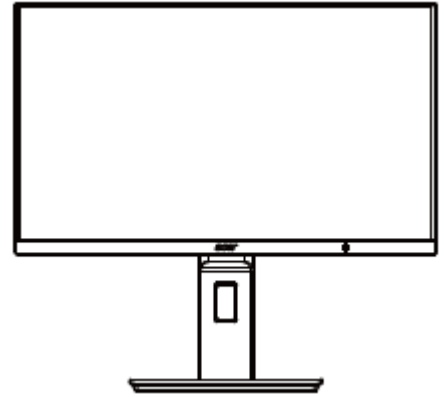


Service  
Service  
Service



Acer Monitor B247Y

# LIFECYCLE EXTENSION GUIDE

# Contents

Important Safety Notice.....	3
<b>1. Exploded view diagram with list of items .....</b>	<b>4</b>
<b>2. Mechanical Instruction .....</b>	<b>5</b>
3. Firmware Upgrade Process .....	18
4. Writing EDID Process .....	25
5. FRU (Field Replaceable Unit) List.....	25
6. Trouble shooting instructions .....	37

## 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.

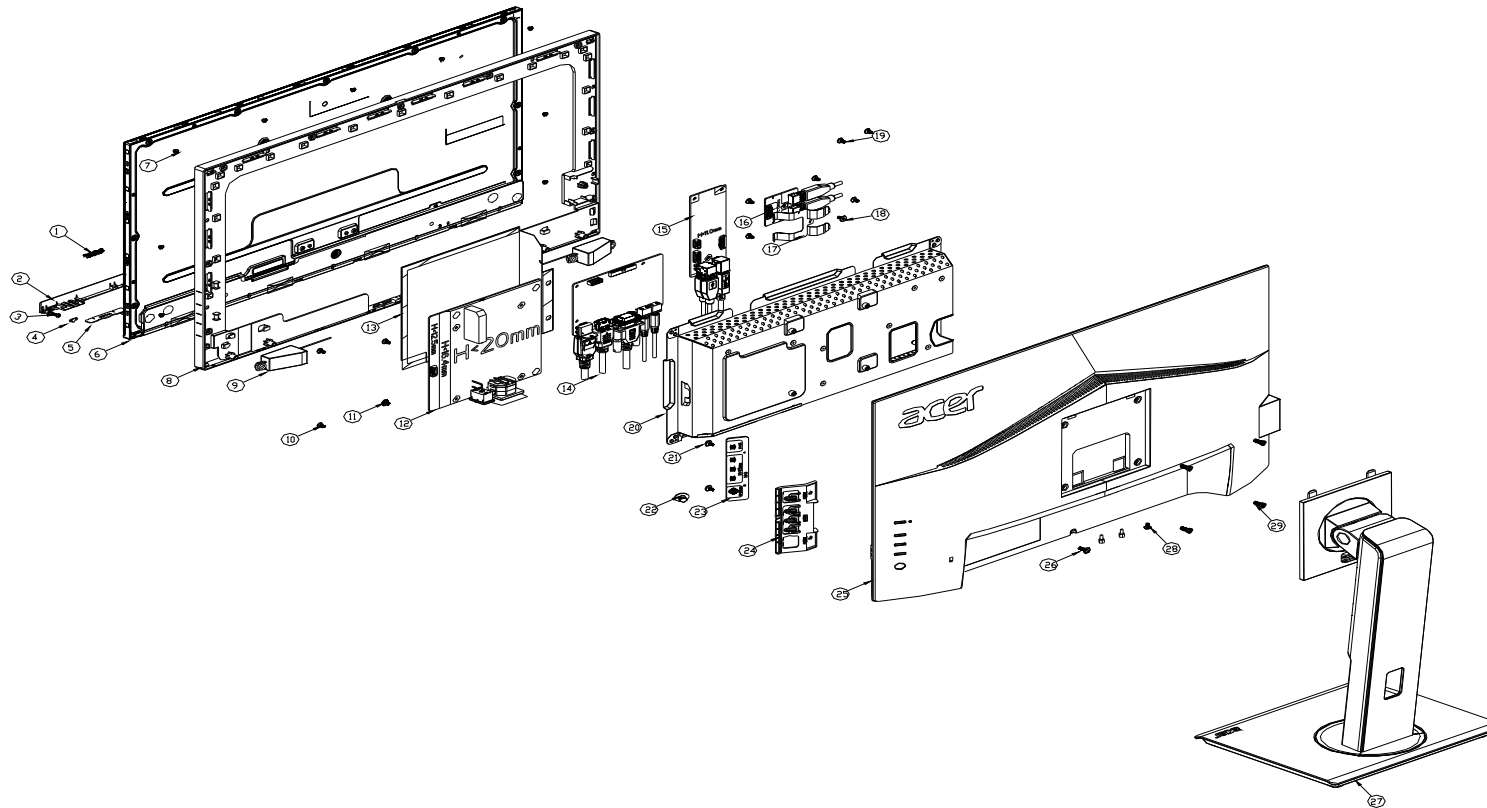
CAUTION -The use of optical instruments with this product will increase eye hazard.

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.)<sup>1</sup>.

# 1. Exploded view diagram with list of items



Item	Description	TPV Part No.	ACER Part No.
2	LED BOARD	LEPCLQA2	55.TCCM2.004
3	PANEL	750GBK238HM2B6N000	NA
4	KEY BOARD	KEPCLQA6	55.TCCM2.003
7	ADAPTER BOARD	PLPCHD541KQB2	55.TCMM2.002
8	MAIN BOARD	756GQHCB0BA098000Q	55.TCMM2.001
	USB BOARD	USBLQA4	#N/A
	USB BOARD	USBLQA6	55.TCMM2.004
	CABLE 30P 400MM(MB TO PANEL)	395G179M30B6480000	50.TCCM2.001

## 2. Mechanical Instruction

### Tools Required

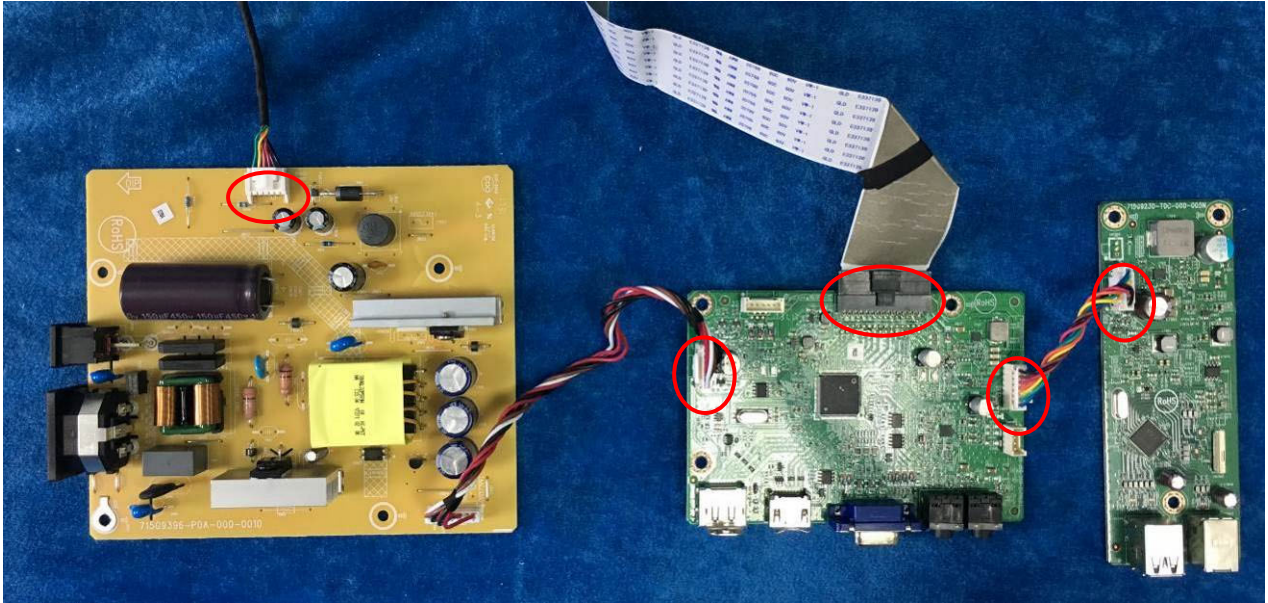
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

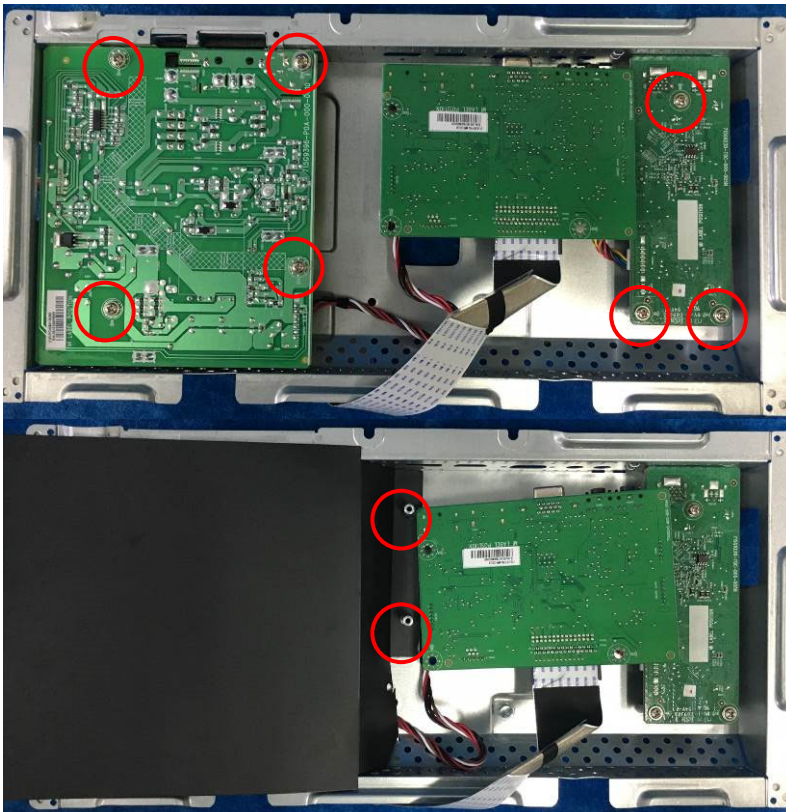
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

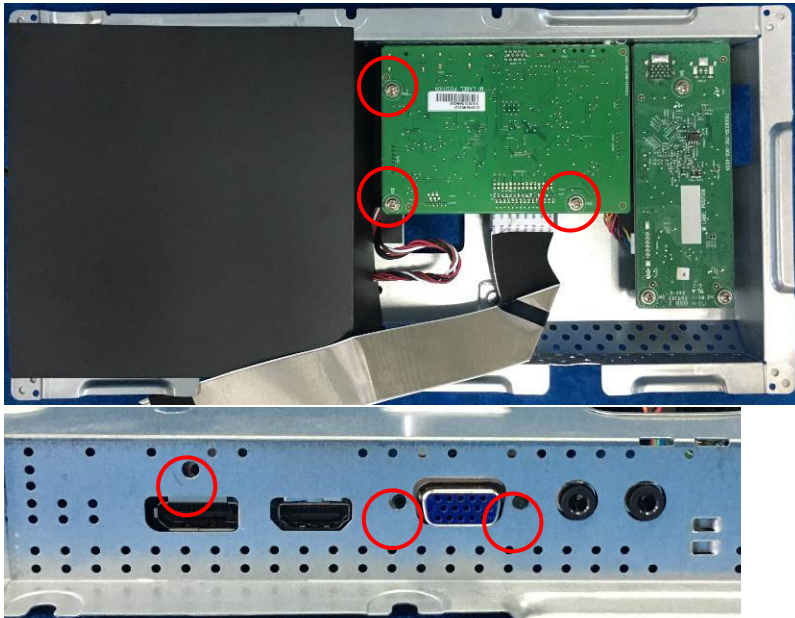
## 2.1 Disassembly Procedures:

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



- S2 Use a screwdriver to tighten the screws till the power board and USB board with shield are firmly attached then put the mylar with main board aim at the two screw bolts of mainframe and tighten the screws of main board.



