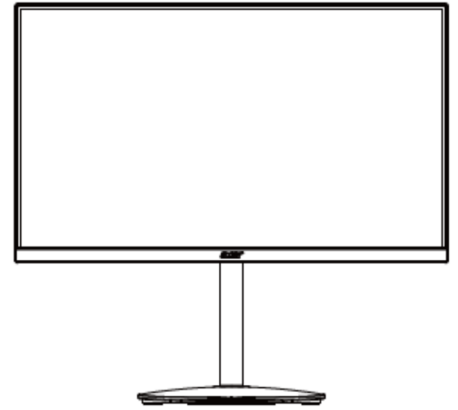


Service  
Service  
Service



Acer Monitor CB242Y

# 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.

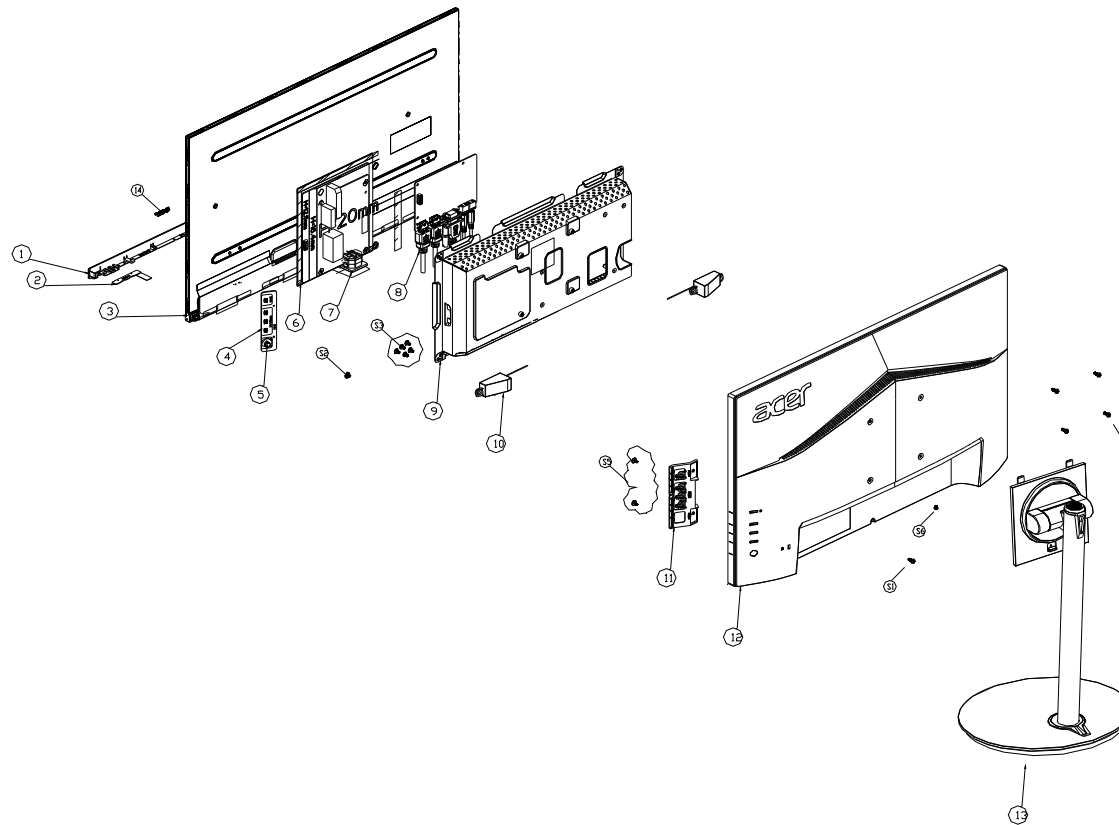
CAUTION -The use of optical instruments with this product will increase eye hazard.

