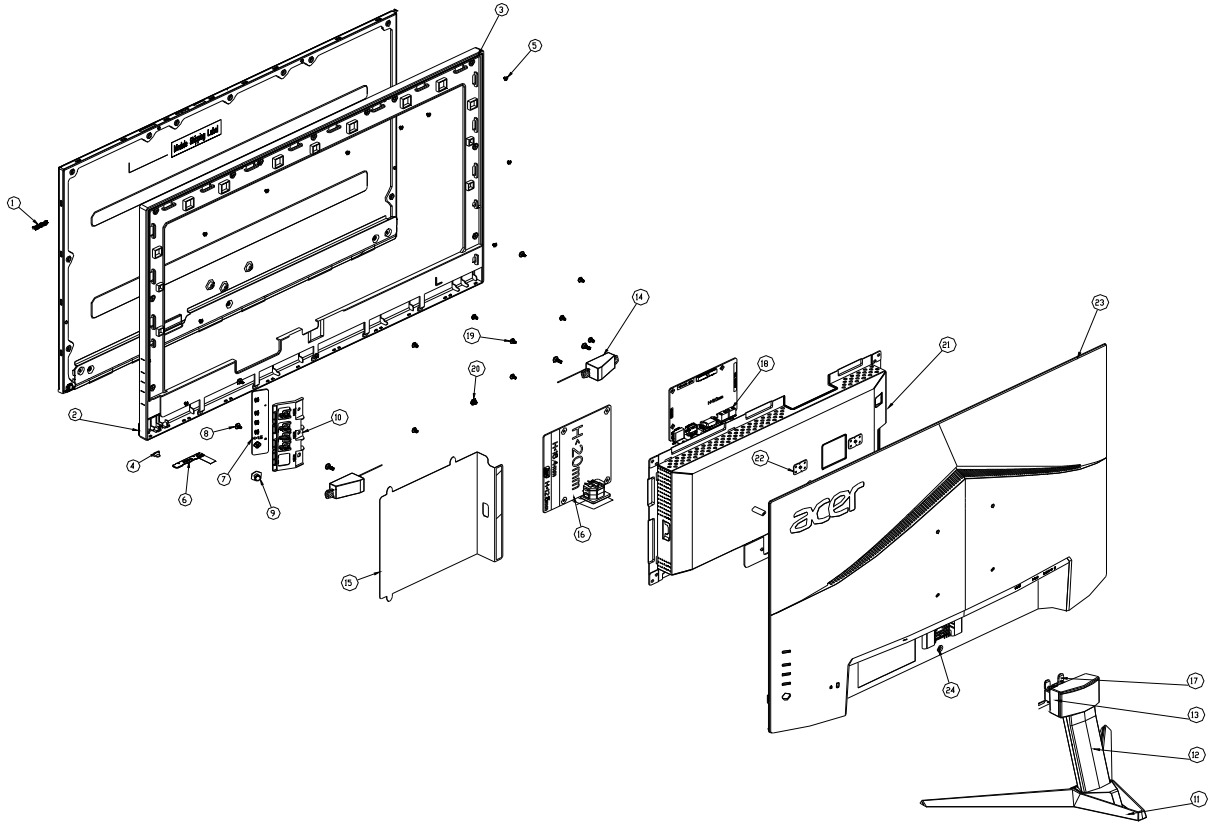
Servicer assumes all liability.

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	Description	TPV Part No.	ACER Part No.
6	LEPCLQA2	LED BOARD	55.TCCM2.004
7	KEPCLQA6	KEY BOARD	55.TCCM2.003
16	PLPCHH541KV7H	ADAPTER BOARD	#N/A
18	CBPCLTPC0QA	MAIN BOARD	#N/A
	750GBN270KC712N000	PANEL	#N/A
	395G279M51N5700000	V-by-One FFC CABLE 51P-51P 450MM(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:

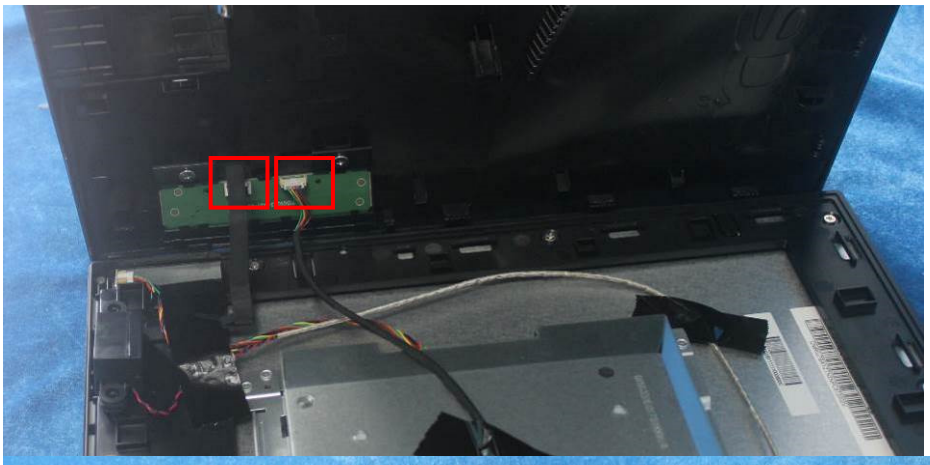
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

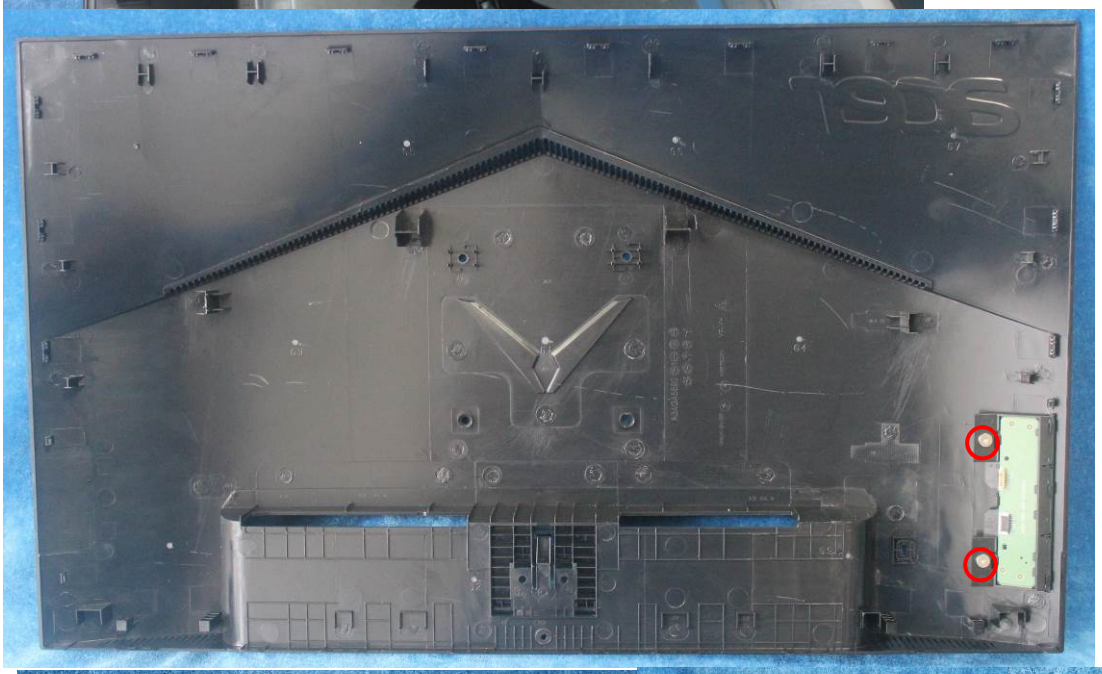
2.1 Disassembly Procedures:

S1. Remove the Stand-base Assy.

S2. Remove the rear cover. Unscrew the screw and use a tool (like picture using) to open all latches. (Be careful the position of the key board.)

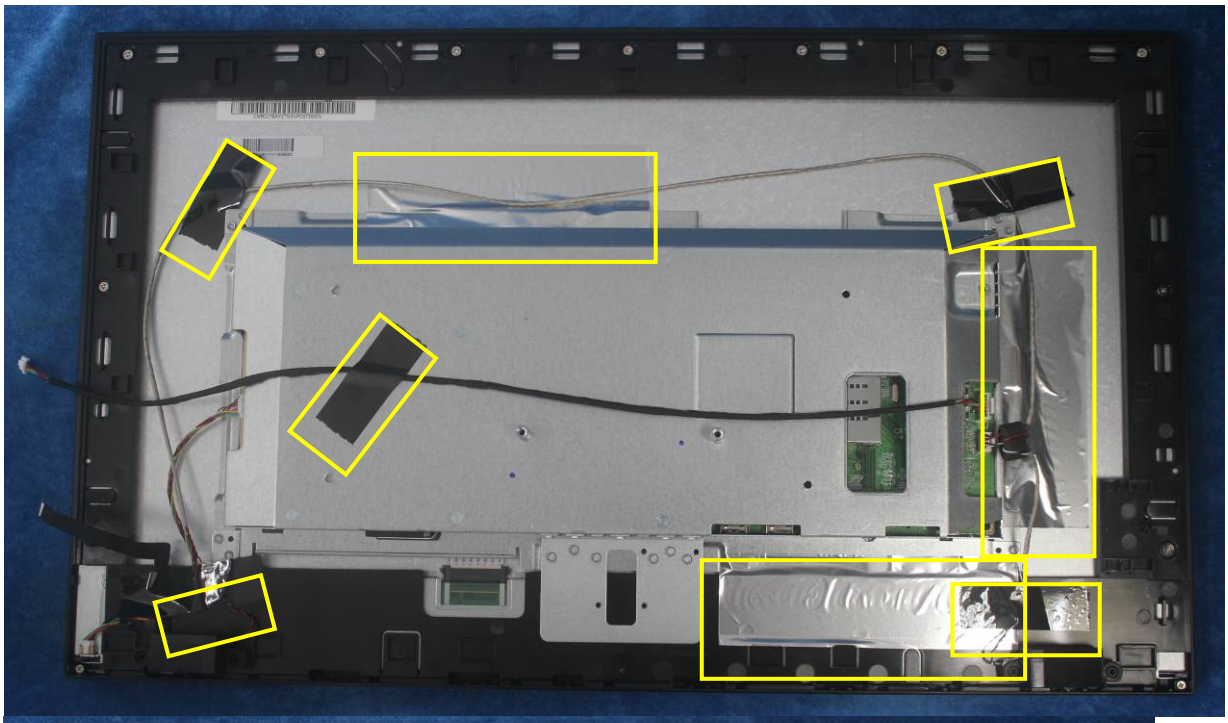
S3. Disconnect the cable (main board to Key board / LED board to Key board) and remove the screws and tapes to remove the key board from the rear cover.

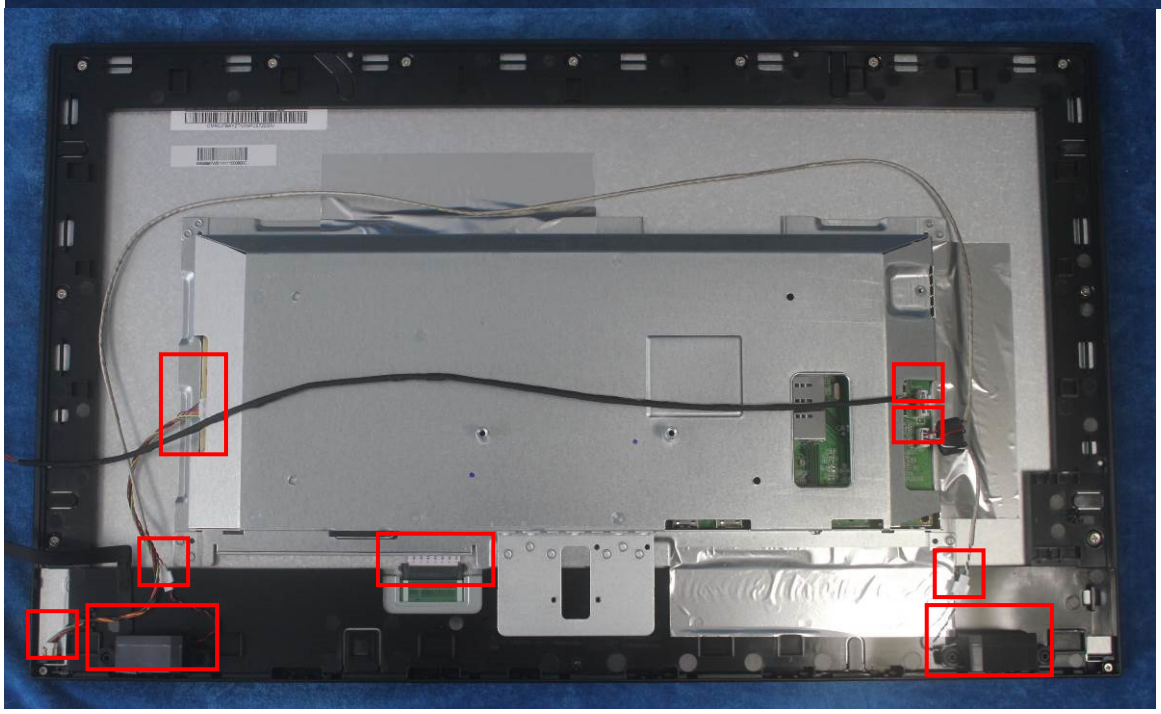




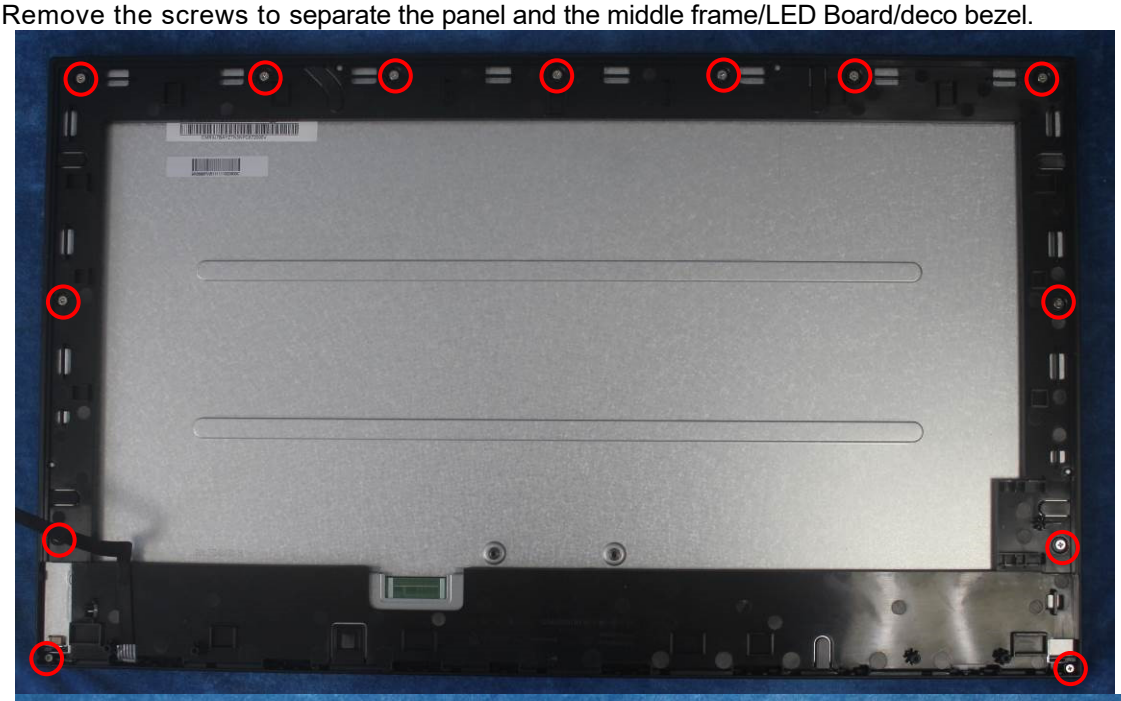
RoHS
715G9232-K01-000-004T

S4. Tear up all tapes and disconnect the LVDS cable (main board to panel), the cables (power board to panel) and speakers.