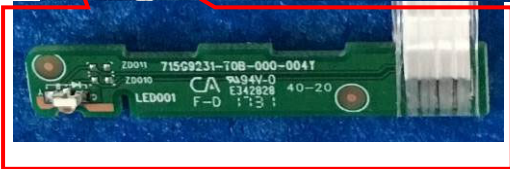
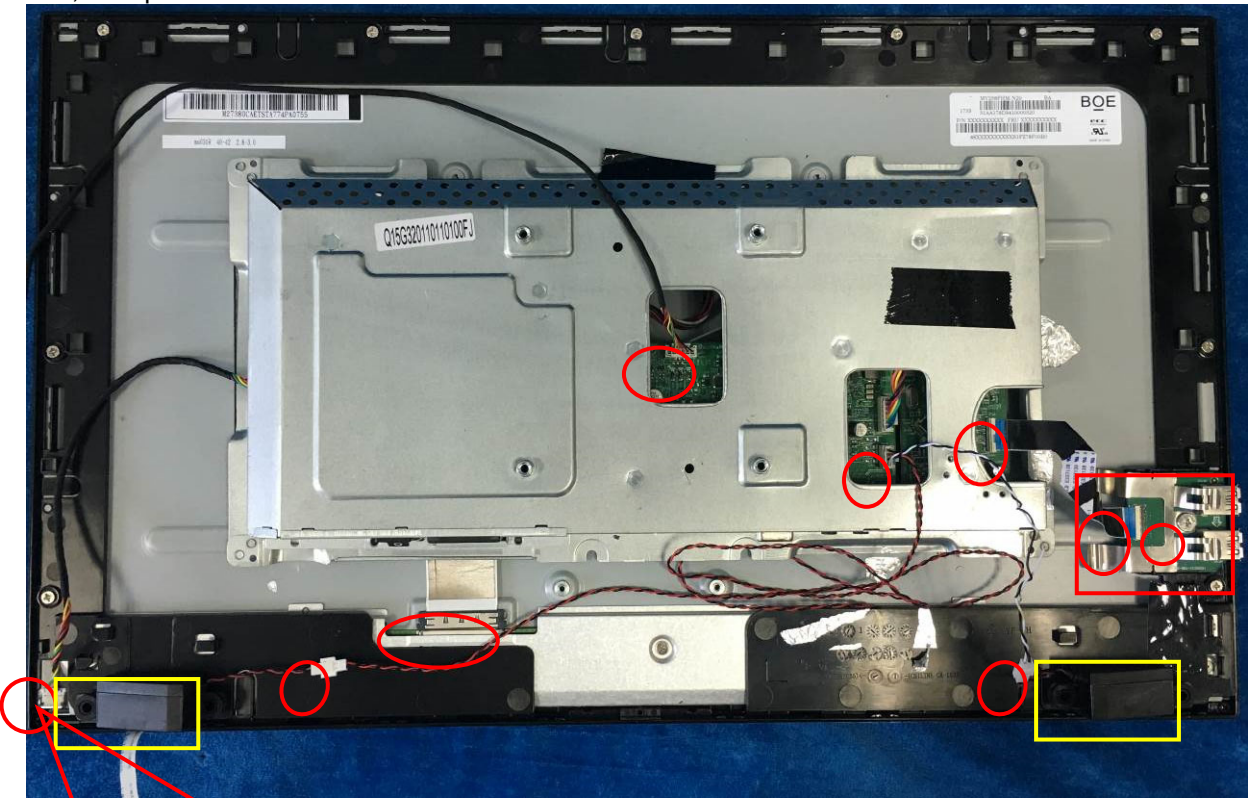


S3 Assemble the MIDDLE FRAME, DECO bezel and the panel. Use a screwdriver to tighten the screws.



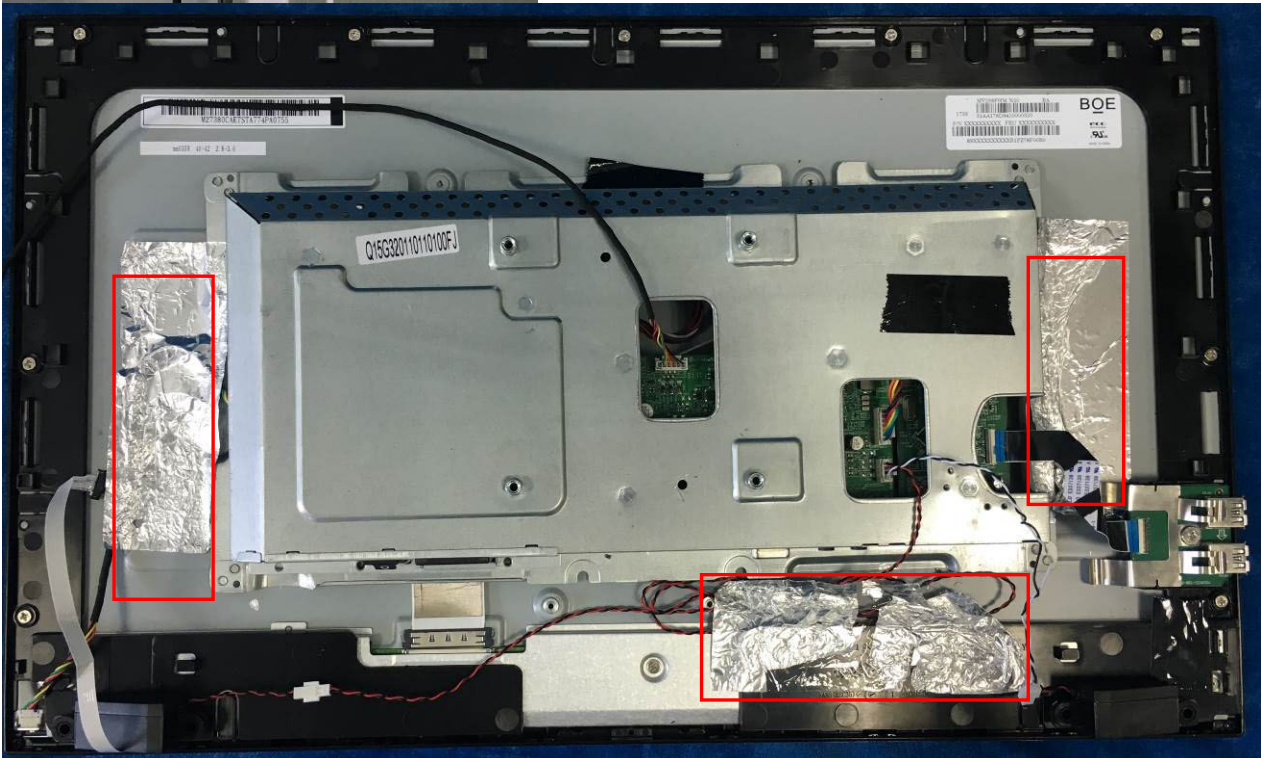
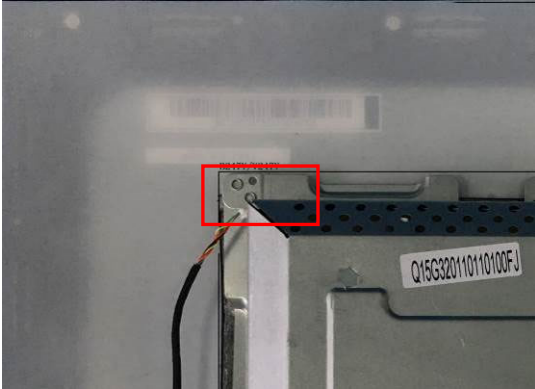


S4 Connect cables (mainboard to panel, mainboard to speakers and the power board to panel). Assemble the LED board, the speakers and the USB board.





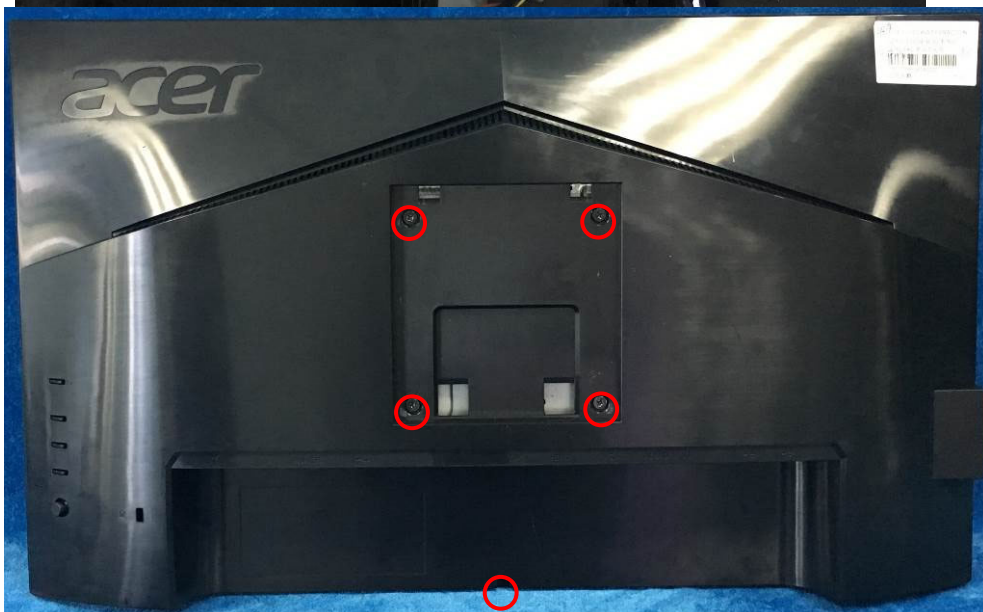
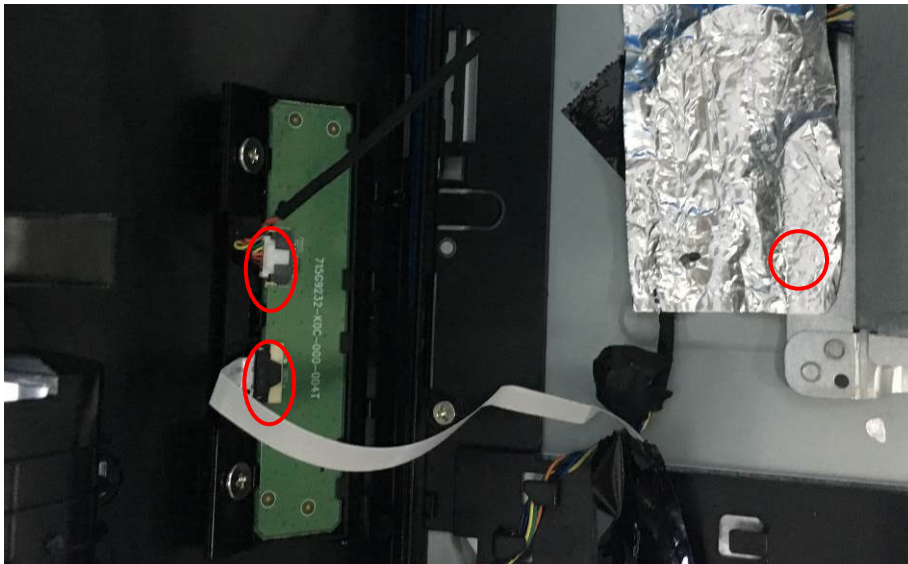
- S5 Put the Mylar slice (Note: refer to last page) marked the information of mainframe position on the panel. Mylar slice edge must be against the bezel. Put the mainframe along the mark. Holding the mainframe while you are removing the Mylar and pasting the tapes.



S6 Prepare a rear cover and a key board and use the screws to lock the key board.



S7 Connect the pin (LED board / Key board) and the pin (Key board to mainboard). Use the screws to lock the rear cover.

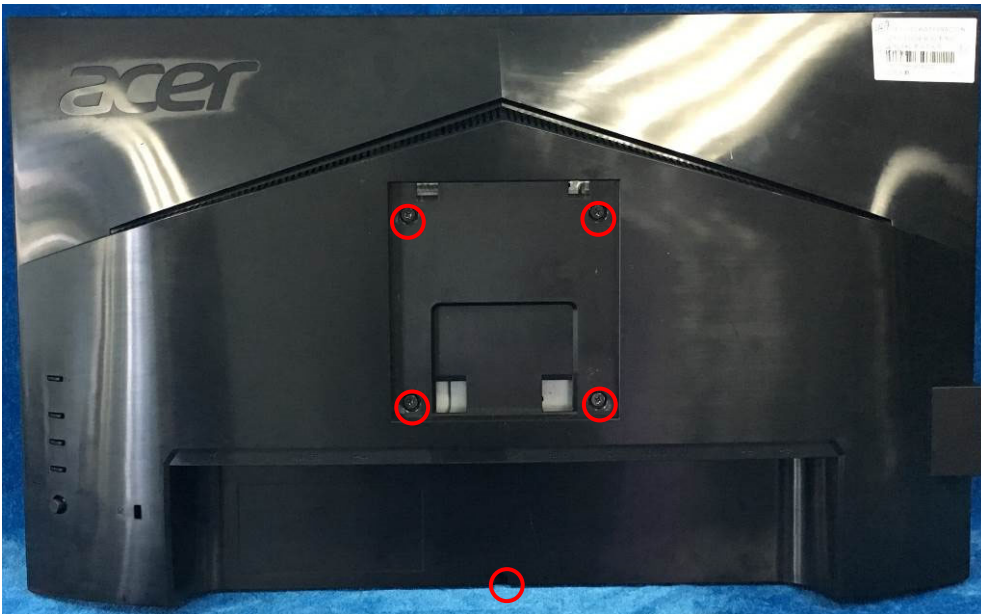


S8 Assemble the stand and base ASS'Y.