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.)<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	750GBV2381L4L1N000	KL.23806.003
4	KEY BOARD	KEPCLQA6	55.TCCM2.003
7	ADAPTER BOARD	PLPCHI541TCB5	NA
8	MAIN BOARD	CBPRLW5C0Q9	NA
	FFC CABLE 30P-30P 450MM(MB TO PANEL)	395G179M30B8370000	50.TCMM2.004

## **2. Mechanical Instruction**

### **Tools Required**

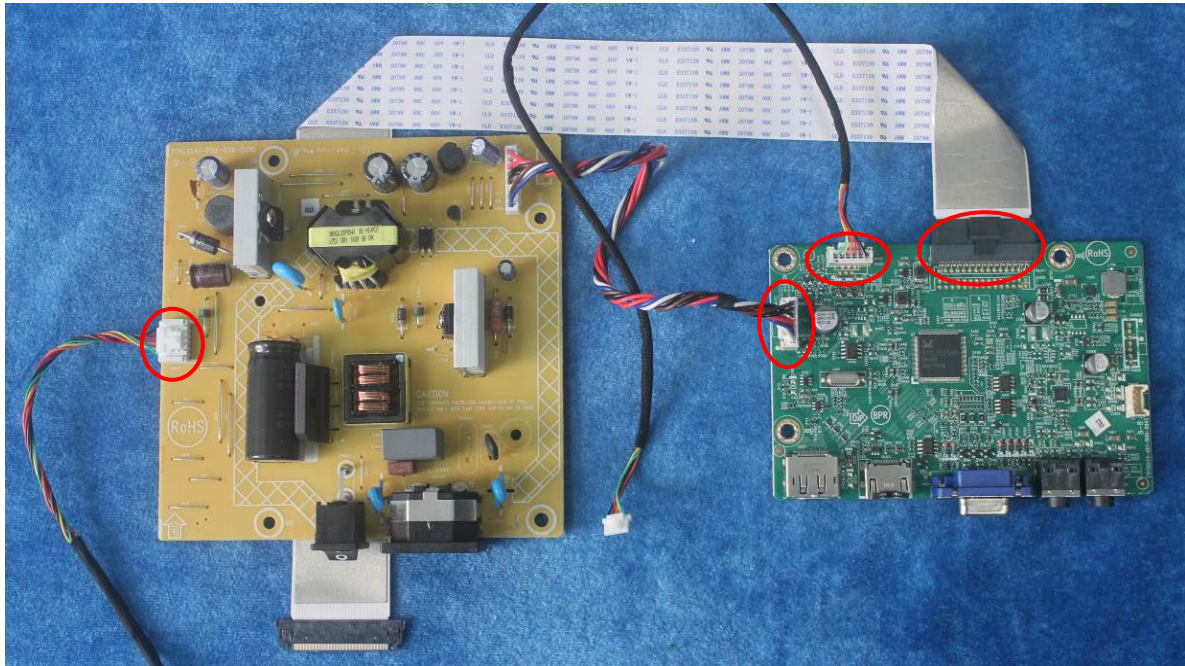
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

Tool Description:

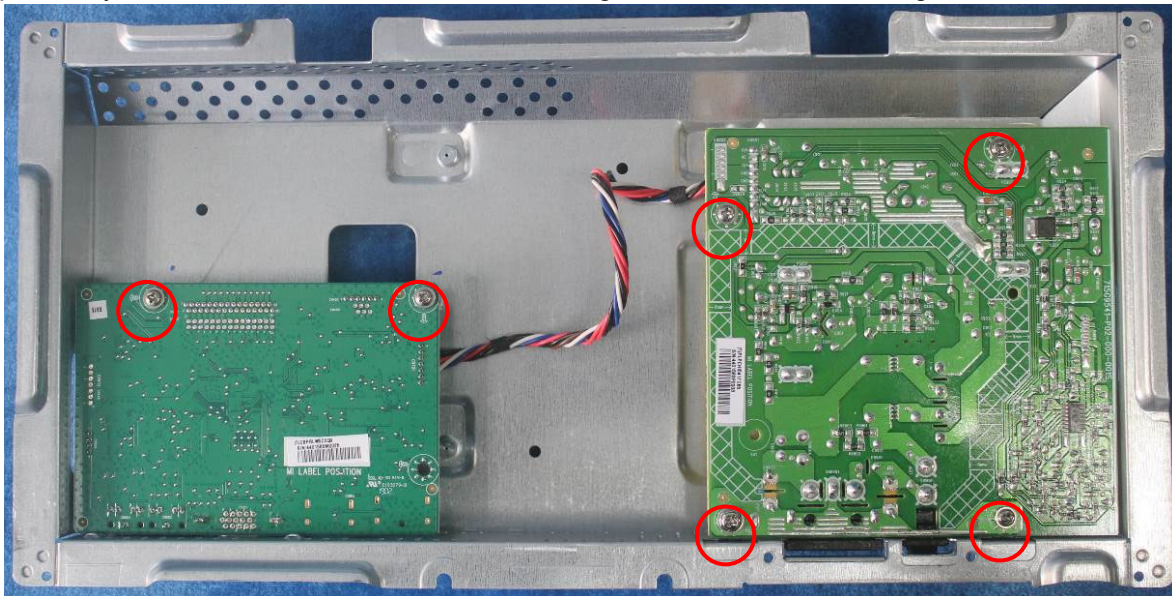
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