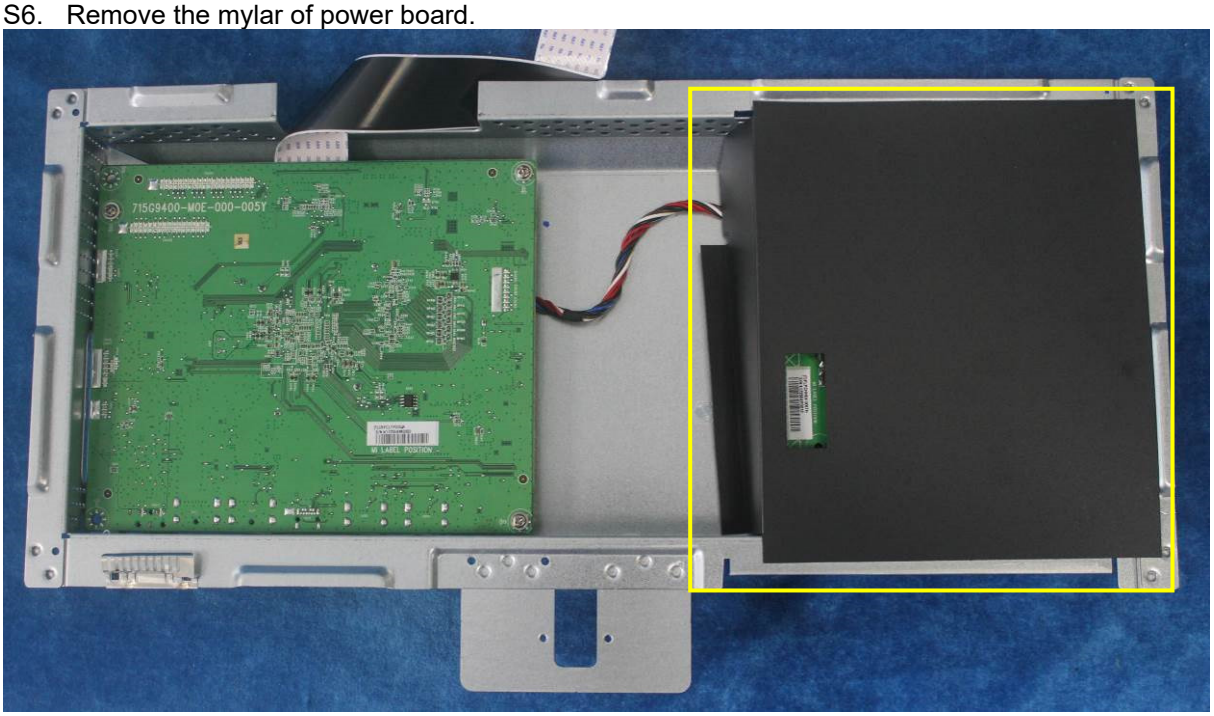




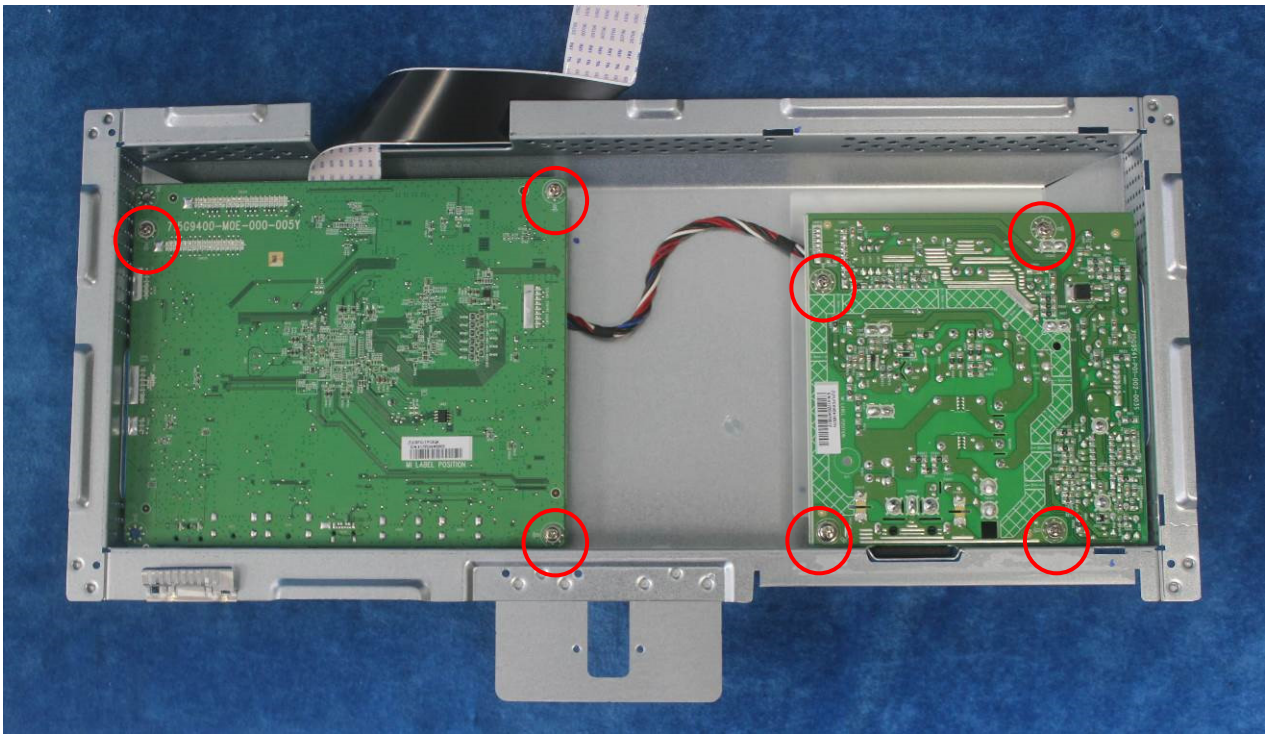
S5. Remove the screws to separate the panel and the middle frame/LED Board/deco bezel.



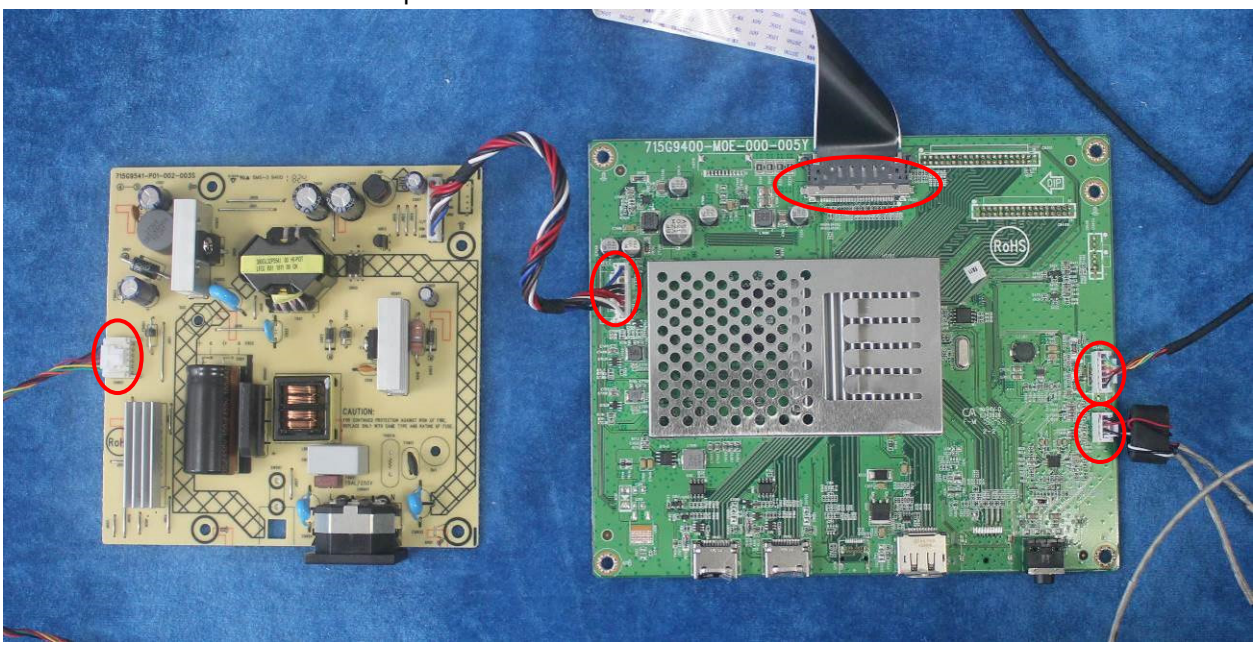
S6. Remove the mylar of power board.



S7. Turn over the shield and unscrew the screws on main board and power board.

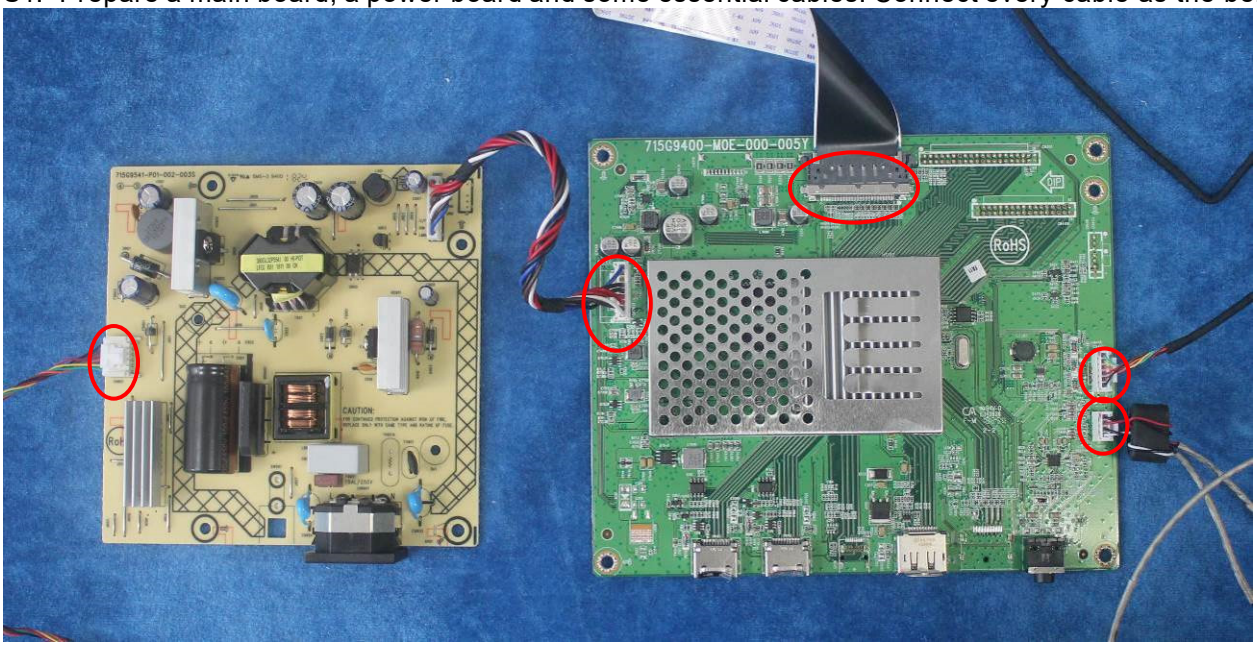


S8. Remove the main board and power board. Disconnect the cables.