4.2 Disassembly procedures:

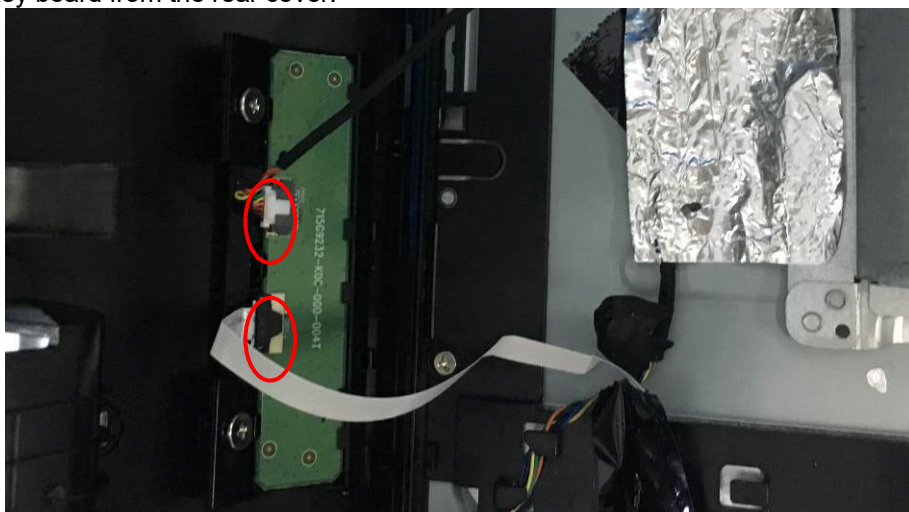
S1 Push the button to remove the stand –base ASS'Y and unscrew the screw on rear cover.



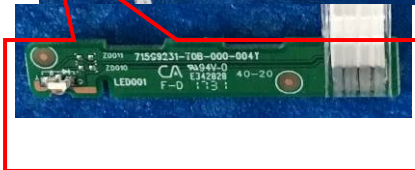
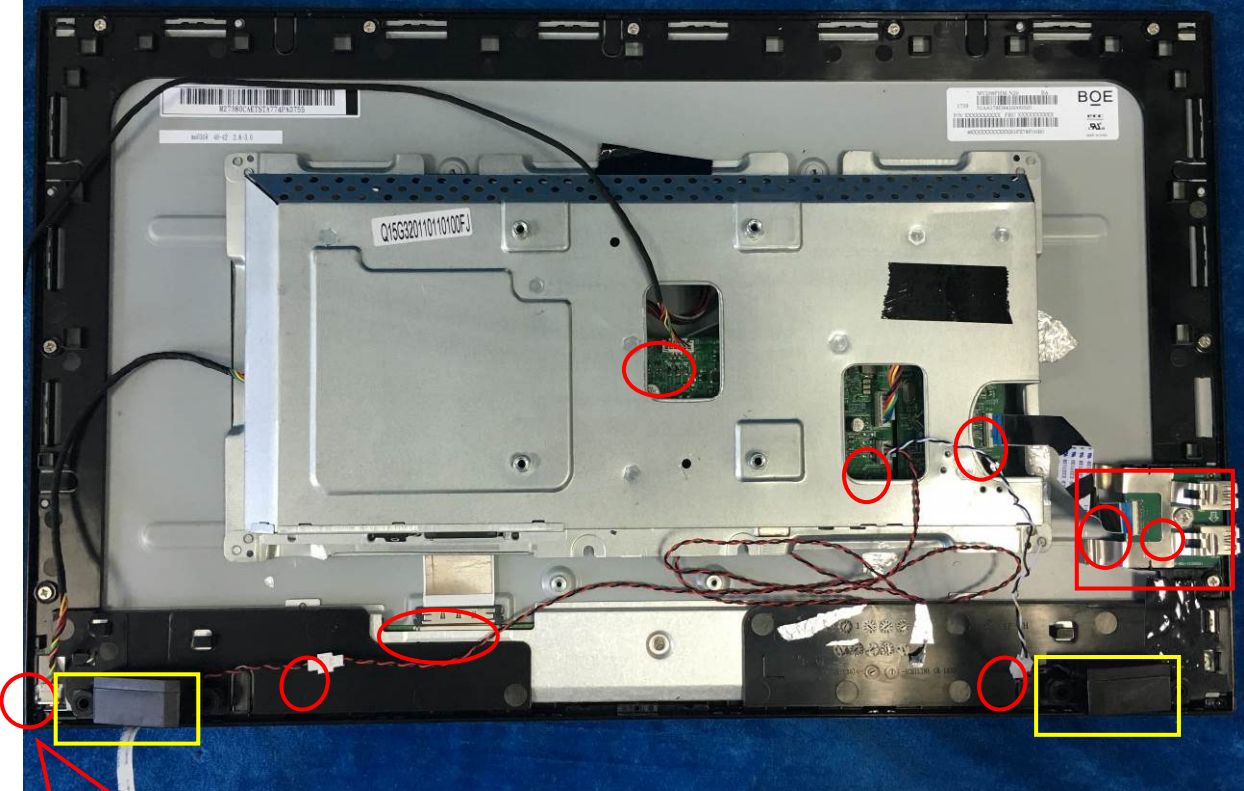
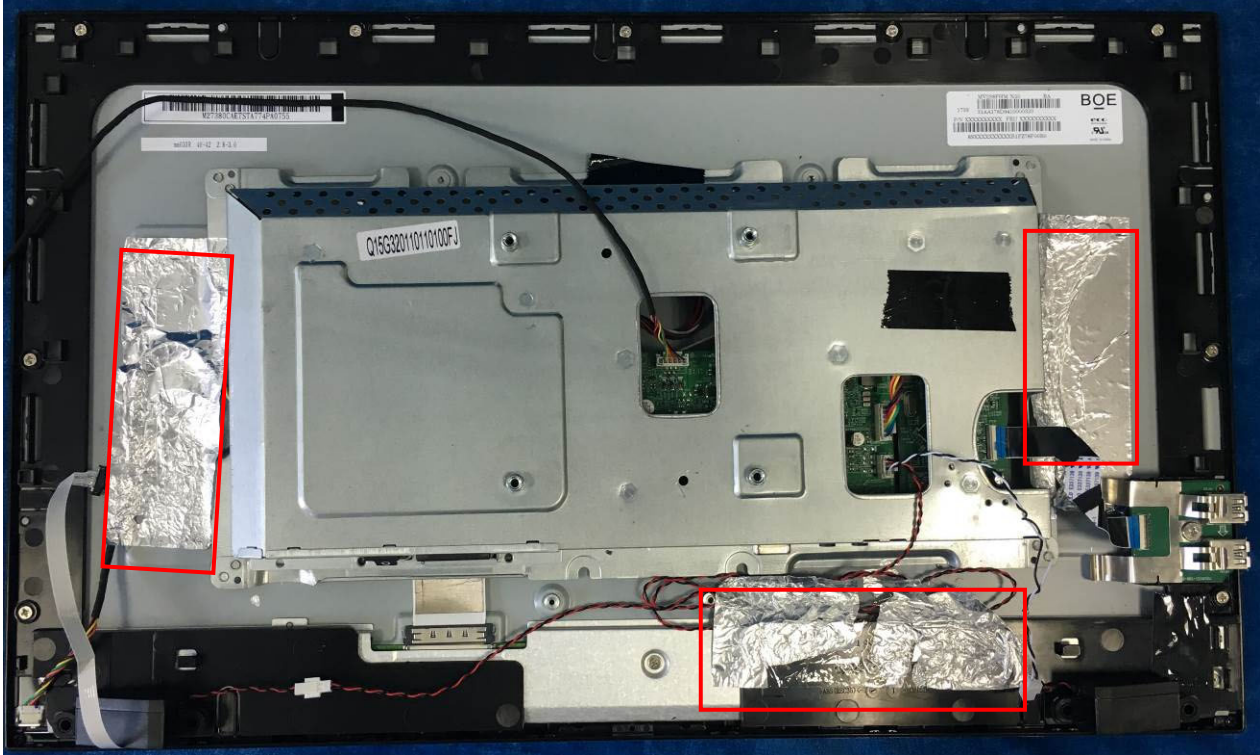
- S2 Remove the rear cover. Use a tool (like picture using) to open all latches. (Be careful the position of the key board.)



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



S4 Tear up all tapes and disconnect the LVDS cable (main board to panel), the cables (power board to panel and the main board to key board). Remove the LED board and the Speakers. Remove the screw to remove the USB board.

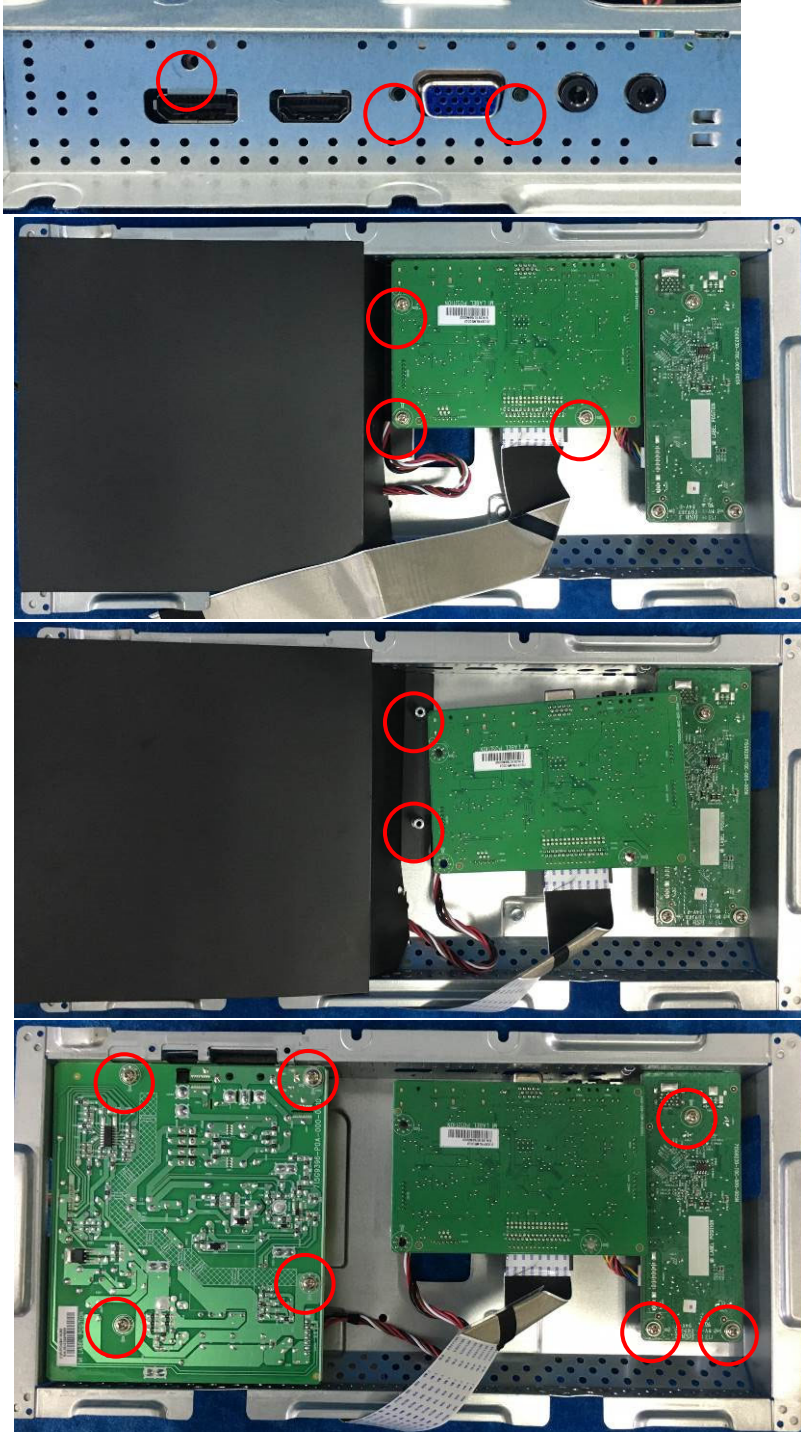


S5 Remove the screws to separate the panel and the Middle Frame and the DECO BEZEL.