## 2.1 Disassembly Procedures:

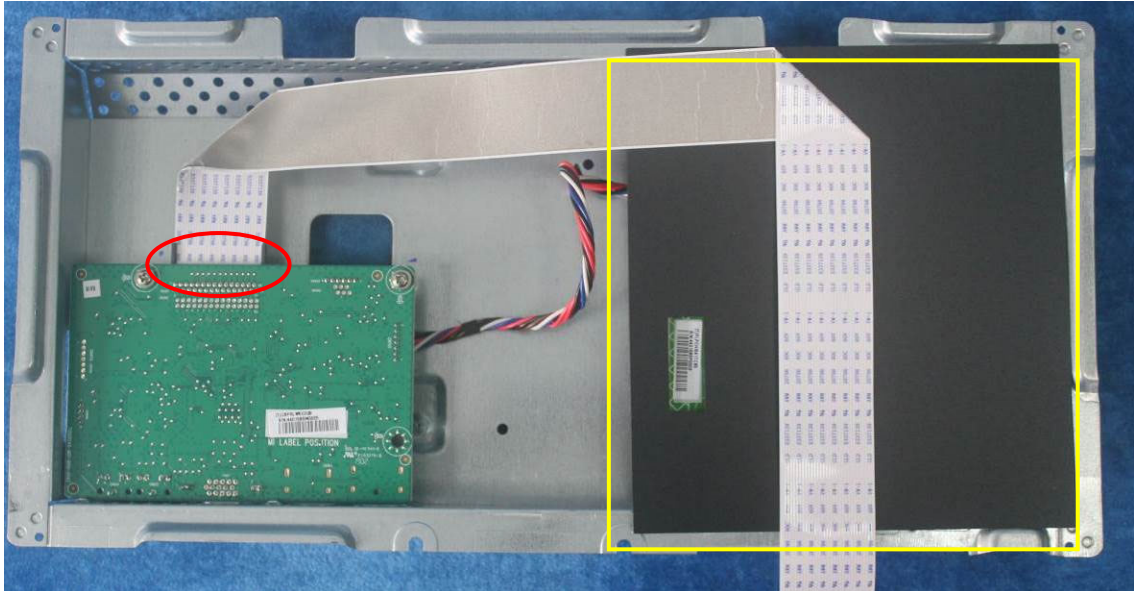
S1 Prepare a main board, a power board and some essential cables. Connect every cable as the below picture.



S2 Use a screwdriver to tighten the screws till the power board and main board with shield are firmly attached. Tape the Mylar. And use a Hex-head screwdriver to tighten the screws for locking the connector.







S3

Assemble the DECO bezel, the LED board and the panel.