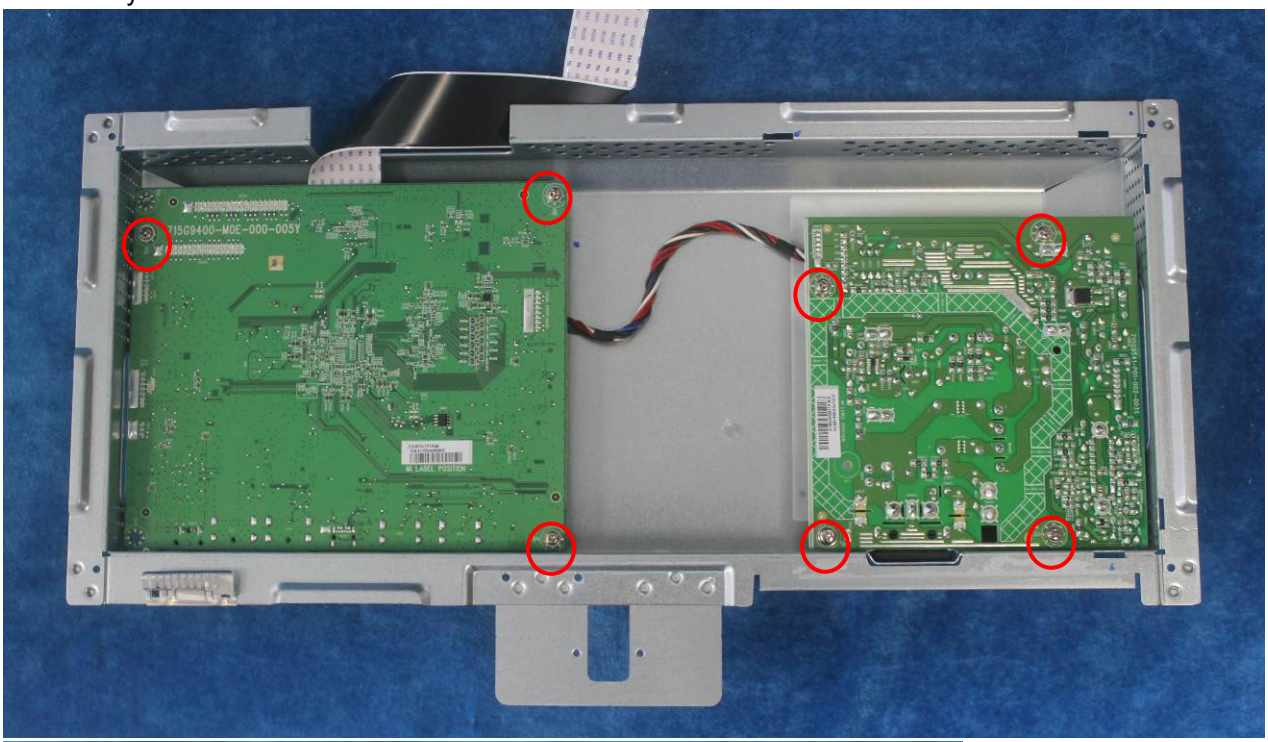


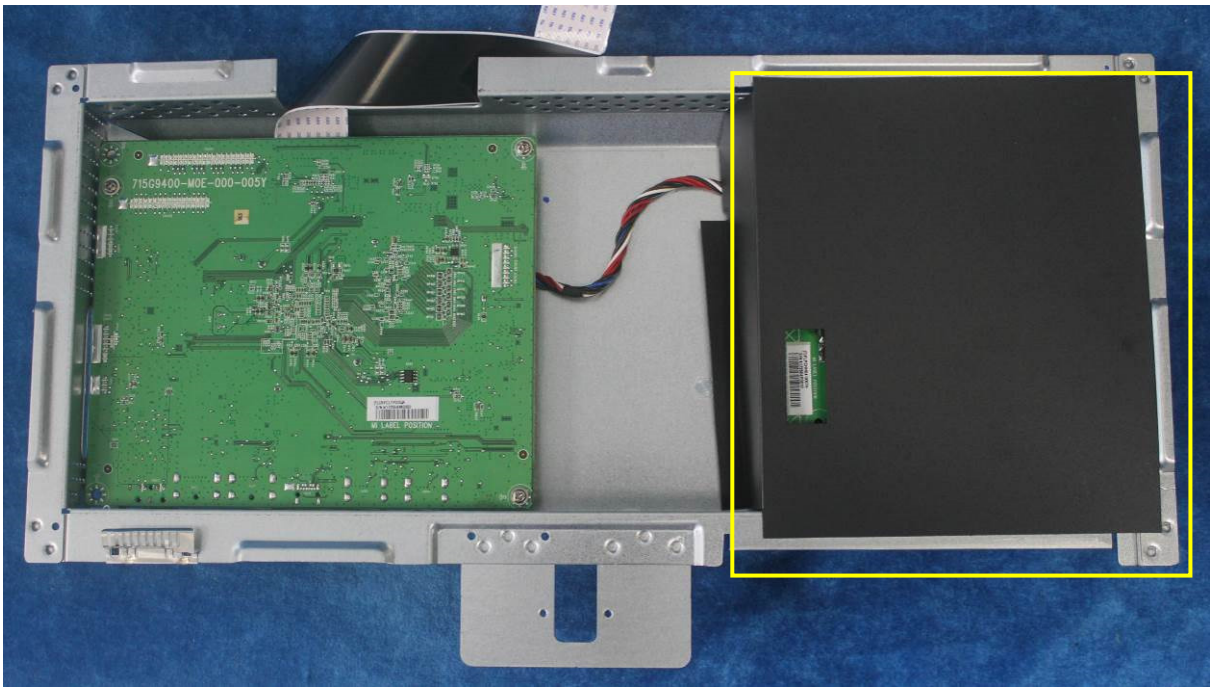
2.2 Assembly Procedures:

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

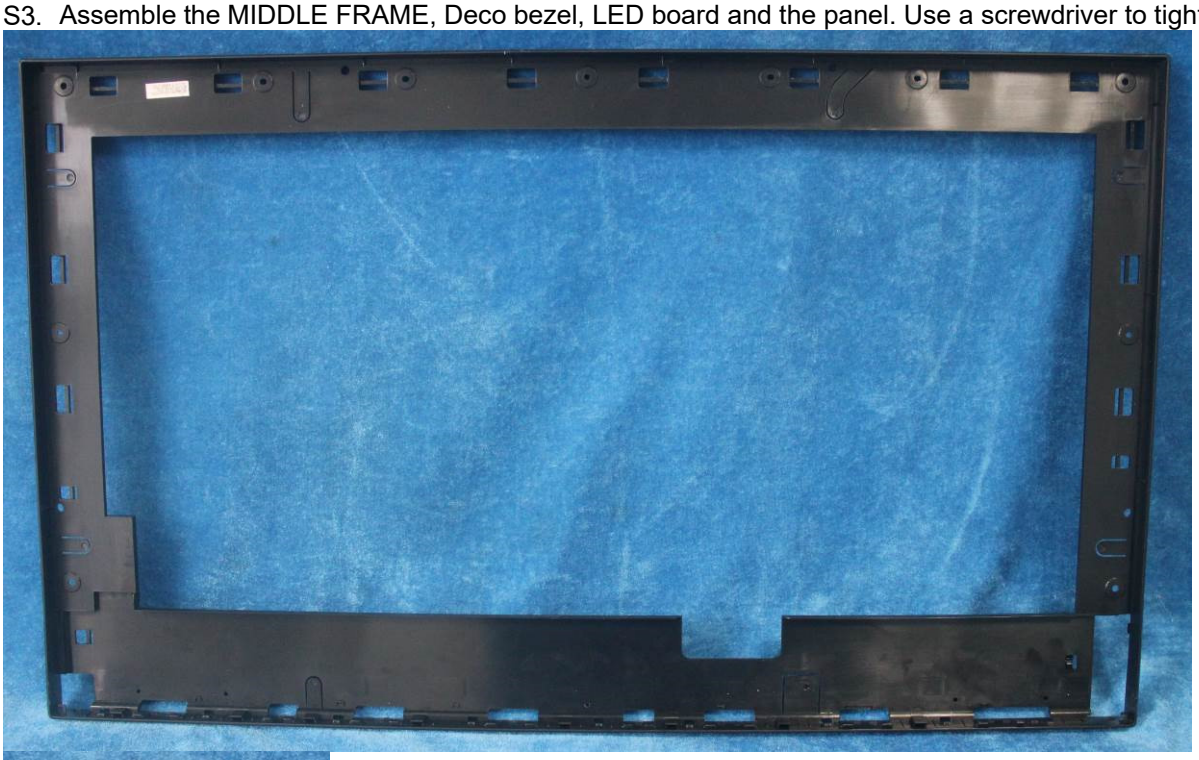


S2. Use a screwdriver to tighten the screws till the power board, main board with shield are firmly attached. Put on the Mylar.

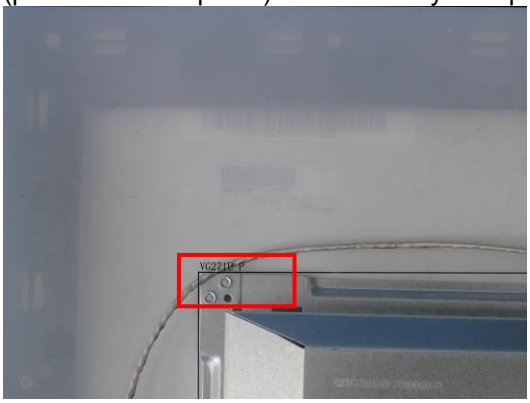


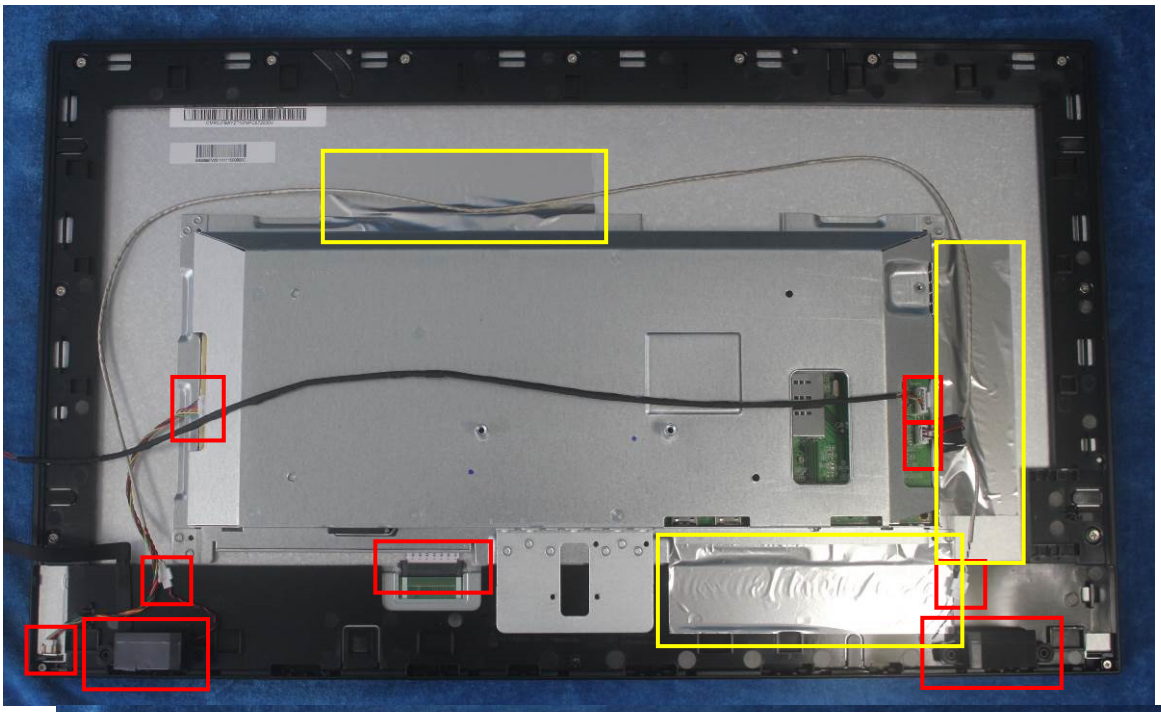


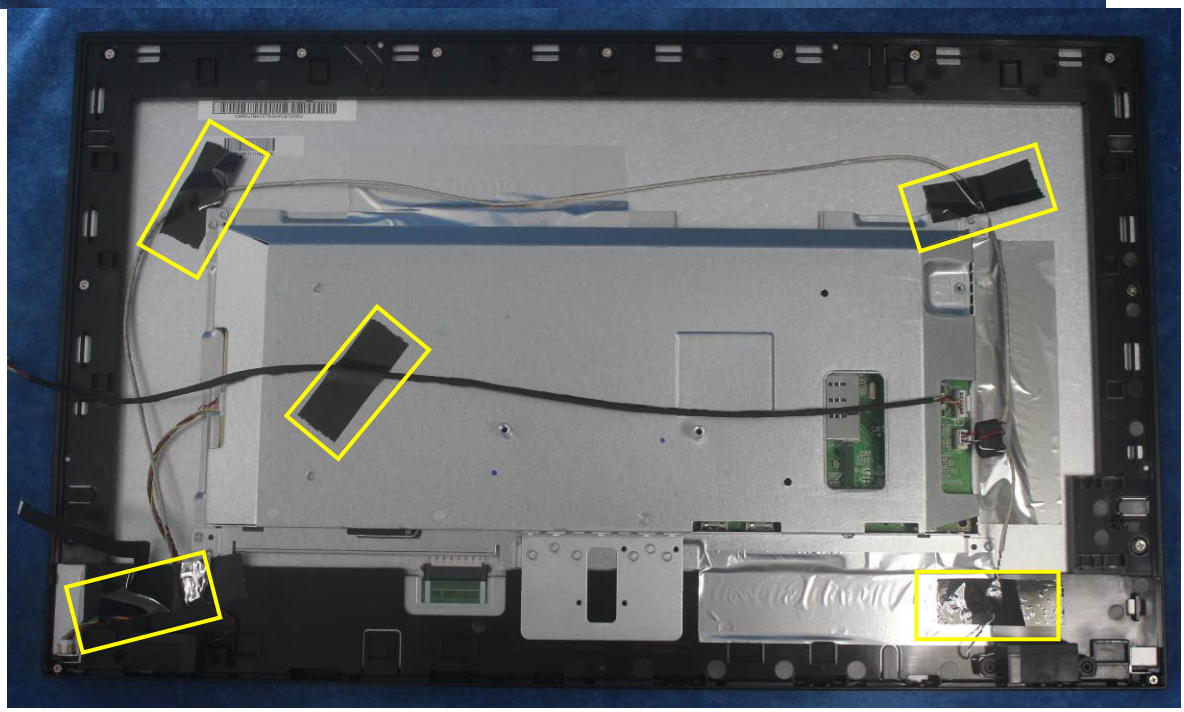
S3. Assemble the MIDDLE FRAME, Deco bezel, LED board and the panel. Use a screwdriver to tighten the screws