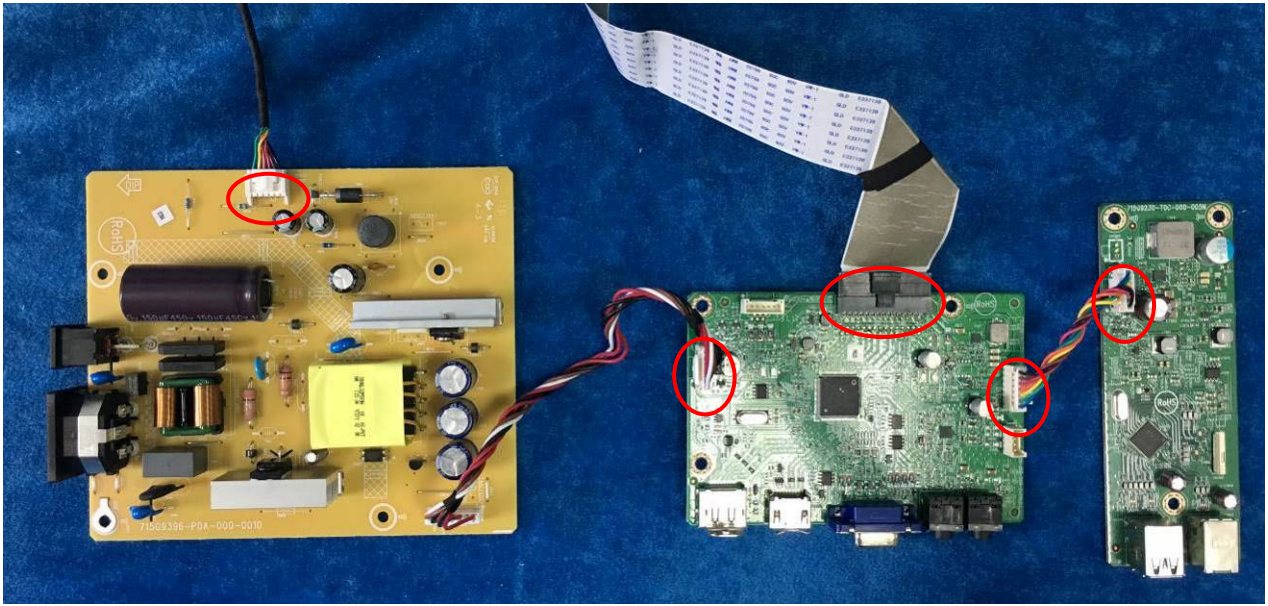
S6

Firstly, unscrew the screws of the main board and pull out the two screw bolt to remove the mylar. Then unscrew the screws of the power board and main board to remove them from mainframe.





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



### 3. Firmware Upgrade Process

#### 1. Materials list



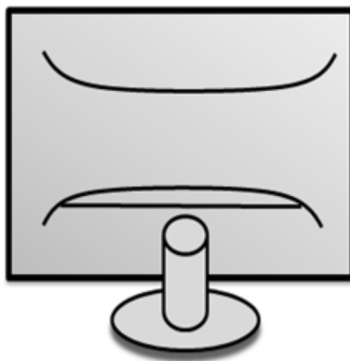
ISP JIG: 715GT089-C



VGA cable  
TPV P/N: 089G728 GAA DB



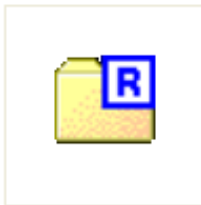
PC



Monitor



USB cable  
TPV P/N: 089G1758 X



FTC100103(MSTAR) usb  
drive.rar  
USB port driver



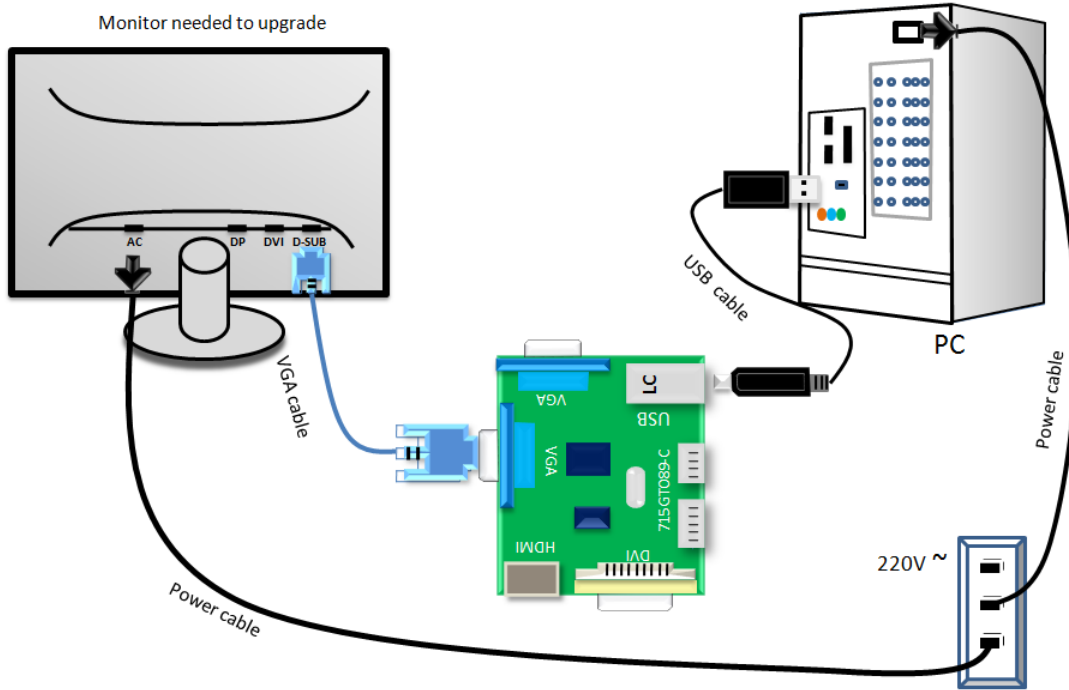
RTDTool.exe

ISP tool:



Acer\_B247Y\_RT  
D2525AR\_AHDP  
HUB\_MV238FH  
M\_N20\_7F000...  
New F/W

## 2.Connection

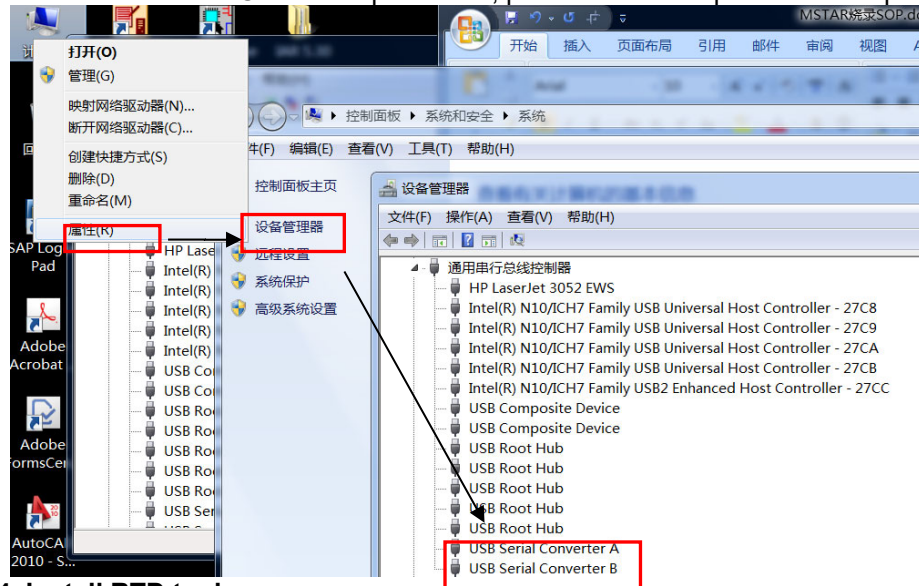


## 3.Install USB driver.

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.

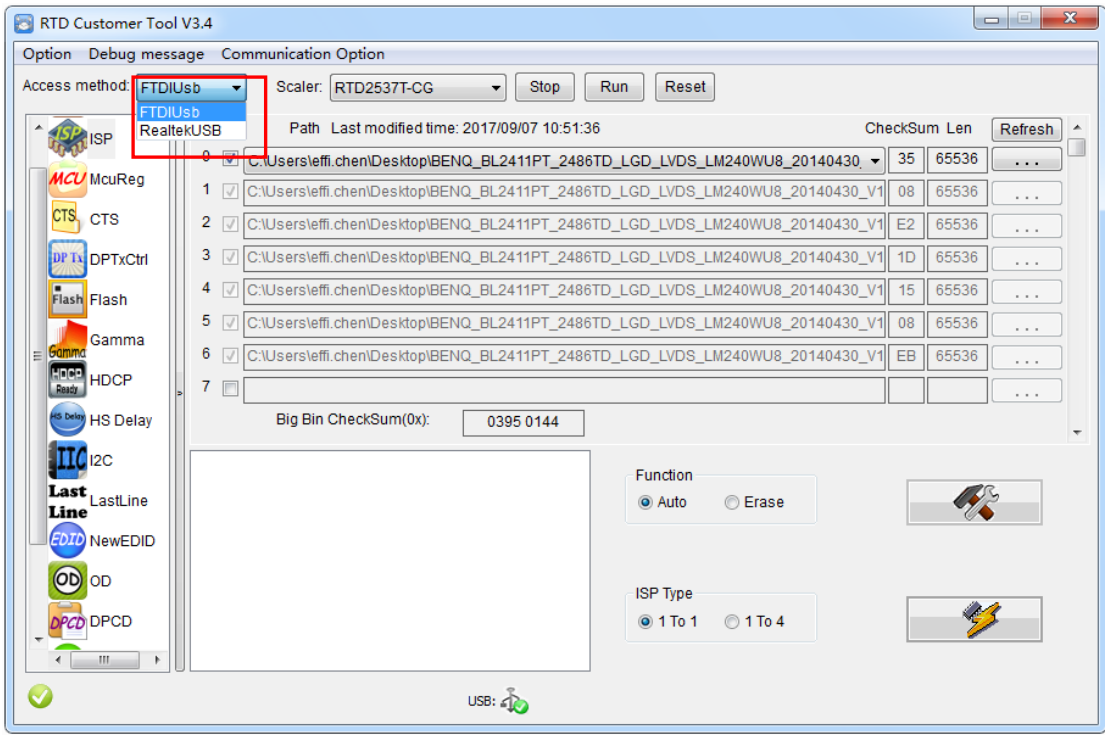
**Note:** If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the EDID writing tool before running the F/W Upgrade tool.