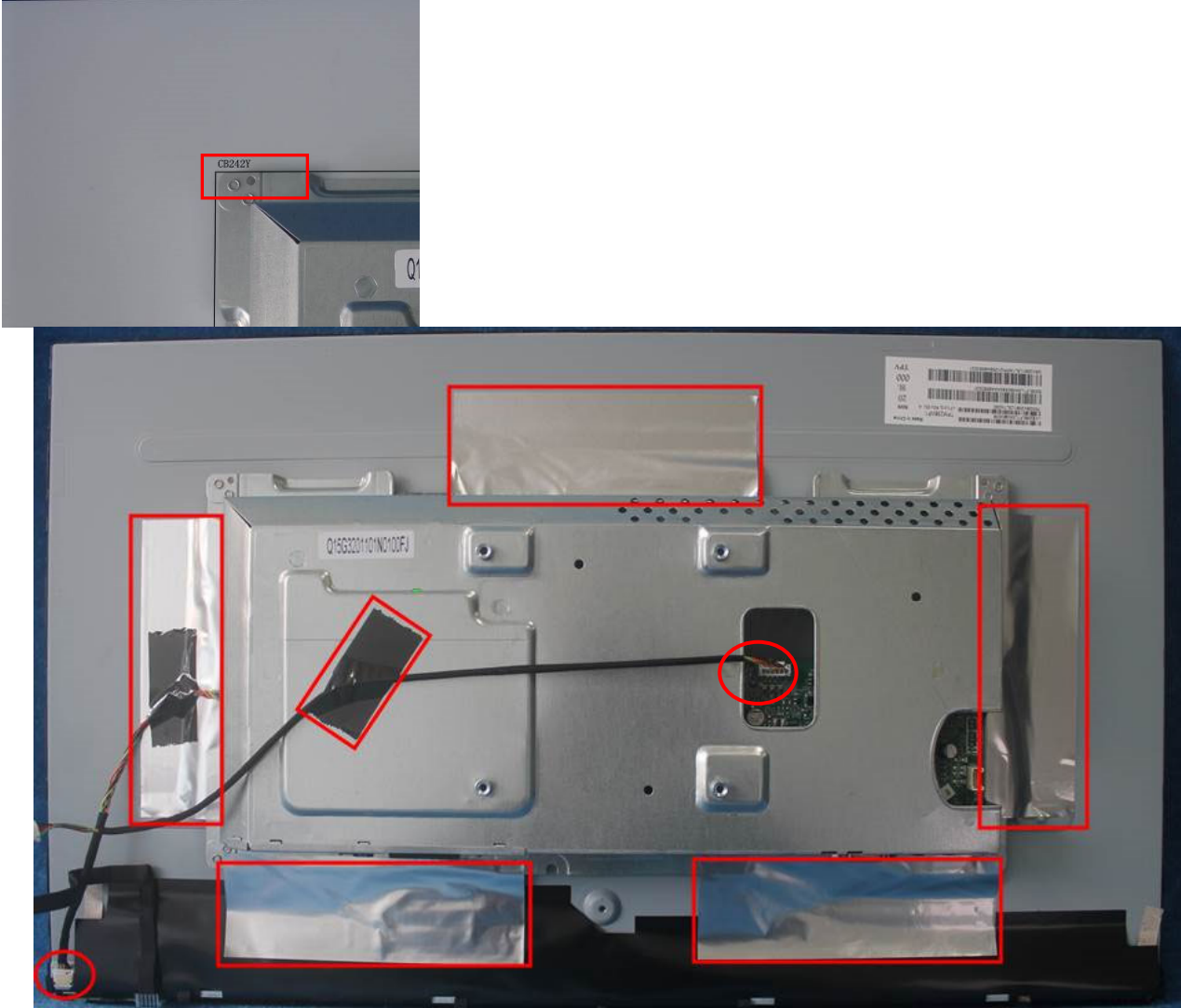


S4 Connect the cable (mainboard to panel.)