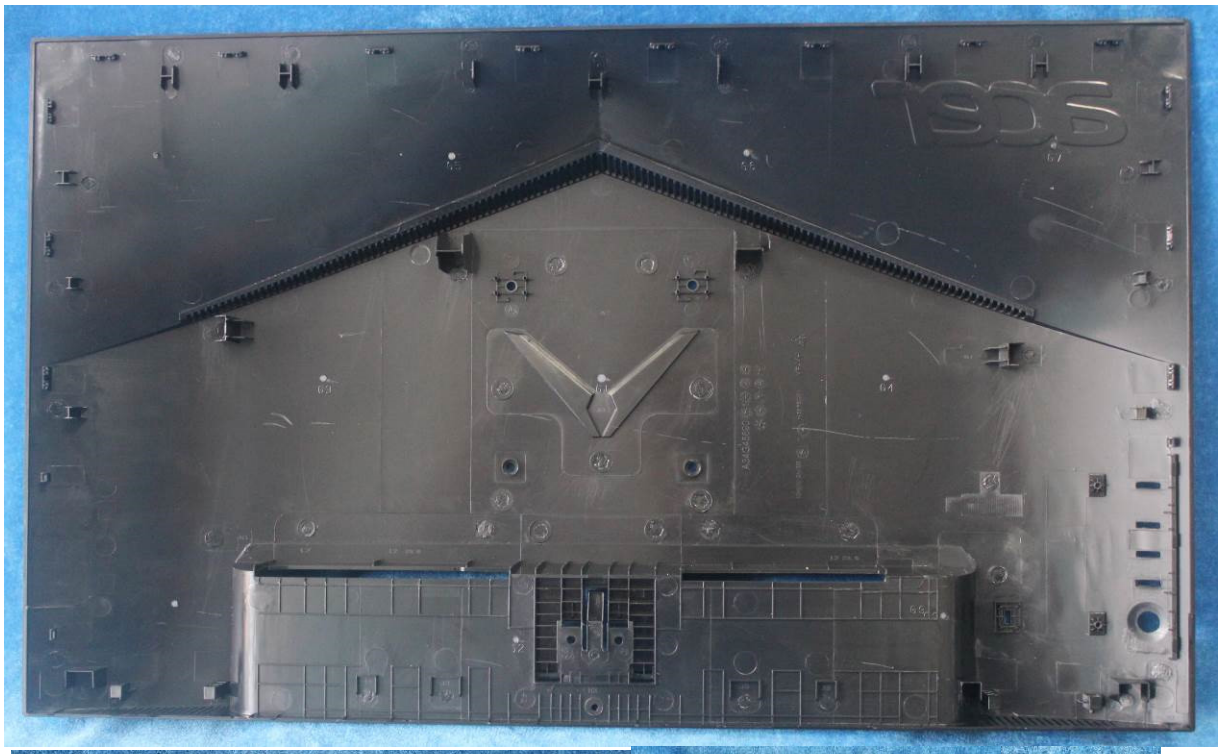
S4. Put the Mylar slice(Note：refer to the last page)marked the information of mainframe position on the panel. Mylar slice edge must be against the bezel. Put the mainframe along the mark. Holding the mainframe while you are removing the Mylar and pasting the tapes. Connect the LVDS cable (main board to panel), lamp power cable (power board to panel) and assembly the speakers, stick all tapes.







S5. Prepare a rear cover, a key board, use the screws to lock the key board.



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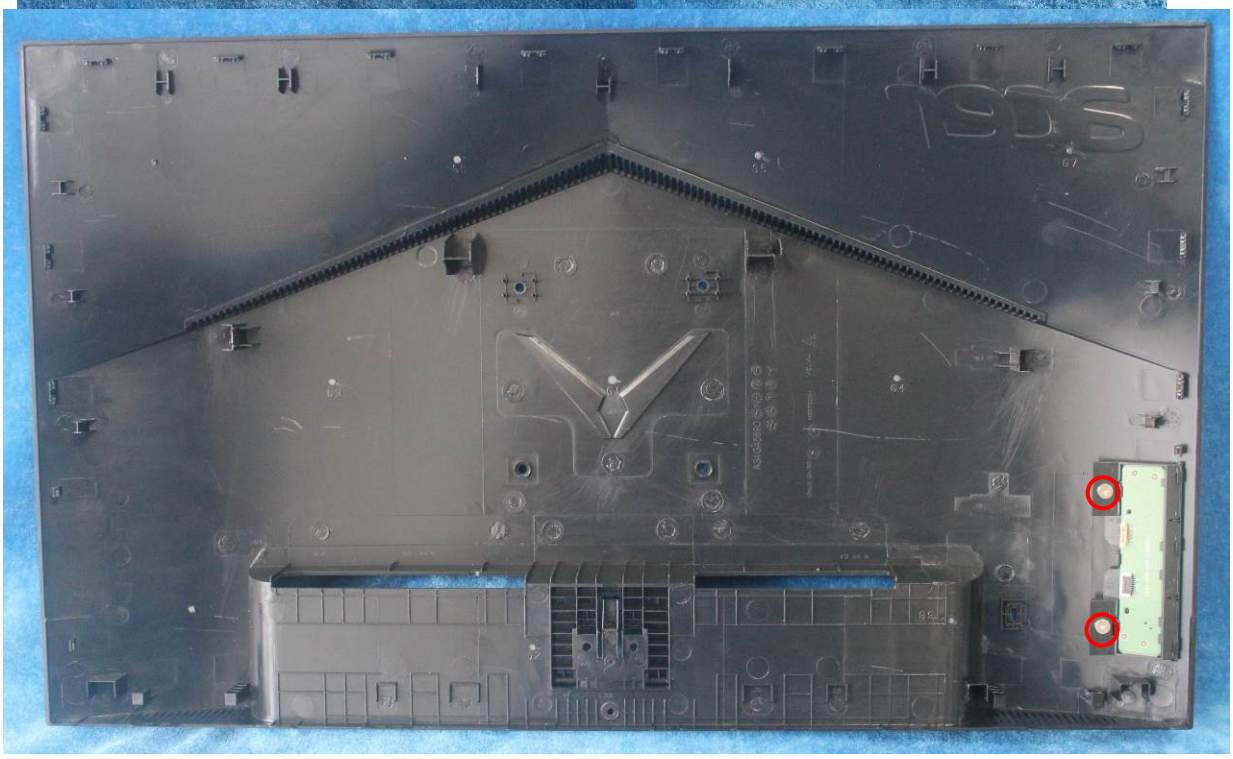
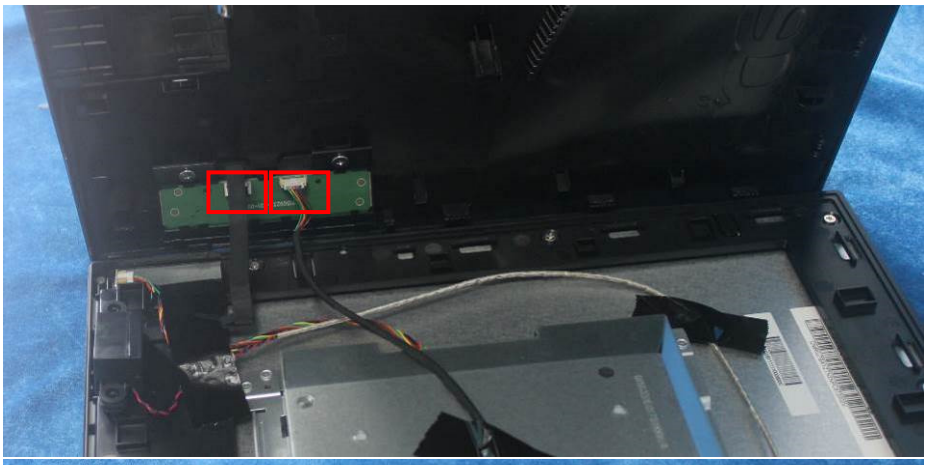


S6. Connect the pin (LED board / Key board)and the pin (Key board to mainboard).Use the screws to lock the rear cover



S7. Assemble the stand and base ASS'Y.

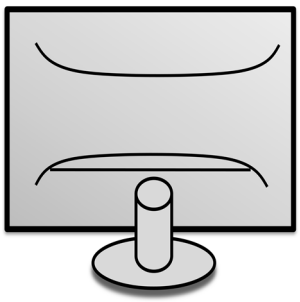
3. Firmware Upgrade Process

1. Materials

ISP JIG: 715GT089-C

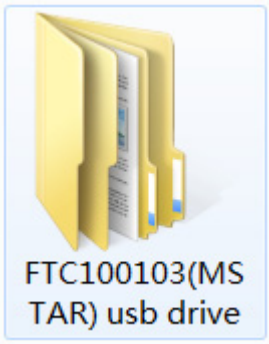
DVI to HDMI cable
TPV P/N: 089G183GAA501

PC



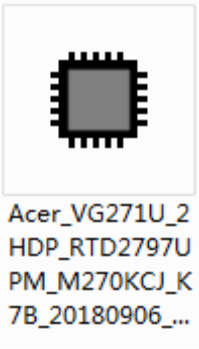
Monitor

USB cable
TPV P/N: 389G017508R1CG



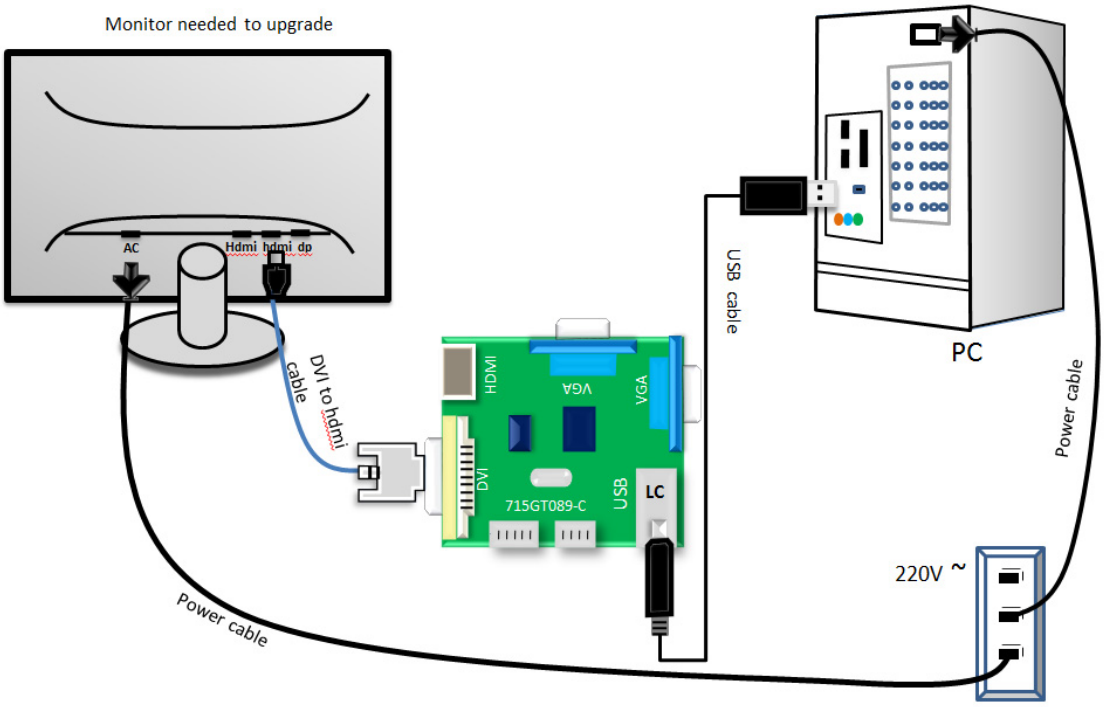
USB port driver

ISP tool:



New F/W

2.Connection

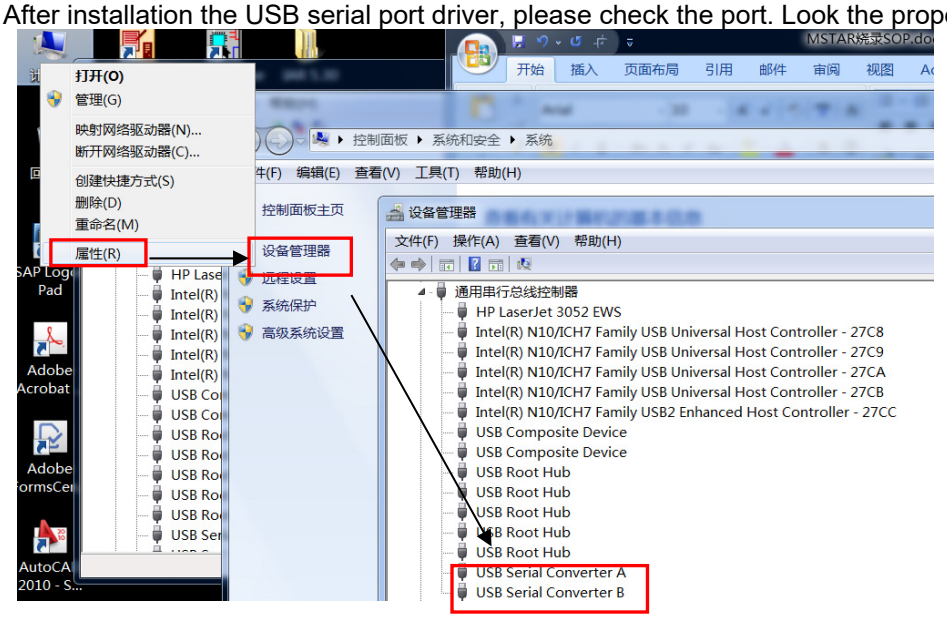


3.Install USB driver.