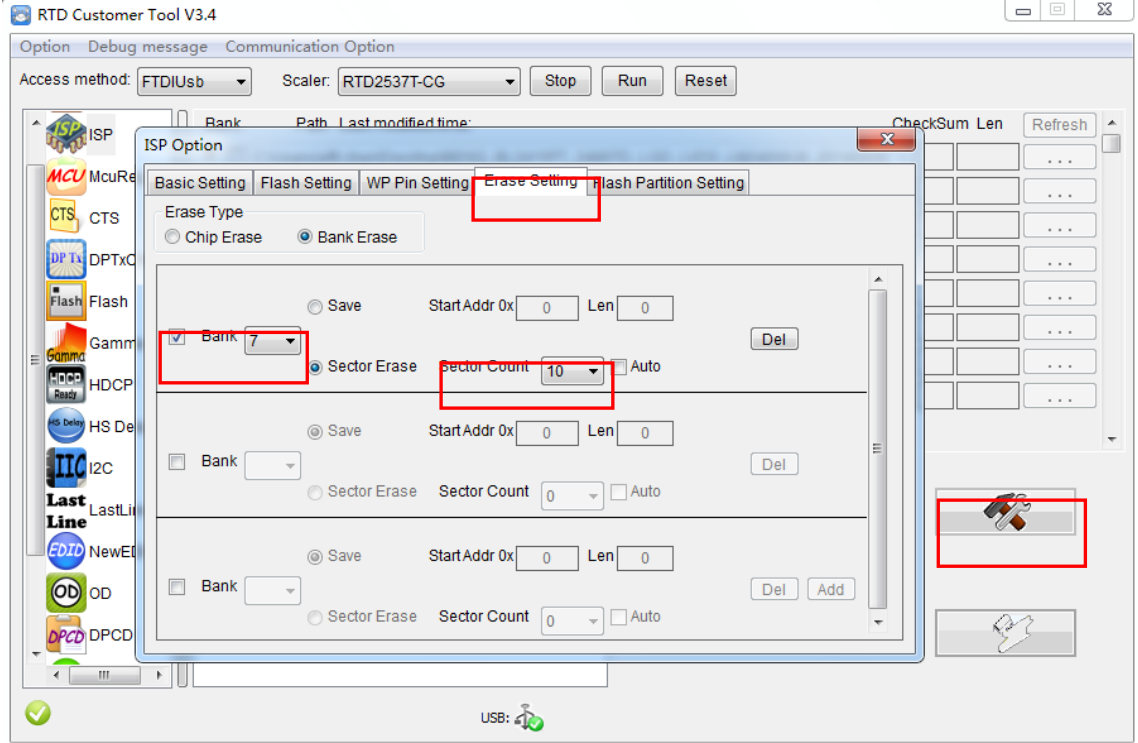
4.1. Double-clicks the icon to run it.

Note: Must to install driver firstly

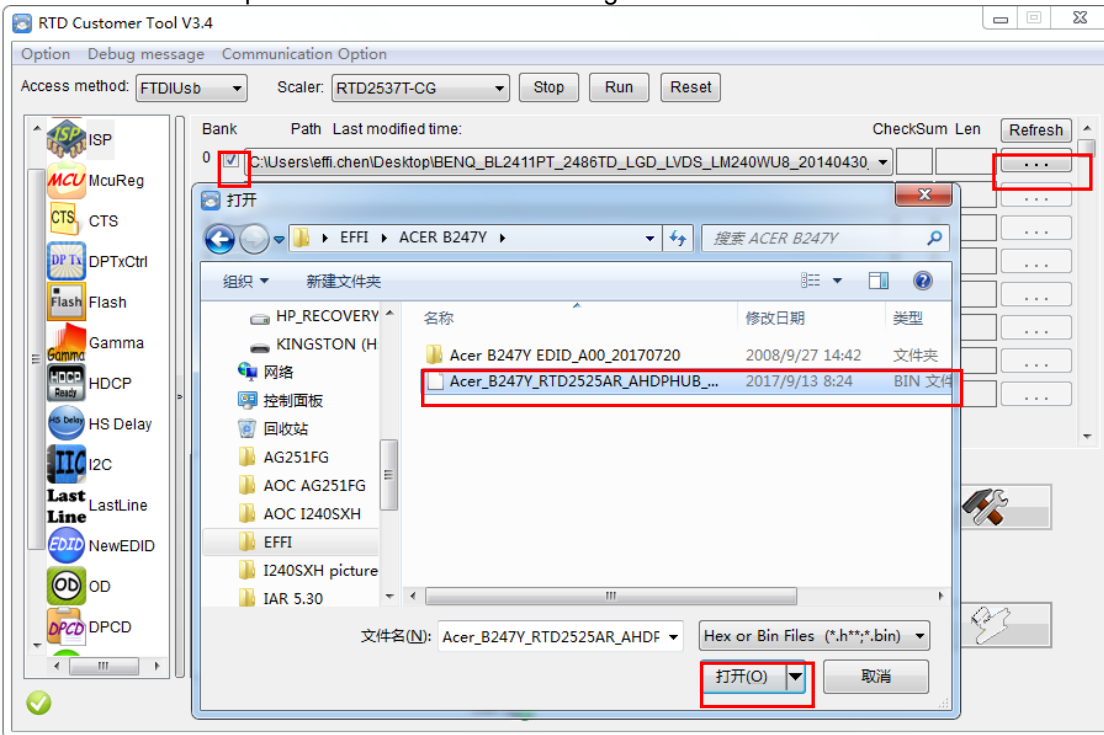
4.2. Choose the FTDIUSB communication way.



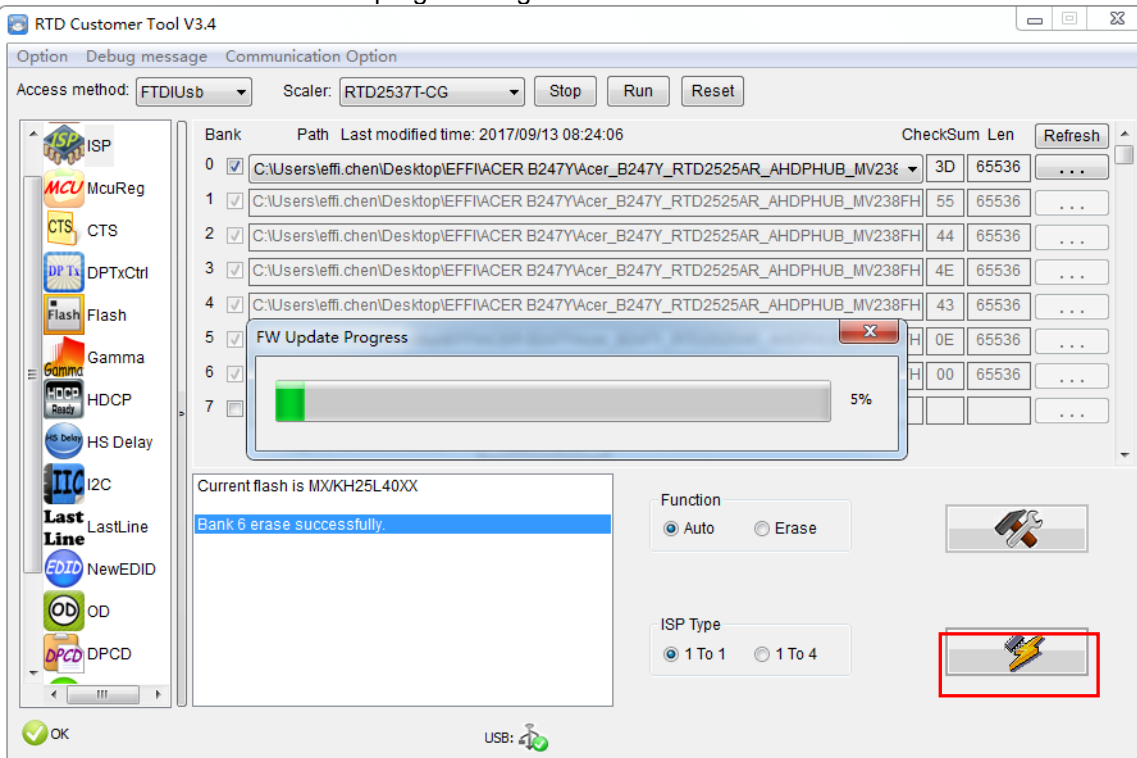
4.3 Click "ISP" and "ISP Option" to set the "Erase Setting" as below.



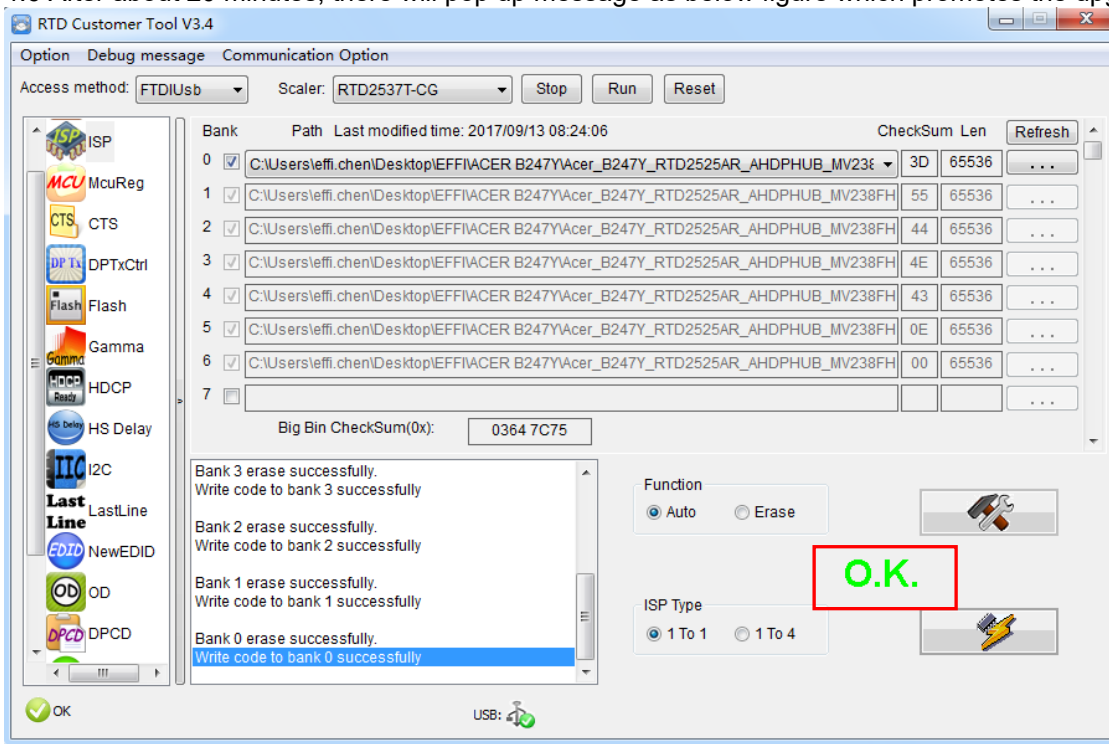
4.4 Close the “ISP Option” window and click the “BigBin” to load the correct F/W.



4.5 Click  to start programming.



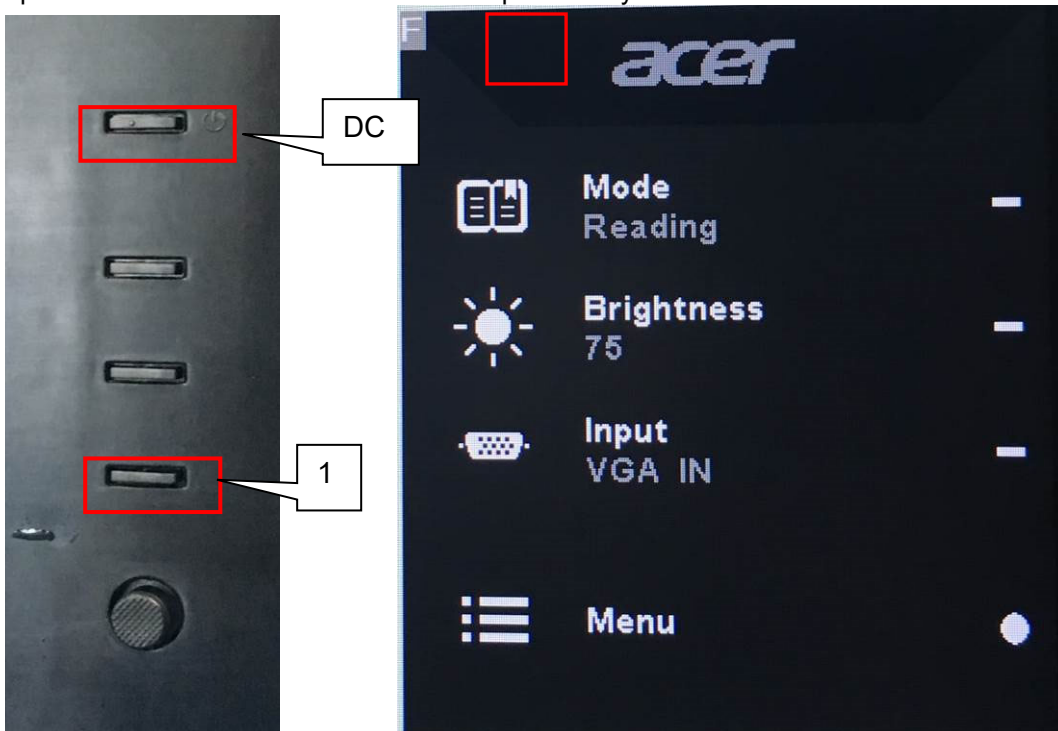
4.6 After about 20 minutes, there will pop up message as below figure which promotes the upgrade successful.