3.1. 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 check the port. Look the properties of “my Computer”

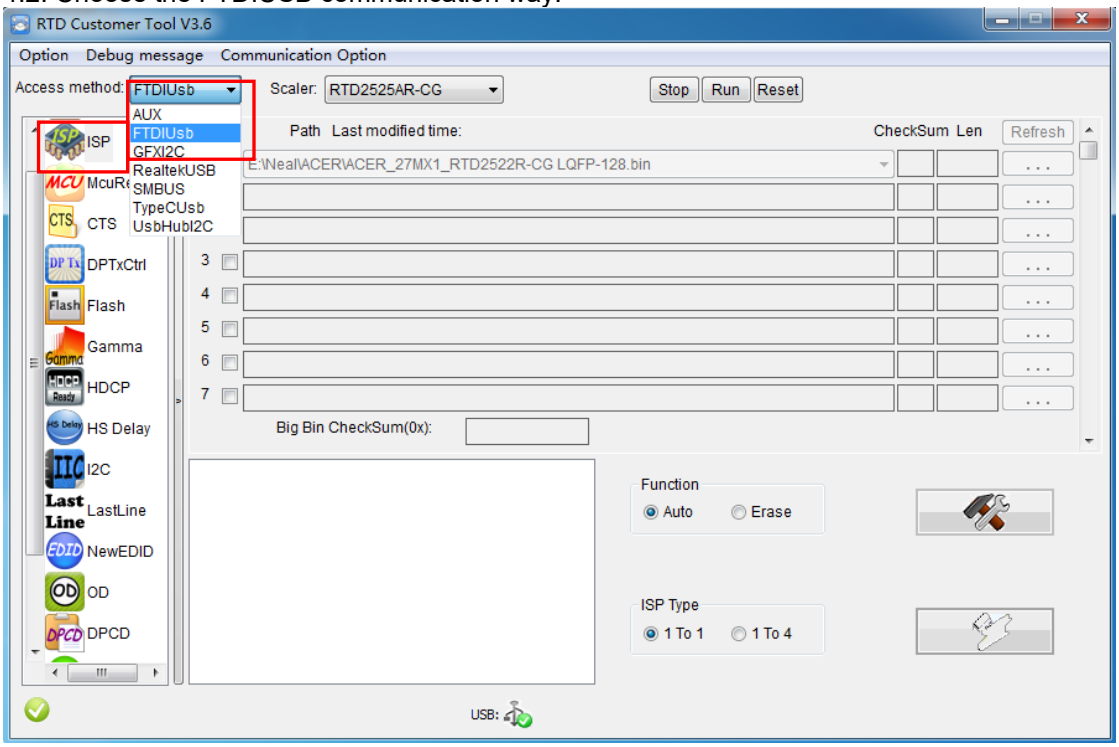


4. Install RTD tool.

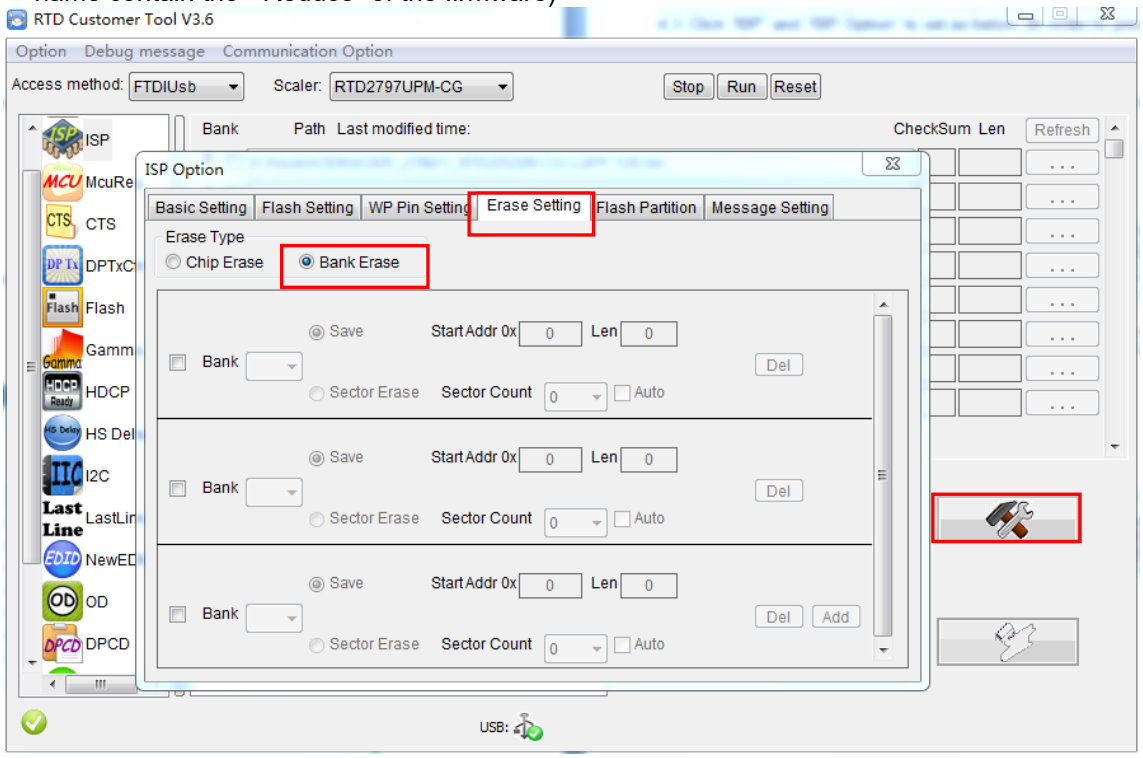
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the EDID writing tool before running the F/W Upgrade tool.

4.1. RTDTool.exe double- clicks the icon to run it.
Note: Must to install driver firstly

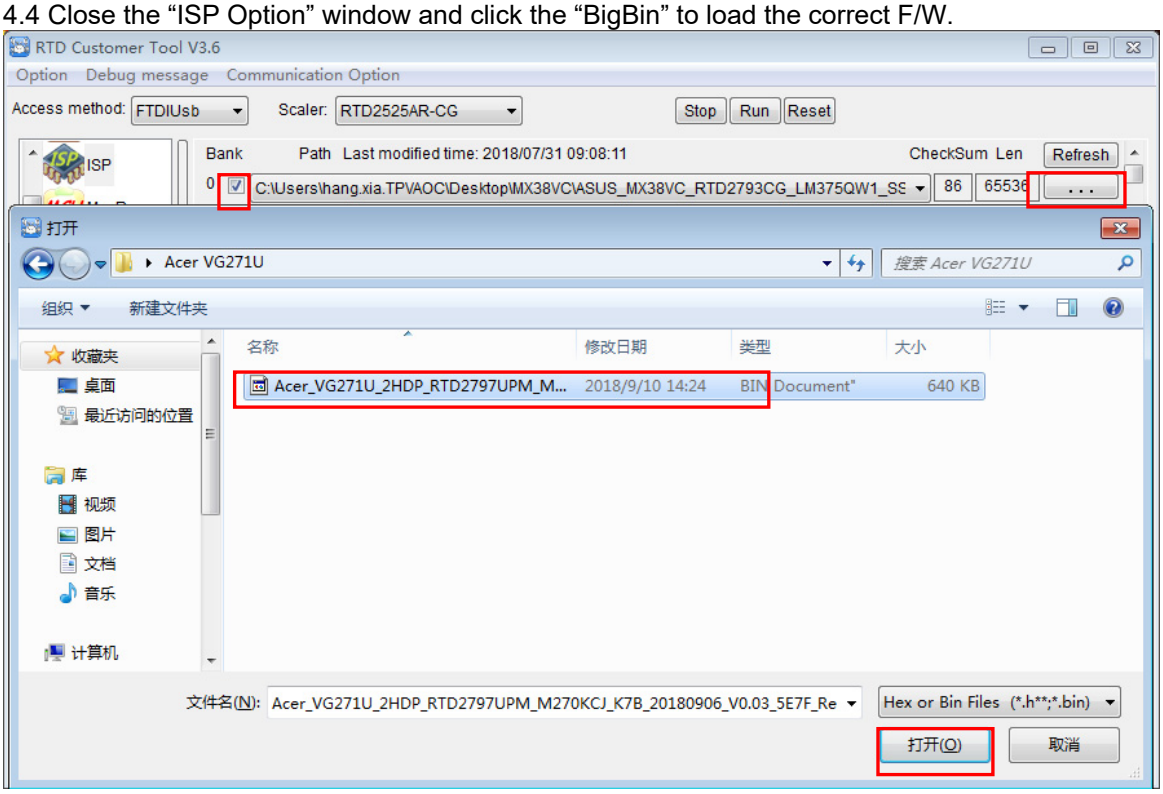
4.2. Choose the FTDIUSB communication way.



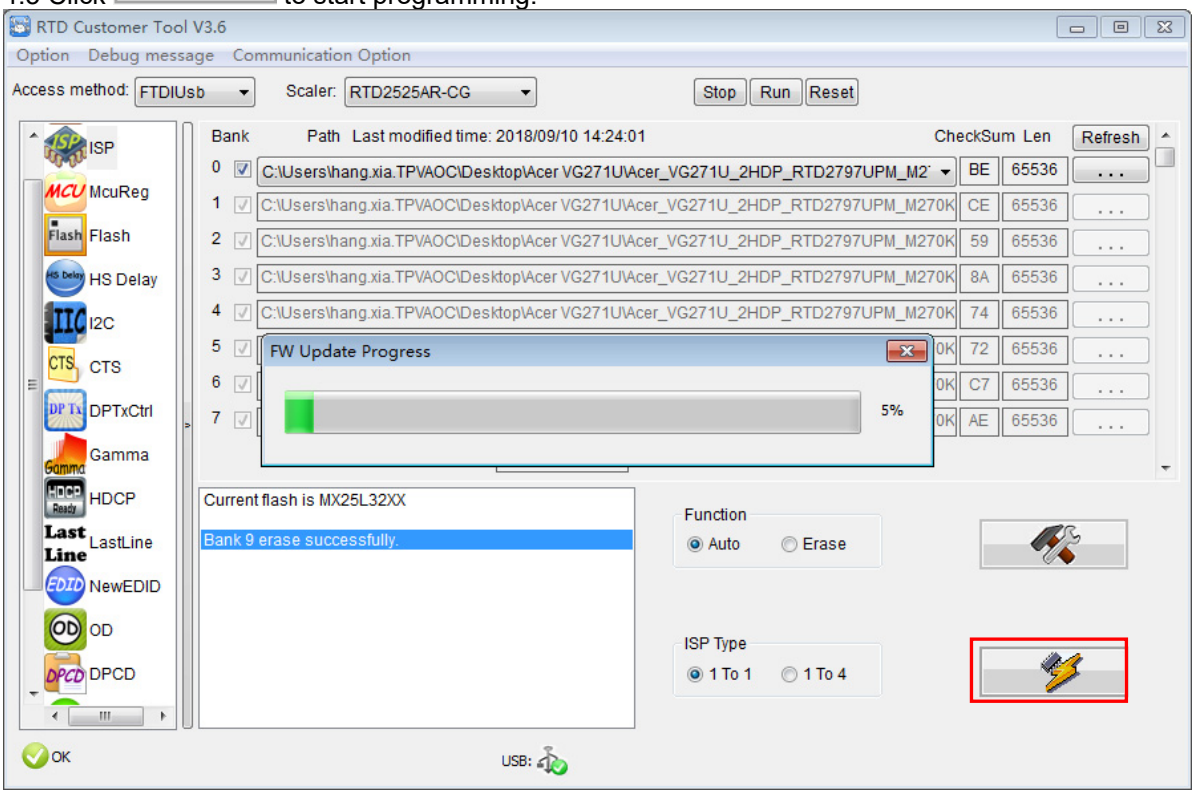
4.3 Click “ISP” and “ISP Option” to set as below. (In order to prevent HDCP KEY data loss, please must load the file name contain the “ Reduce” of the firmware)



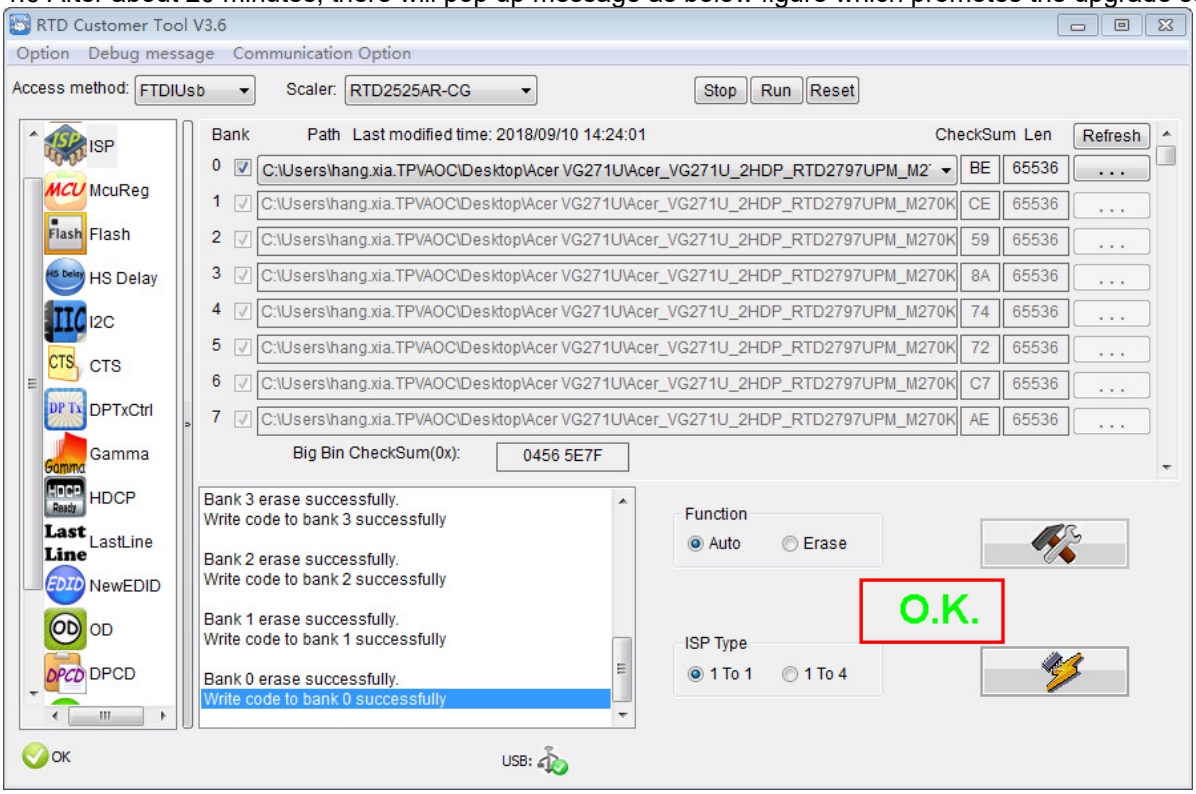
4.4 Close the “ISP Option” window and click the “BigBin” to load the correct F/W.



4.5 Click to start programming.



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

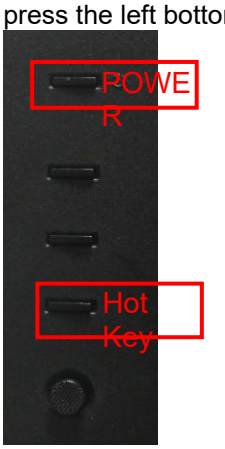


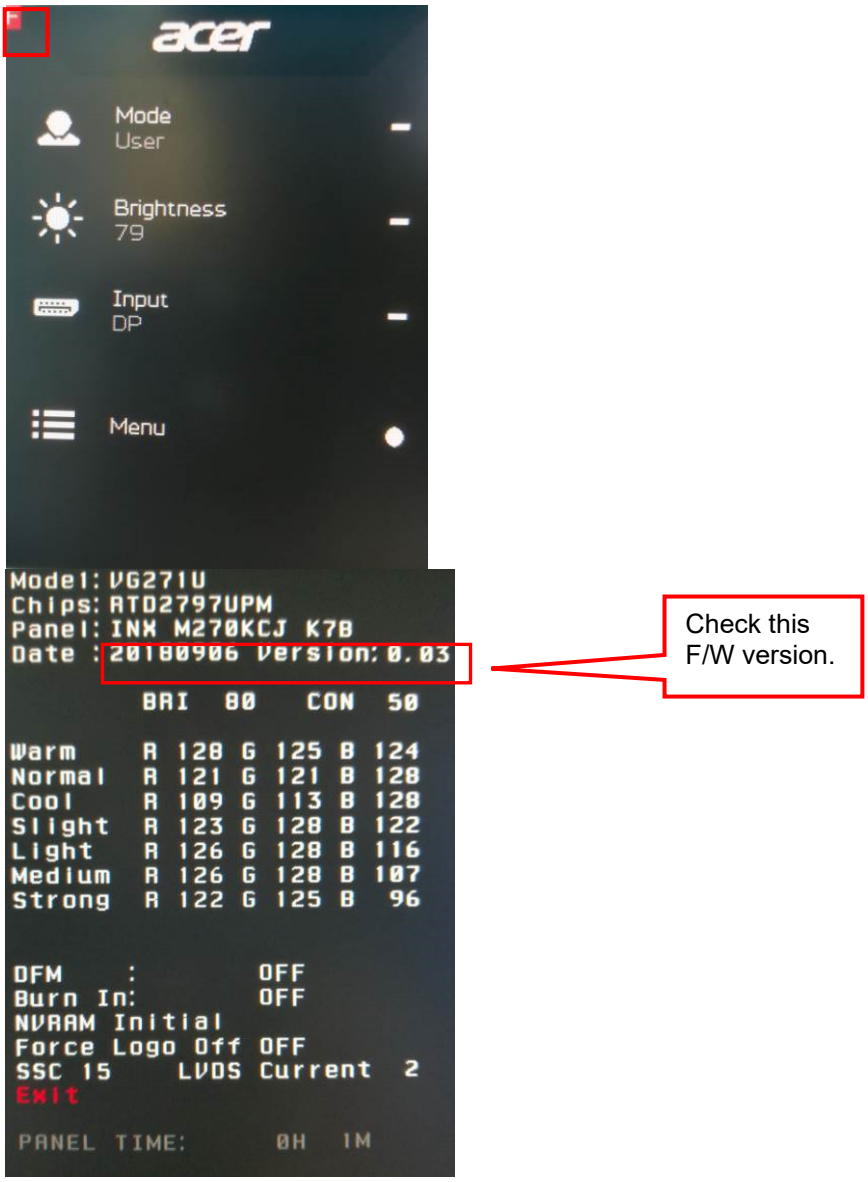
5. Check the FW version after upgrade.

5.1. The way to open factory menu.

(1) Connect DP or HDMI source to monitor and turn it on.

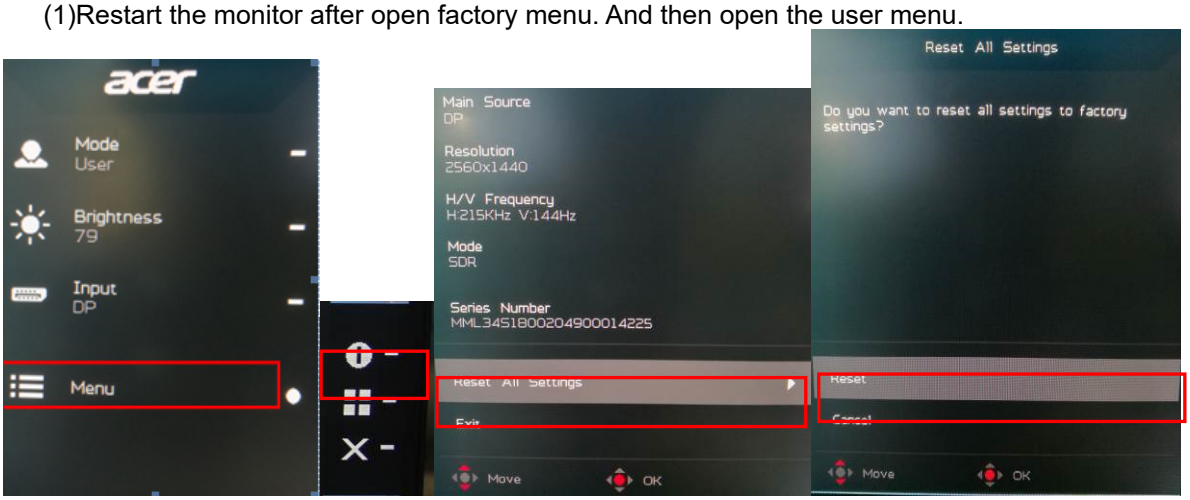
(2) The way to factory menu: Pressing the hot key button and DC on, when the screen lights, release the key and press the left botton again to open the menu with “F” and select “F” to open factory menu.





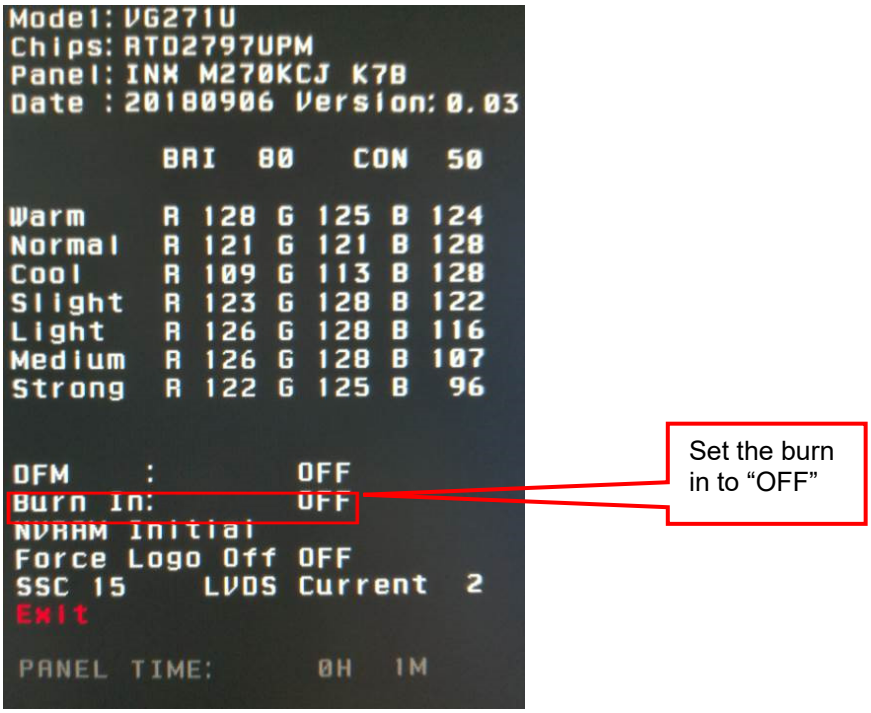
5.2. Do factory reset in user menu.

(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.

5.3 How to close the burn in mode:



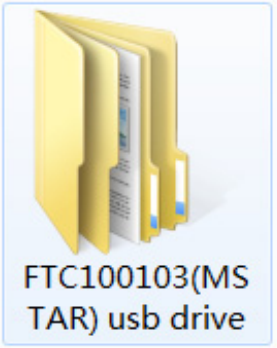
Set the burn in to “OFF”

4. Writing EDID Process

1. Materials list

DVI TO HDMI cable
TPV P/N: 089G183GAA501

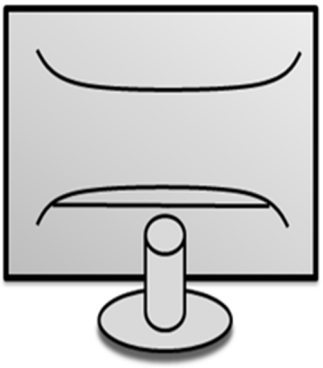
USB cable
TPV P/N: 389G017508R1CG



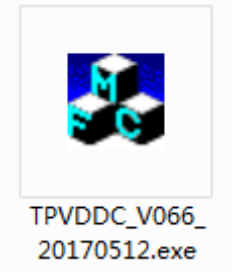
USB port driver

ISP JIG: 715GT089-B

PC



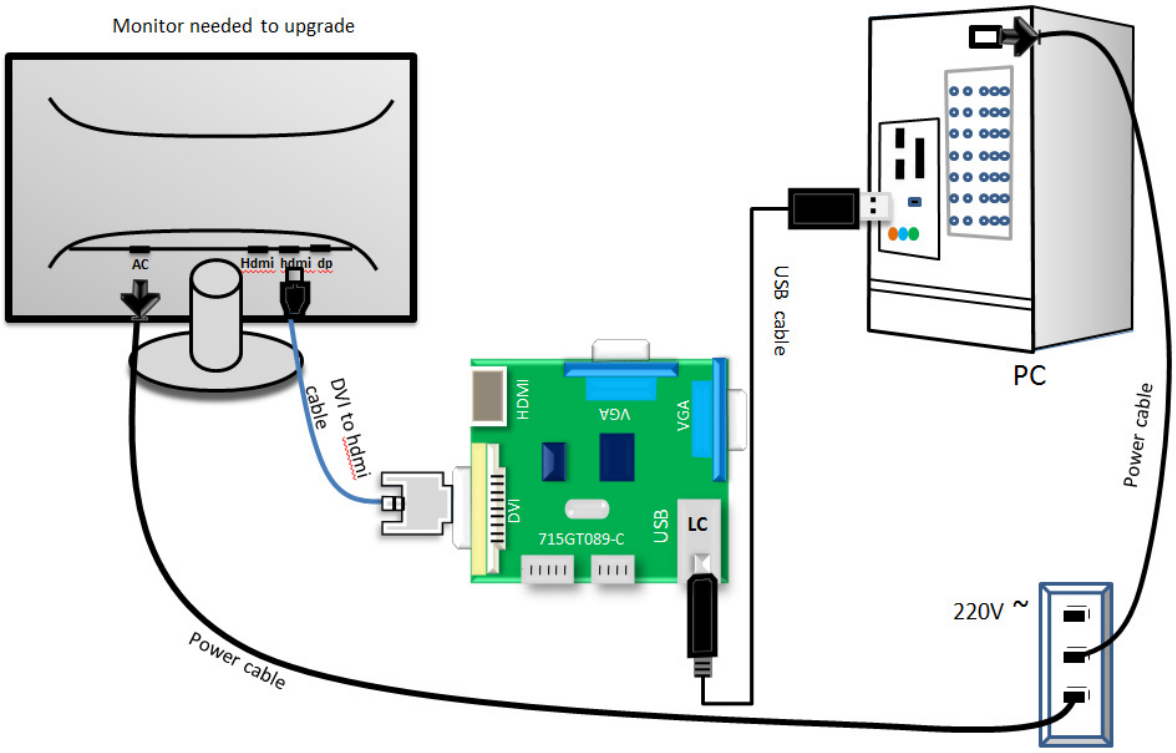
Monitor



ISP tool

EDID

2. Connection(DC on the monitor)



3. Install USB driver.

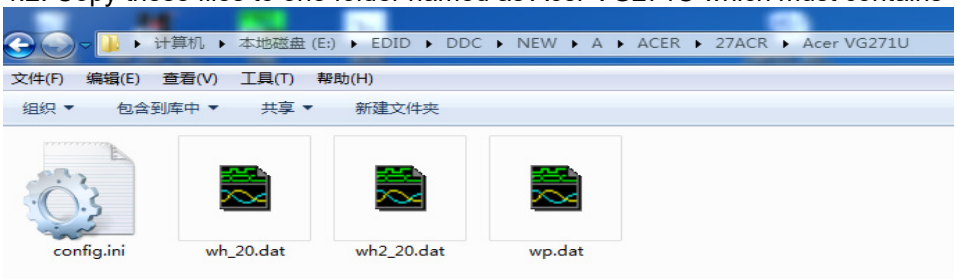
4. Prepare the EDID written.

4.1. Change the EDID files name as below rule.

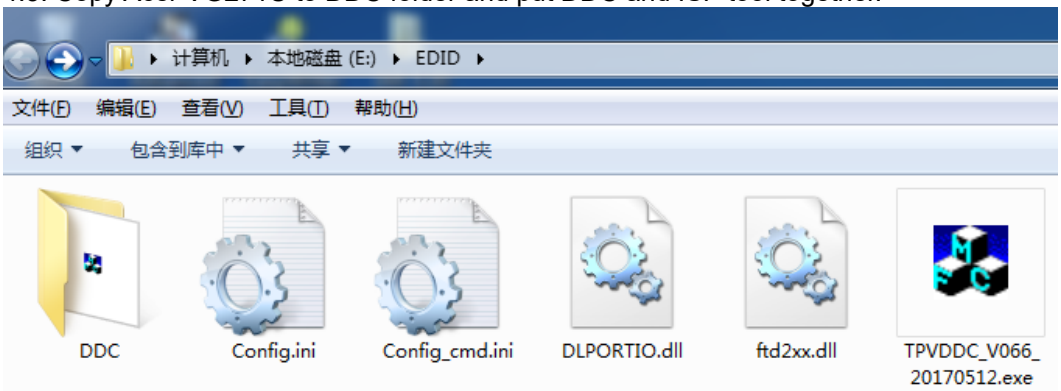
DP EDID ⟶ WP.dat　　HDMI_2.0 EDID ⟶ WH_20.dat

HDMI2_2.0 EDID ⟶ WH2_20.dat

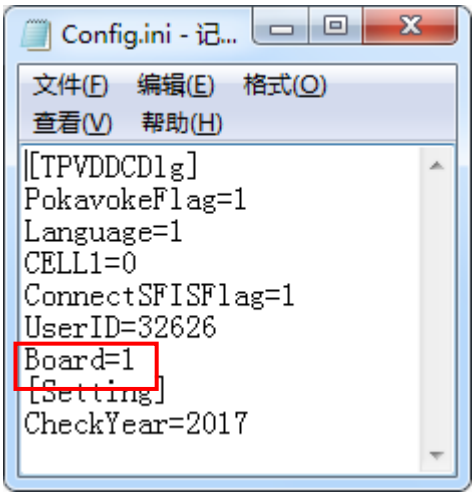
4.2. Copy these files to one folder named as Acer VG271U which must contains “config.ini” file.