## 5. Check the FW version after upgrade.

5.1. The way to open factory menu.

- (1) Connect 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.



```

Model: B247Y
Chips: RTD2525AR
Panel: BOE MV238FHM N20
Date : 20170913 Version: 0.02

AutoColor
Gain      R 188 G 181 B 169
Offset    R 106 G 105 B 111

          BRI  75    CON  50

Warm      R 128 G 128 B 128
Normal    R 125 G 122 B 128
Cool      R 111 G 110 B 128
Slight    R 128 G 128 B 115
Light     R 128 G 128 B 109
Medium    R 128 G 128 B  99
Strong    R 128 G 128 B  91

DFM      :          OFF
Burn In:          OFF
NVRAM Initial
Force Logo Off OFF
HW AutoColor  FAIL
SSC  9    LVDS Current  3
Exit

```

Check this F/W version.

(3) Do "Auto Color" in factory mode.

```

Model: B247Y
Chips: RTD2525AR
Panel: BOE MV238FHM N20
Date : 20170913 Version: 0.02

AutoColor          PASS
Gain      R 167 G 162 B 144
Offset    R 108 G 107 B 114

          BRI  75    CON  50

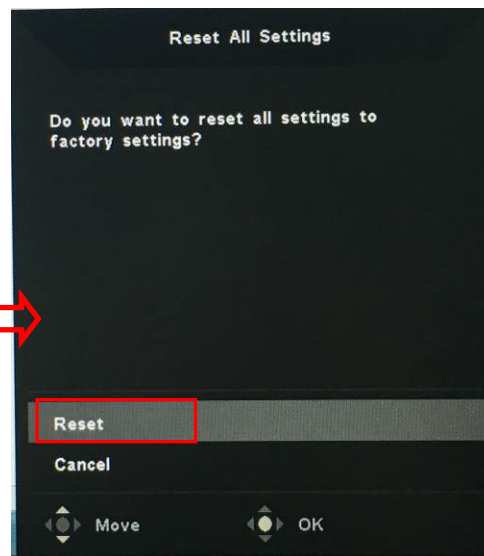
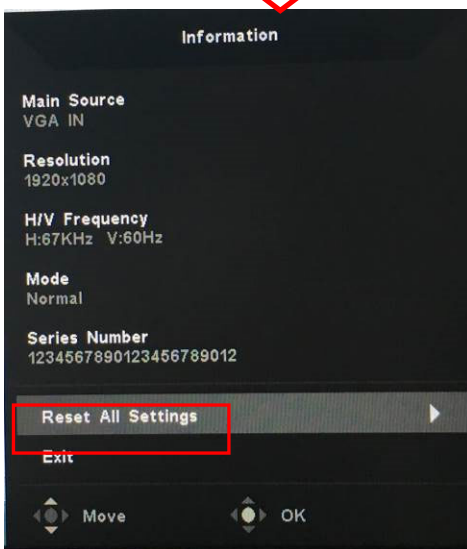
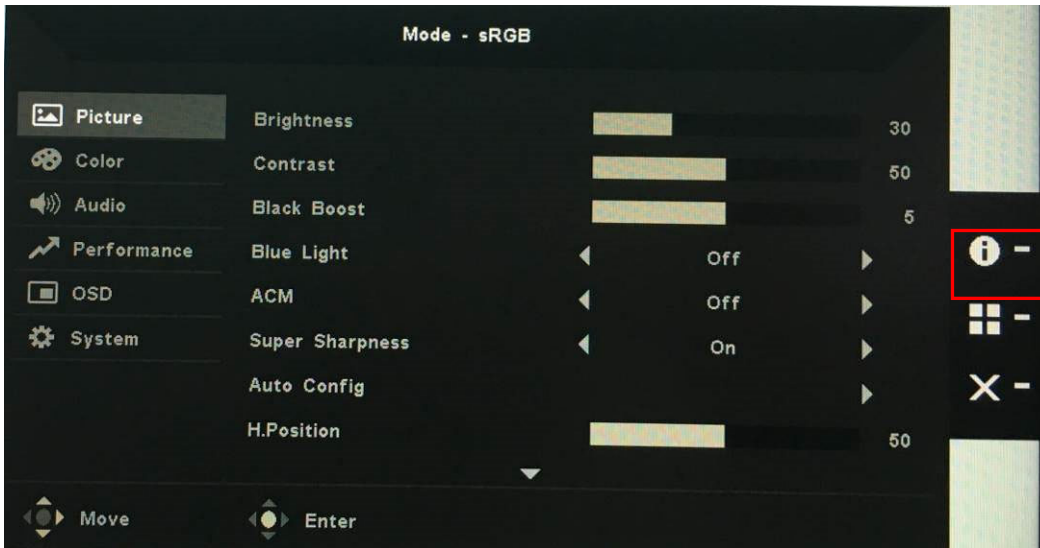
Warm      R 128 G 128 B 128
Normal    R 125 G 122 B 128
Cool      R 111 G 110 B 128
Slight    R 128 G 128 B 115
Light     R 128 G 128 B 109
Medium    R 128 G 128 B  99
Strong    R 128 G 128 B  91

DFM      :          OFF
Burn In:          OFF
NVRAM Initial
Force Logo Off OFF
HW AutoColor  FAIL
SSC  9    LVDS Current  3
Exit

```

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.

## 6. Troubleshooting.

### 6.1. 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.
- (4) Change ISP JIG or cable.
- (5) Change PC.



# 4. Writing EDID Process

## 1. Materials list



ISP JIG: 715GT089-C



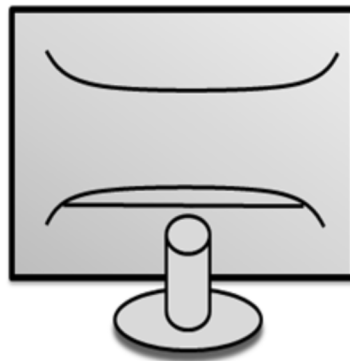
VGA CABLE  
TPV P/N: 089G728 GAA DB



USB CABLE  
TPV P/N: 089G1758 X



PC



Monitor



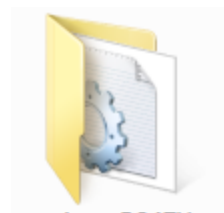
FTC100103(MSTAR) usb  
drive

USB port driver



TPVDDC\_V066\_  
20170512.exe

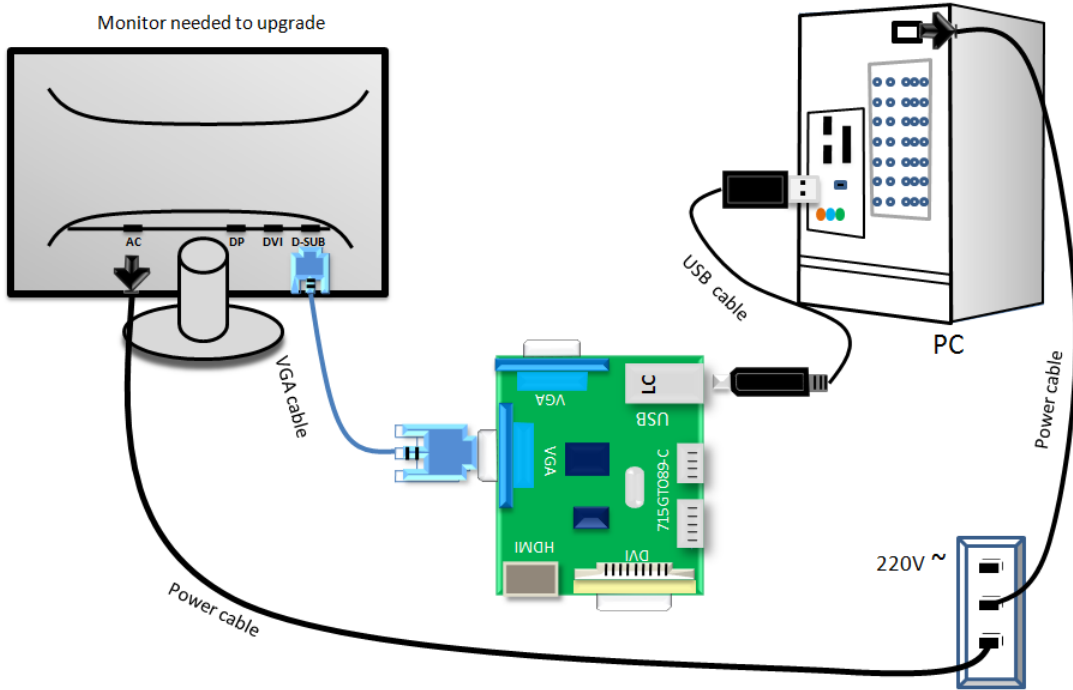
ISP tool



Acer B247Y  
EDID\_A00\_2017  
0720

EDID

## 2. Connection(DC on the monitor)



## 3. Install driver.

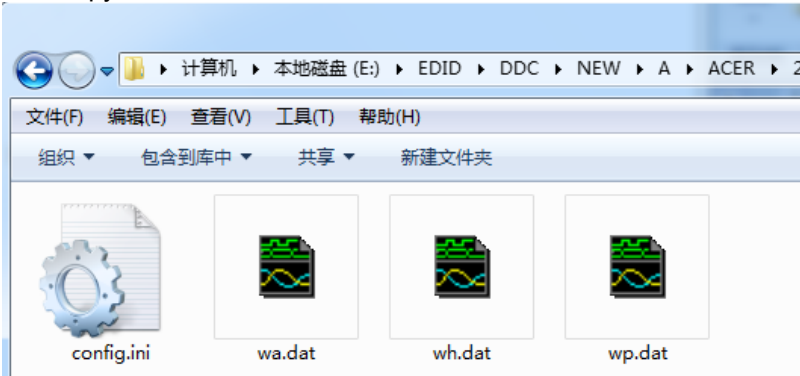
### 4. Prepare the EDID written.

4.1. Change the EDID files name as below rule.

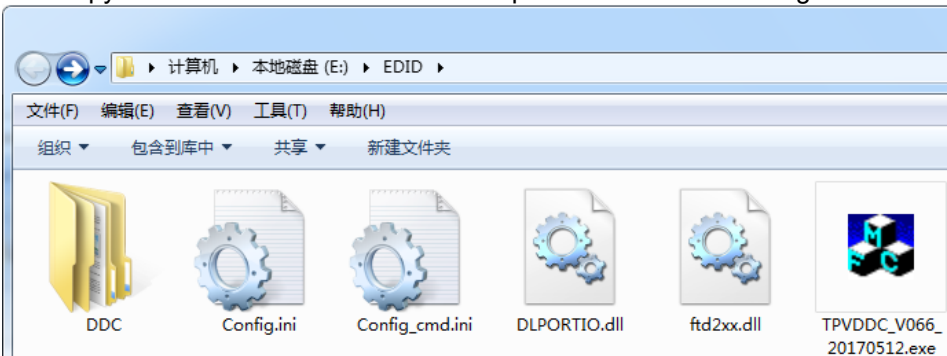
VGA EDID → WA.dat

DP EDID → WP.dat    HDMI EDID → WH.dat

4.2. Copy these files to one folder named as ACER B247Y must contains "config.ini" file.



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

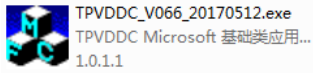


4.4 Set the config as below.

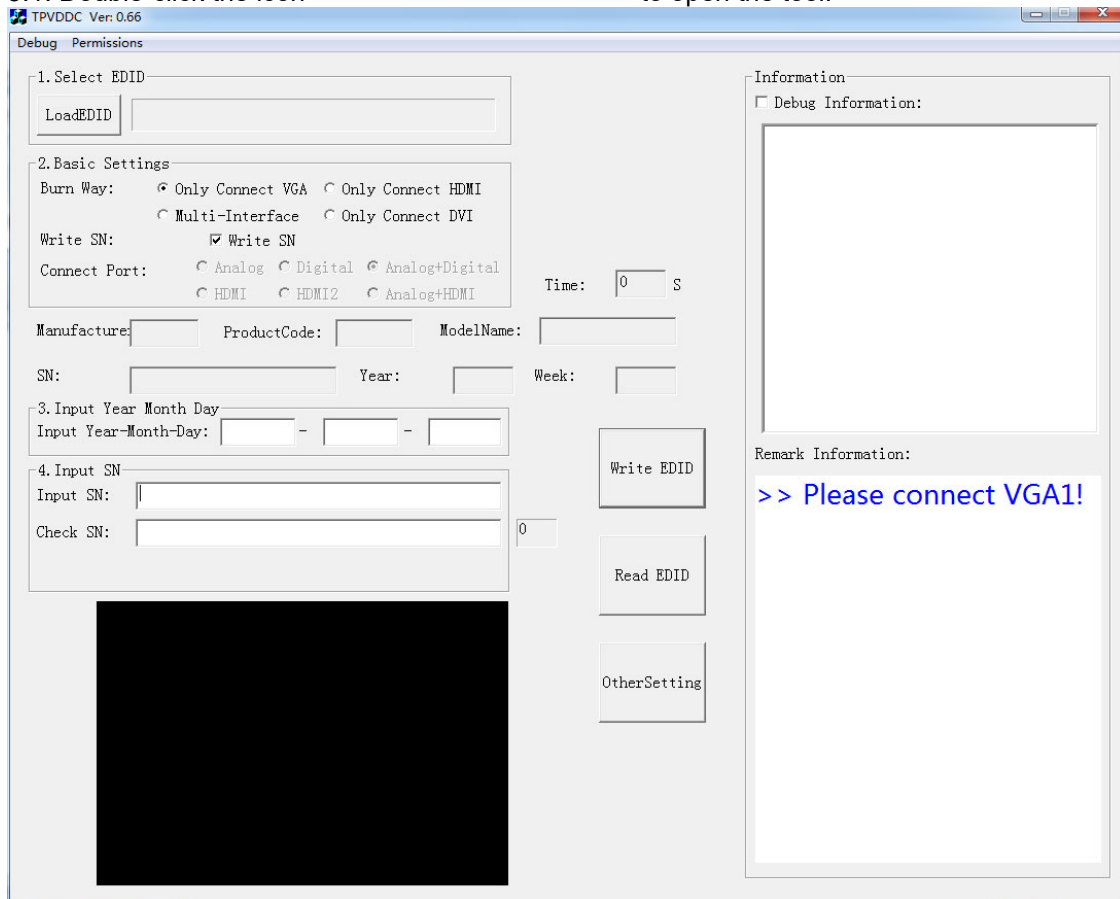
```
Config.ini - 记事本
文件(F) 编辑(E) 格式(O) 查看(V)
[TPVDDCD]g
PokavokeFlag=0
Language=1
CELL1=1
ConnectSFISFlag=0
UserID=
Board=1
[Setting]
checkYear=2016
ScanningBarcode=0
```

### 5. Run the ISP tool

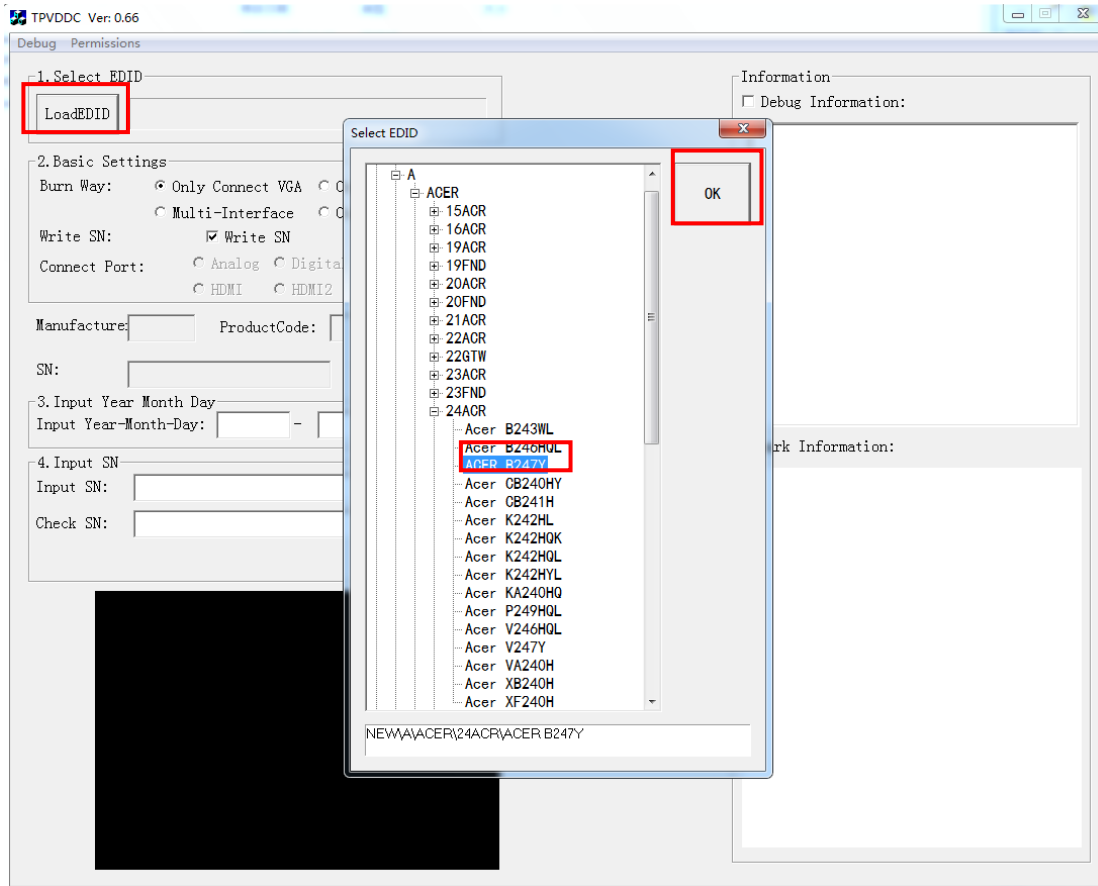
**Note:** If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.



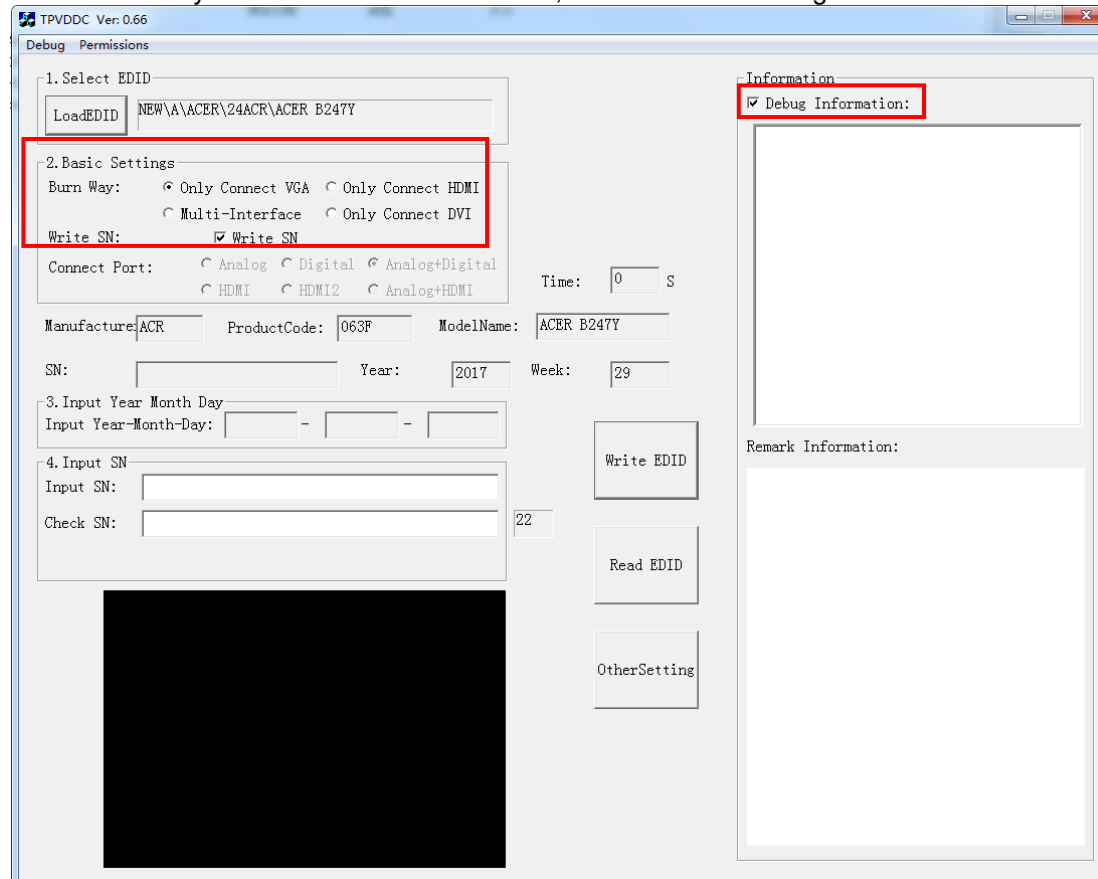
5.1. Double-click the icon to open the tool.



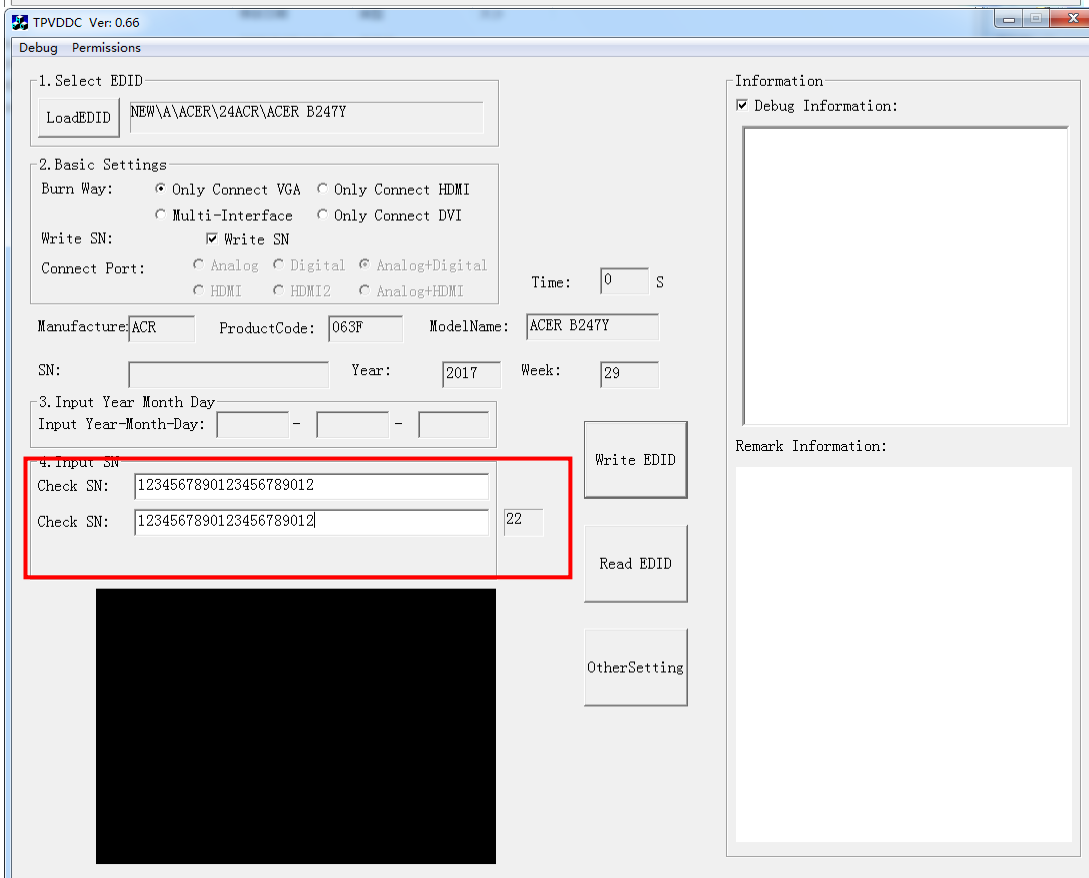
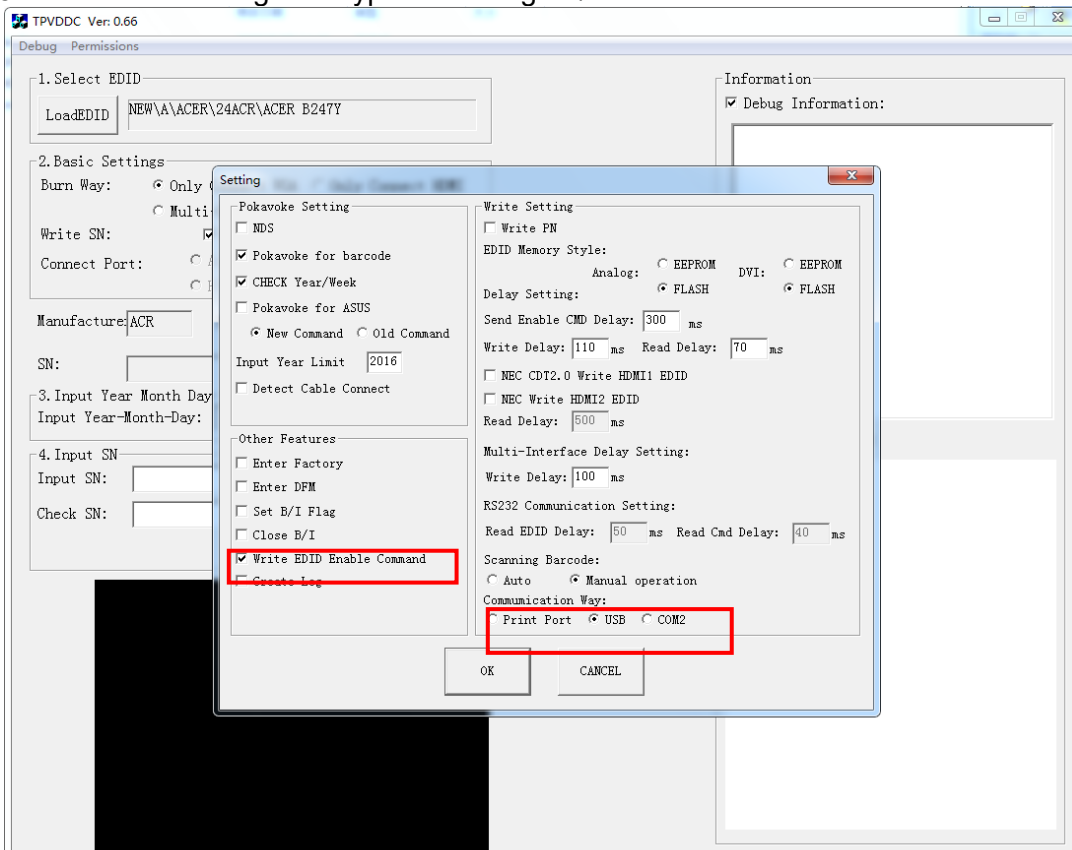
## 5.2. Select the EDID folder.