4.3. Copy Acer VG271U to DDC folder and put DDC and ISP tool together.

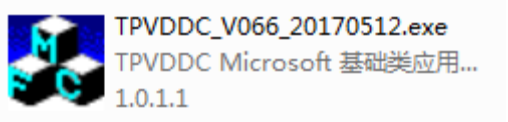


4.4 Setting the Config as below.

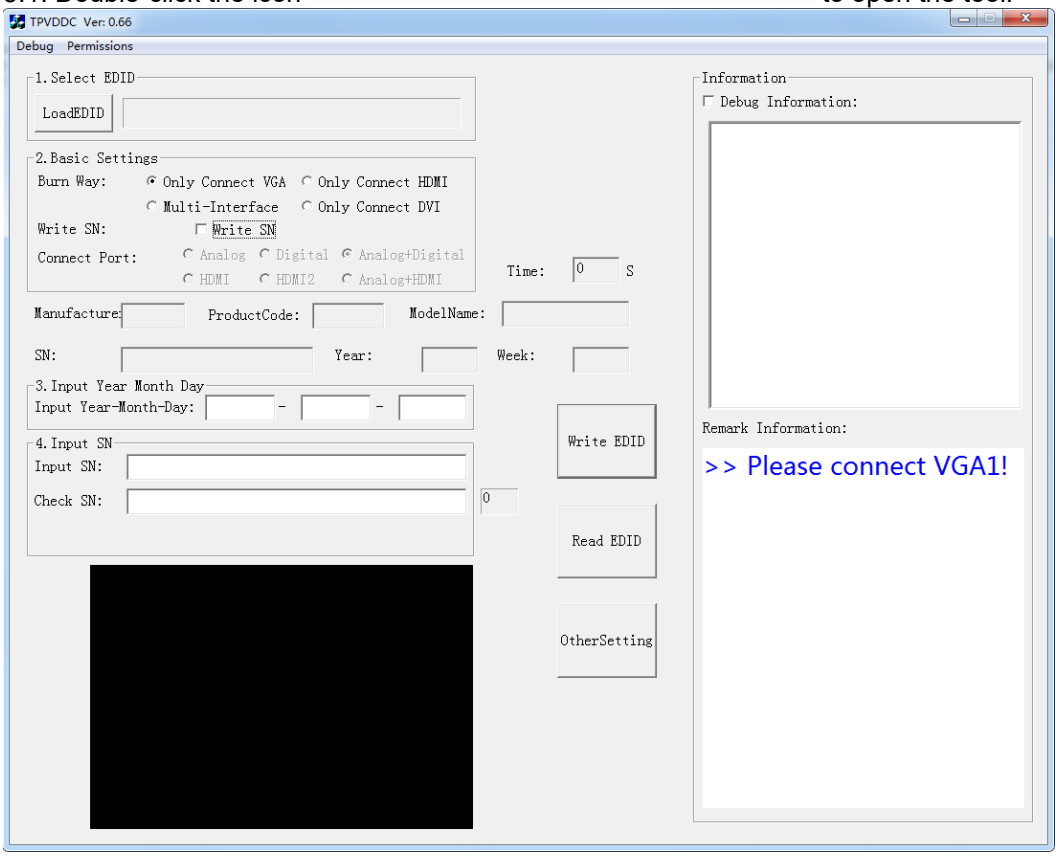


5. Run the ISP tool

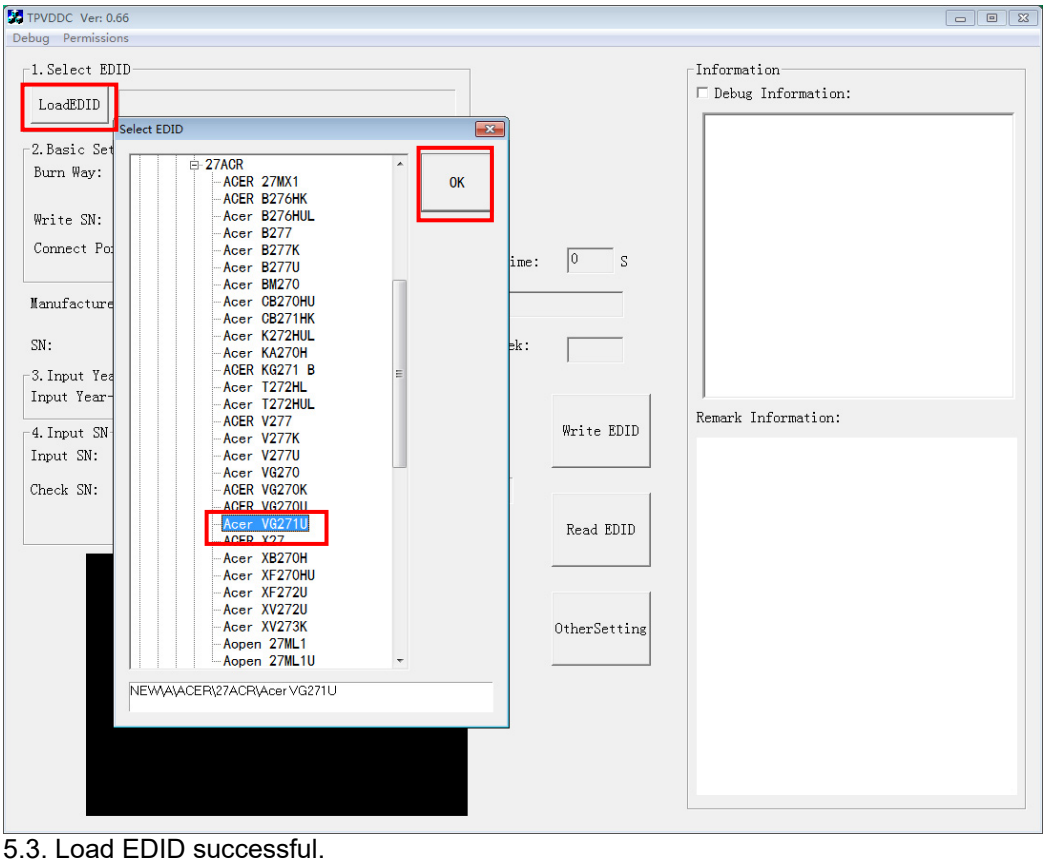
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.

5.1. Double-click the icon 

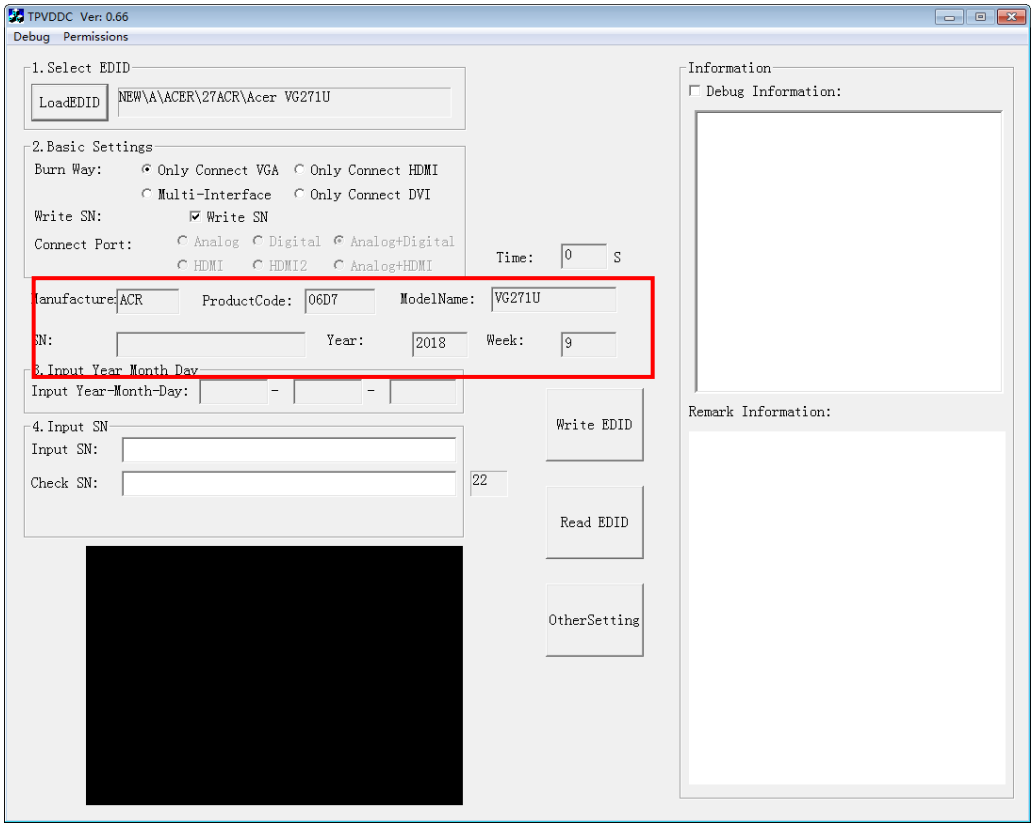
to open the tool.



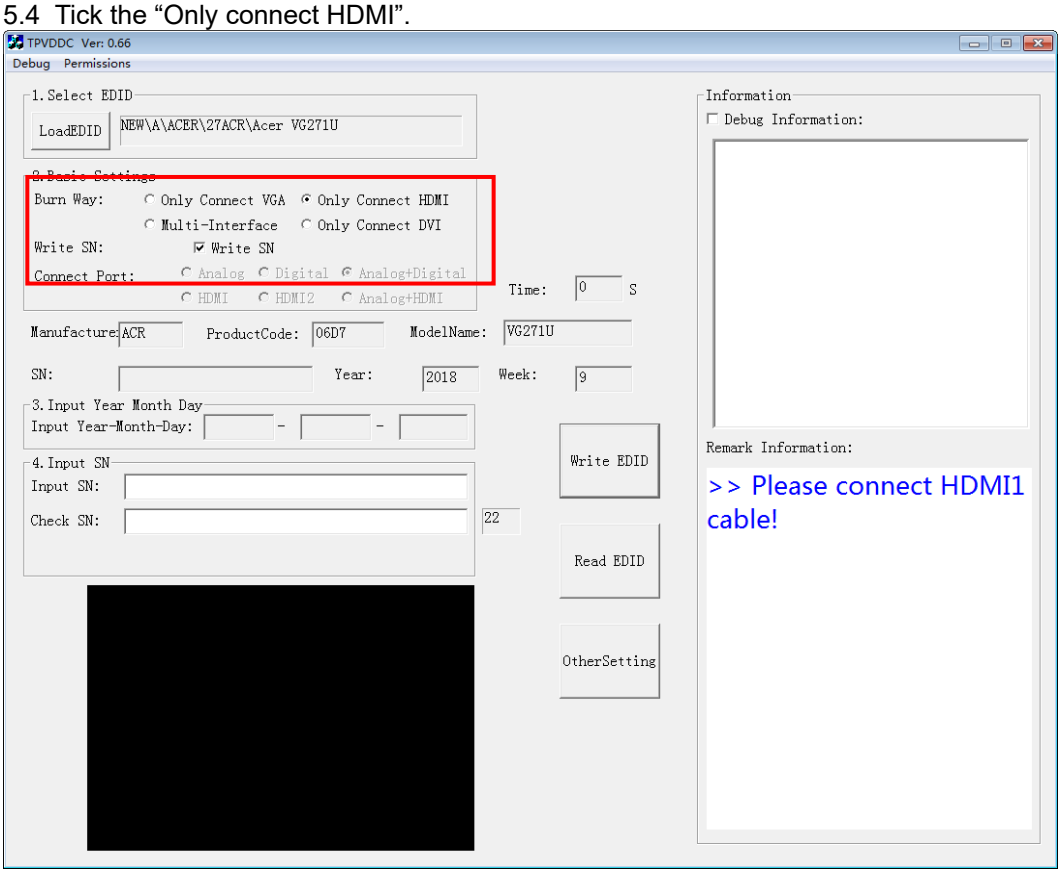
5.2. Select the EDID folder.



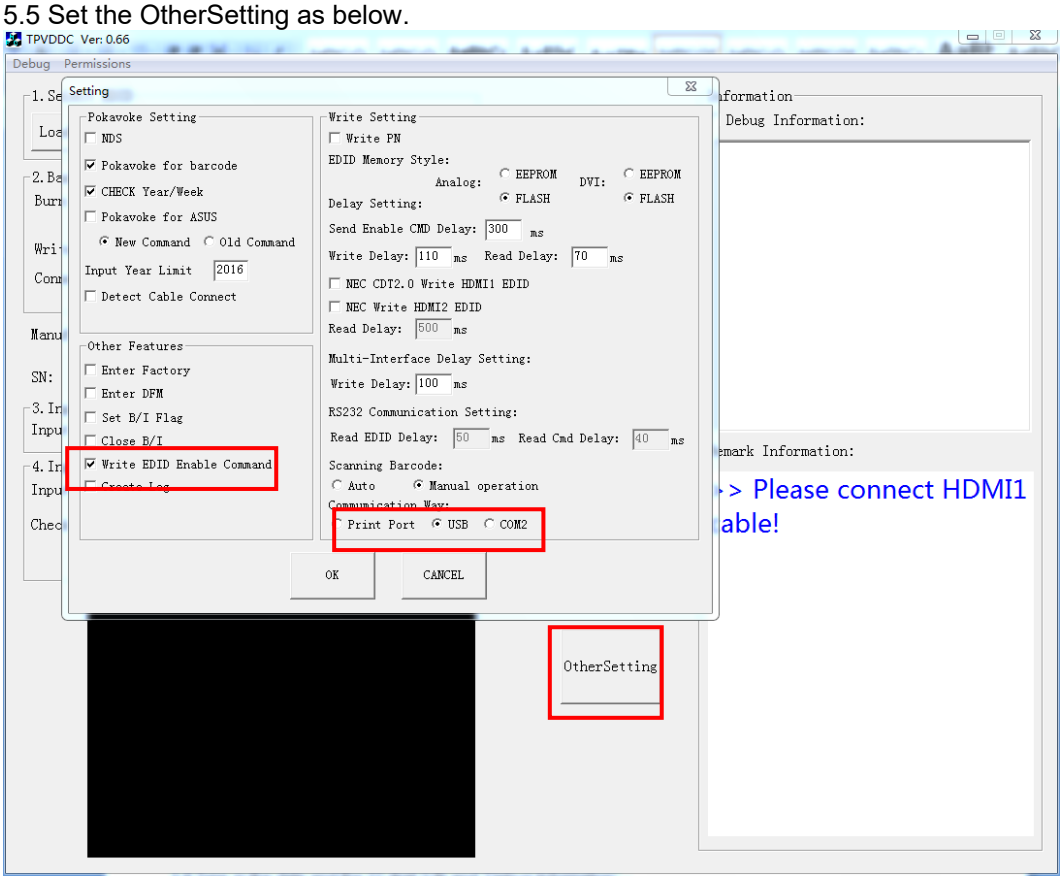
5.3. Load EDID successful.



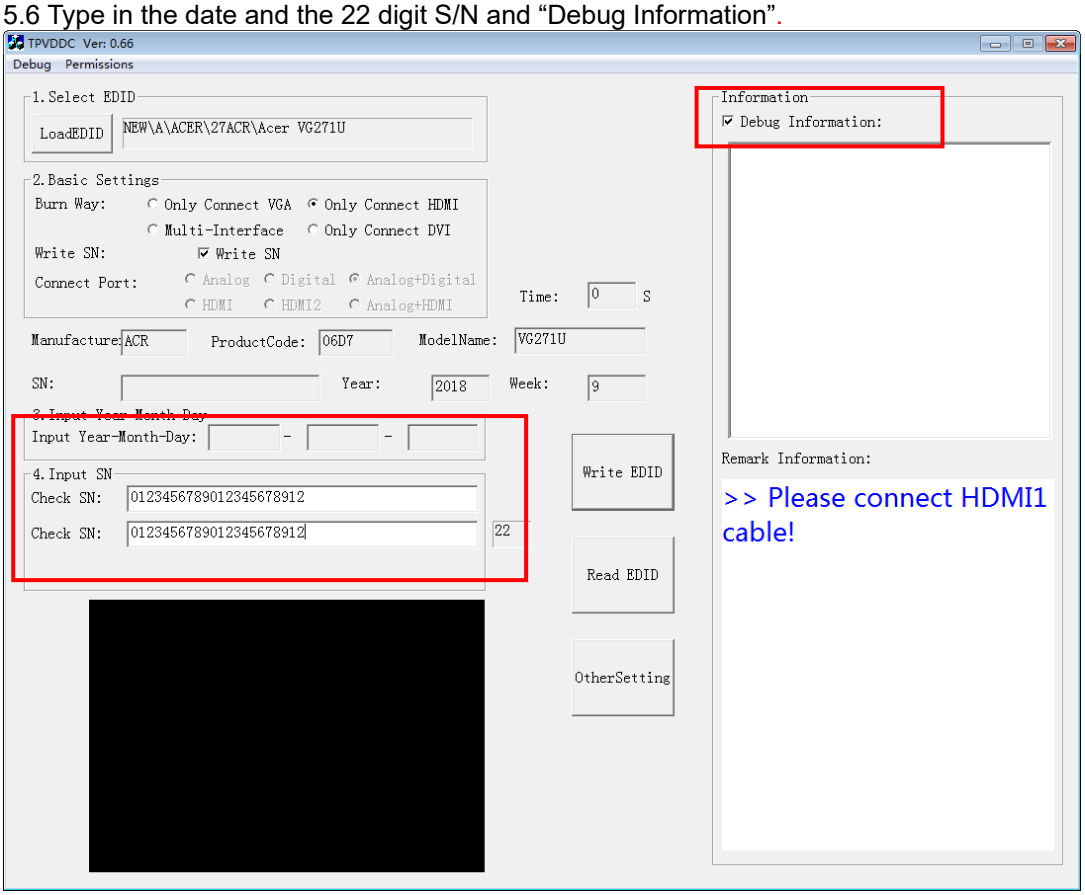
5.4 Tick the “Only connect HDMI”.



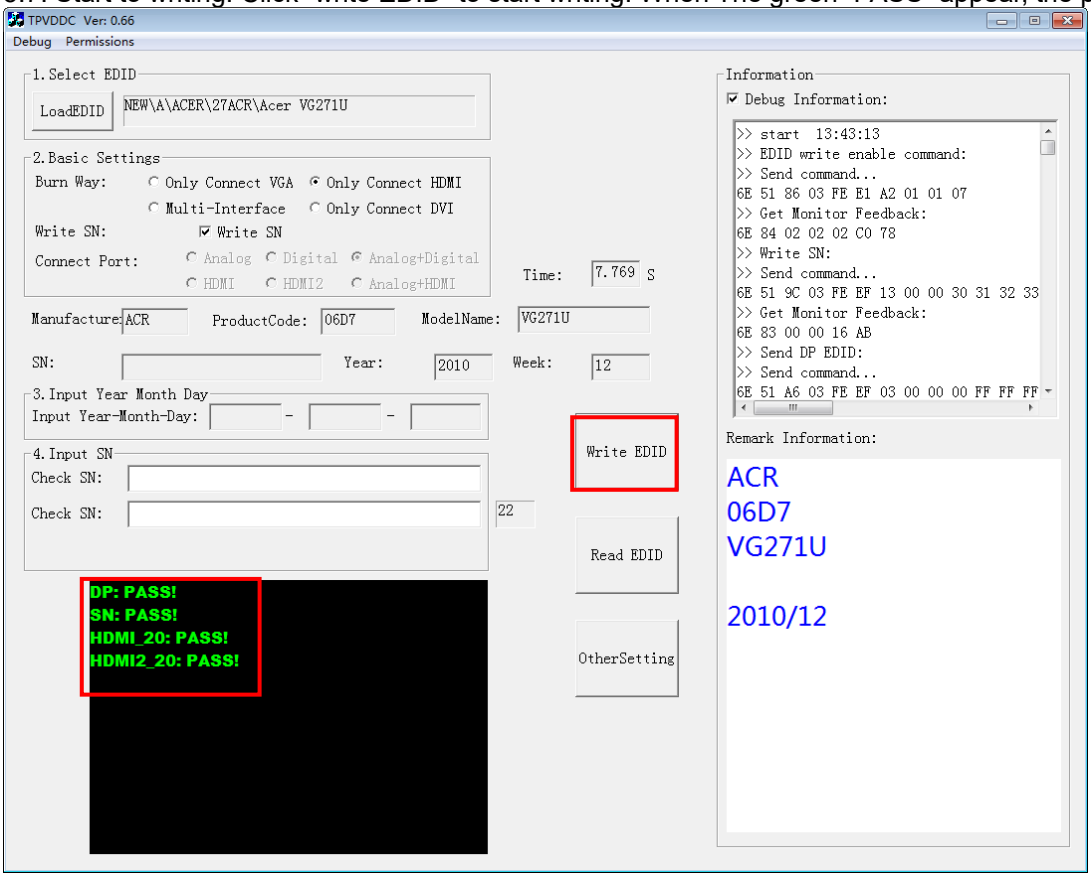
5.5 Set the OtherSetting as below.



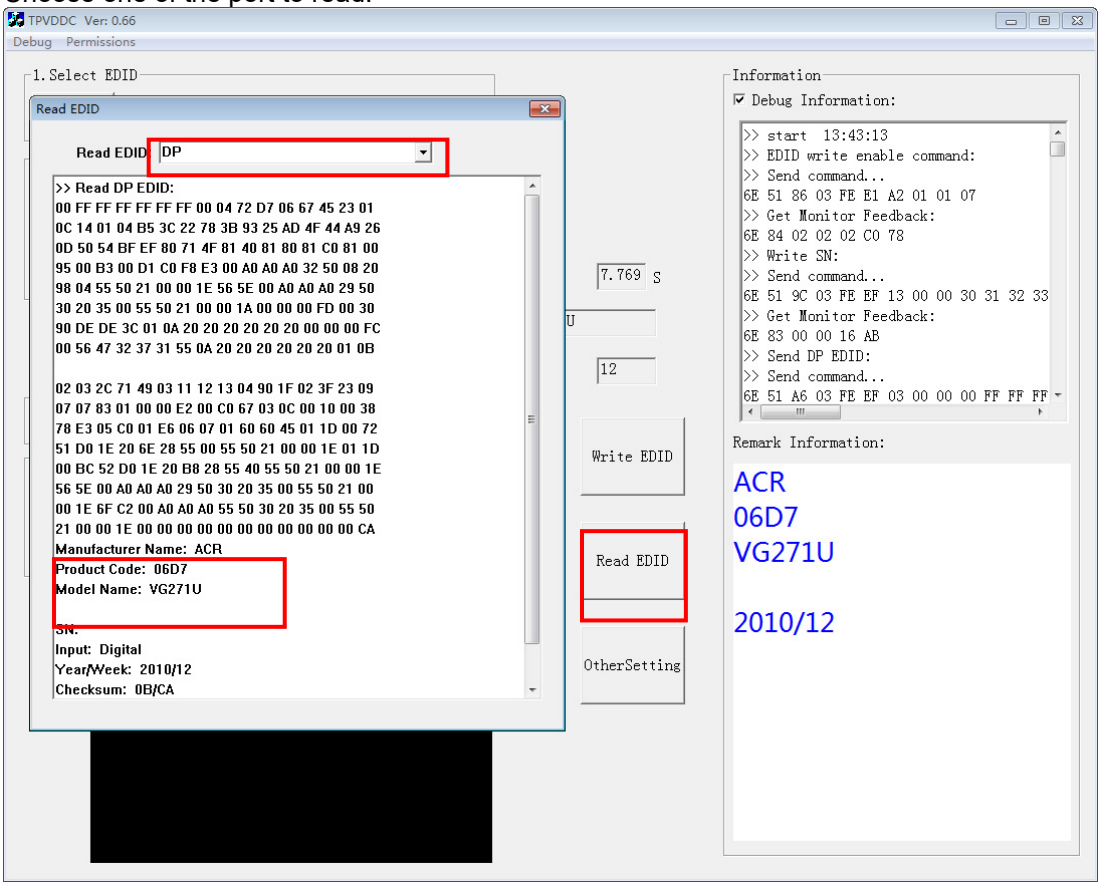
5.6 Type in the date and the 22 digit S/N and “Debug Information”.



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



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.

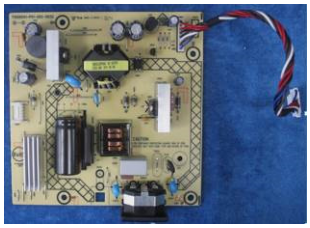
(3) Set the Burn in on last to try again.

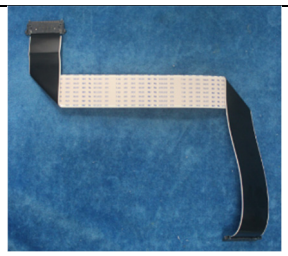
5. FRU (Field Replaceable Unit) List

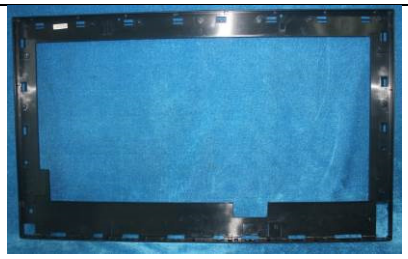
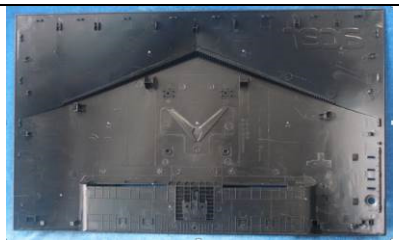
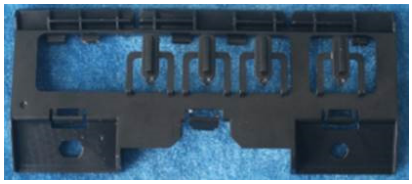
This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER VG271U P Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

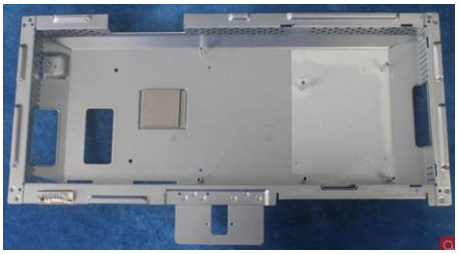
Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted on the printed Service Guide. For ACER AUTHORIZED SERVICE PROVIDERS, your ACER office may have 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	756GQICB0BA073000Q	NA
	POWER BOARD	PLPCHH541KV7H	NA
	KEY BOARD	KEPCLQA6	55.TCCM2.003
	LED BOARD	LEPCLQA2	55.TCCM2.004
	PANEL	750GBN270KC712N000	NA
	SPEAKER 4OHM 2.5W 63x22MM-50MM (LEFT)	378G0025689CLA	23.TCCM2.001

	SPEAKER 4OHM 2.5W 63x22MM-50MM (RIGHT)	378G0025689CRA	23.TCCM2.002
	HDMI CABLE 1500MM	389G0184GAA502	50.LZ2M2.005
	DP CABLE 1500MM	389G1875AAA501	50.LXPM2.008
	POWER CORD 1800MM (EUROPE)	389G404A18NYHG	27.T1BM2.001
	V-by-One FFC CABLE 51P-51P 450MM(MB TO PANEL)	395G279M51N5700000	NA
	CABLE 6P-6P 550MM(MB TO KEY BOARD)	395GH20006WM325000	NA
	CABLE 4P-2P+2P 850/100MM(MB TO SPEAKER)	395GH20004WM182000	NA

	CABLE 200MM (PB TO PANEL)	395G801406DJ61	50.T1BM2.002
	BEZEL ASSY W LOGO	705GQICS034613	NA
	MIDDLE FRAME	Q34G8801AEM01S0100	NA
	REAR COVER	A34G4569AEM0GS0130	NA
	STAND HINGE ASSY	705GQHCS034504	NA
	BASE ASSY	Q37G085801100001ZA	60.TE9M2.004
	FUNCTION KEY BUTTON	A33G2236AEM01L0100	60.TBLM2.003
	FUNCTION KEY BUTTON(JOYSTICK)	A33G2238AEM01L0100	60.TCCM2.007

	MAINFRAME	Q15G331610170100GH	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.