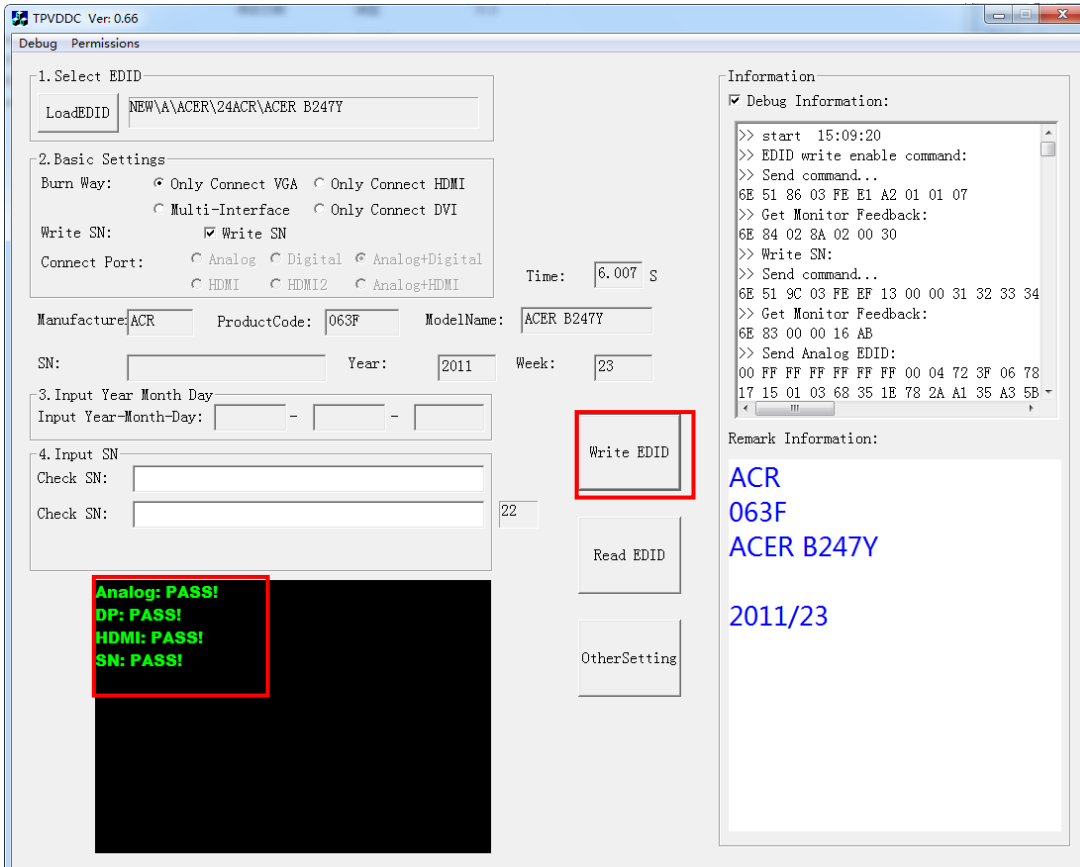
## 5.3 Tick the “Only connect VGA and “Write SN”, and then click “Debug Information”.



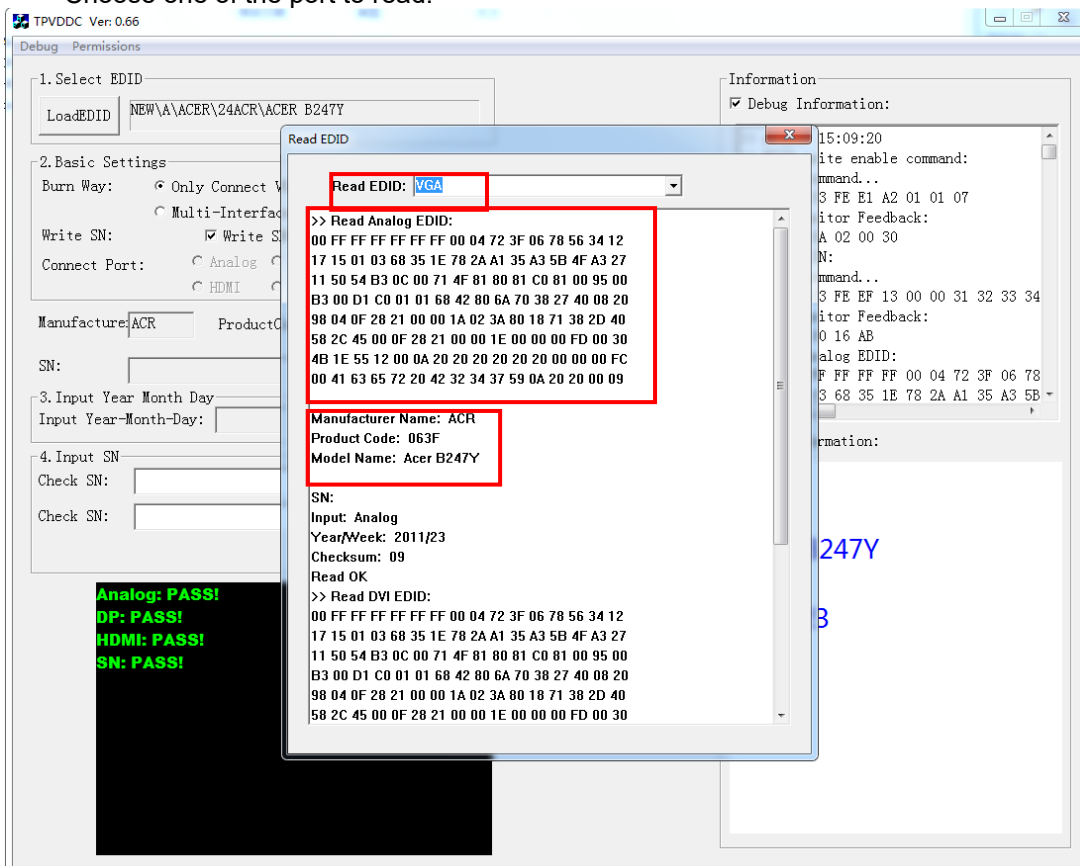
## 5.4 Set "other setting" and type the 22 digit S/N.



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



5.6 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 uually 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.


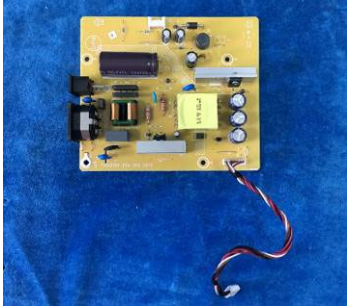



(3) Set the Burn in on last to try again.

## 5. FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER B247Y 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	756GQHCB0BA098000Q	55.TCMM2.001
	Power board	PLPCHD541KQB2	55.TCMM2.002
	KEY BOARD	KEPCLQA6	55.TCCM2.003
	LED BOARD	LEPCLQA2	55.TCCM2.004
	USB BOARD	756GQHUS0BA005000Q	55.TCMM2.003



	<p>SIDE USB BOARD</p>	<p>USBLQA6</p>	<p>55.TCMM2.004</p>
	<p>PANEL</p>	<p>750GBK238HM2B6N000</p>	<p>NA</p>
	<p>SPEAKER</p>	<p>378G0025689CLA</p>	<p>23.TCCM2.001</p>
	<p>SPEAKER</p>	<p>378G0025689CRA</p>	<p>23.TCCM2.002</p>
	<p>CABLE 30P 400MM(MB TO PANEL)</p>	<p>395G179M30B6480000</p>	<p>50.TCCM2.001</p>
	<p>CABLE 30P 180MM(USB BOARD TO SIDE USB BOARD)</p>	<p>395G176K0305170000</p>	<p>50.TCMM2.001</p>

	<p>CABLE 4P-2P+2P 500/400MM(MB TO SPEAKER)</p>	<p>395GH20004WM049000</p>	<p>50.TCCM2.002</p>
	<p>CABLE 6P 500MM(MB TO KEY BOARD)</p>	<p>395GH20006XM208000</p>	<p>50.TCCM2.003</p>
	<p>CABLE 6P 600MM(PB TO PANEL)</p>	<p>395GH20006GM209000</p>	<p>50.TCCM2.004</p>
	<p>CABLE 7P-7P 60MM(MB TO USB BOARD)</p>	<p>395GH20007XM037000</p>	<p>50.TAAM2.005</p>
	<p>D SUB CABLE 1800MM</p>	<p>089G-728GAA-2A</p>	<p>50.LZJM2.003</p>
	<p>POWER CORD 1800MM (EUROPE)</p>	<p>389G404A18NISG</p>	<p>27.T1BM2.001</p>

	<p>HDMI CABLE 1800MM</p>	<p>389G1848CAA502</p>	<p>50.T27M2.010</p>
	<p>AUDIO CABLE 1800MM</p>	<p>389G017356G53R</p>	<p>50.LXPM2.012</p>
	<p>USB CABLE 1800MM</p>	<p>089G-175M02-C</p>	<p>50.T28M2.003</p>
	<p>DP CABLE 1800MM BLACK</p>	<p>089G-187BAA500</p>	<p>50.LW7M2.002</p>
	<p>BEZEL ASSY W LOGO</p>	<p>705GQHCS034441</p>	<p>60.TCCM2.001</p>
	<p>MIDDLE FRAME</p>	<p>Q34G8552AEM01S0100</p>	<p>60.TCMM2.001</p>

	<p>REAR COVER</p>	<p>Q34G8553AEM01S0100</p>	<p>60.TCMM2.002</p>
	<p>STAND BASE ASSY</p>	<p>Q37G083720110100FH</p>	<p>60.TCMM2.003</p>
	<p>FUNCTION KEY</p>	<p>A33G2238AEM01L0100</p>	<p>60.TCCM2.007</p>
	<p>MAINFRAME</p>	<p>Q15G320110110100FJ</p>	<p>33.TCMM2.001</p>
	<p>USB SHIEKDING</p>	<p>Q85G033310110100YM</p>	<p>33.TCMM2.002</p>

## 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.

### DP/HDMI 1.4/VGA 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.