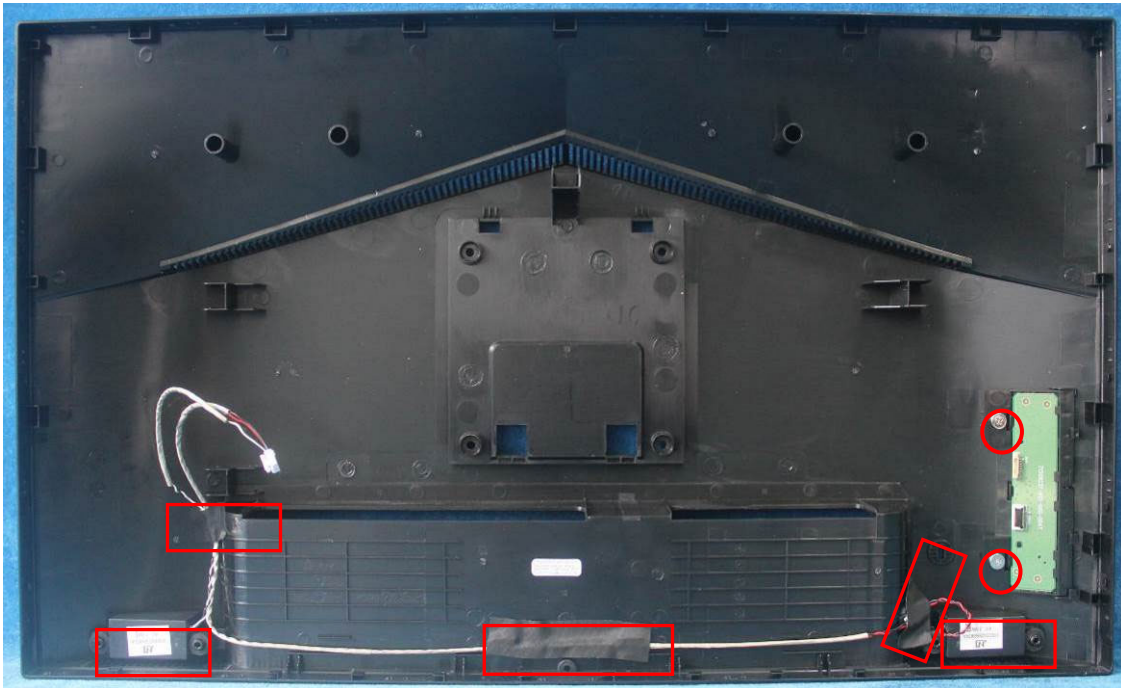


- S5 Put the Mylar slice (Note: refer to last page) marked the information of mainframe position on the panel. Mylar slice edge must be against the bezel. Put the mainframe along the mark. Holding the mainframe while you are removing the Mylar and pasting the tapes. Connector the pin (power board to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

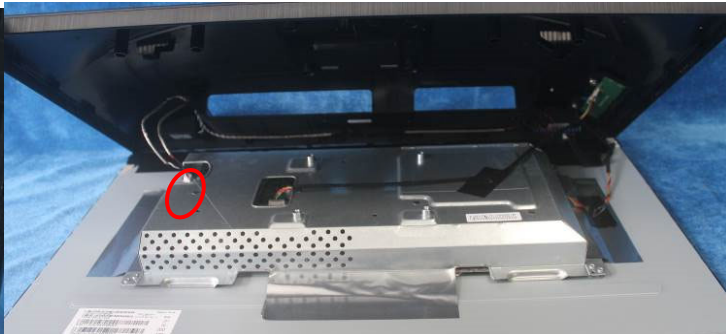
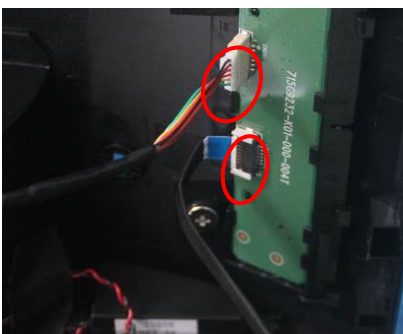


- S6 Prepare a rear cover, a key board and use the screws to lock the key board. Assemble the speakers.





- S7 Connect the pin (LED board / Key board) and the pin (Key board to mainboard), connect the speakers. 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 screws on rear cover.

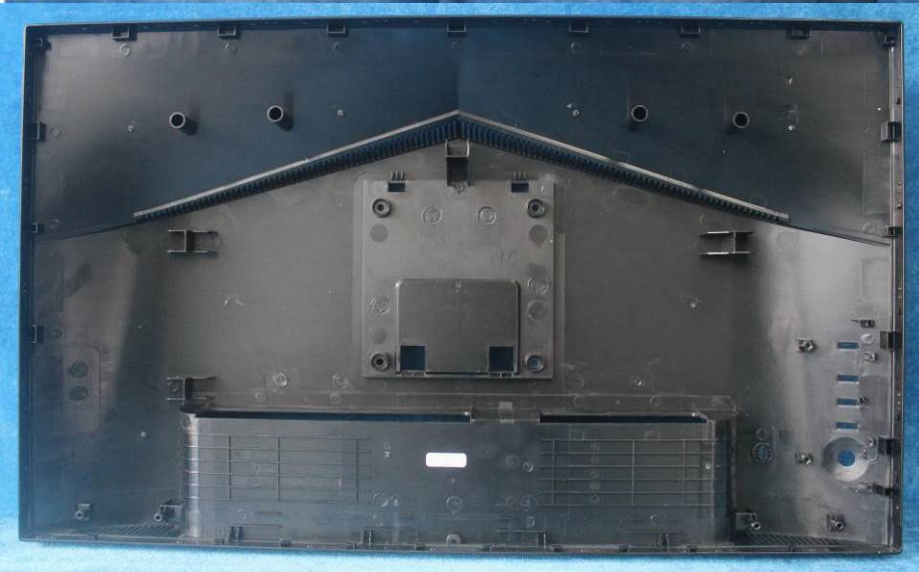
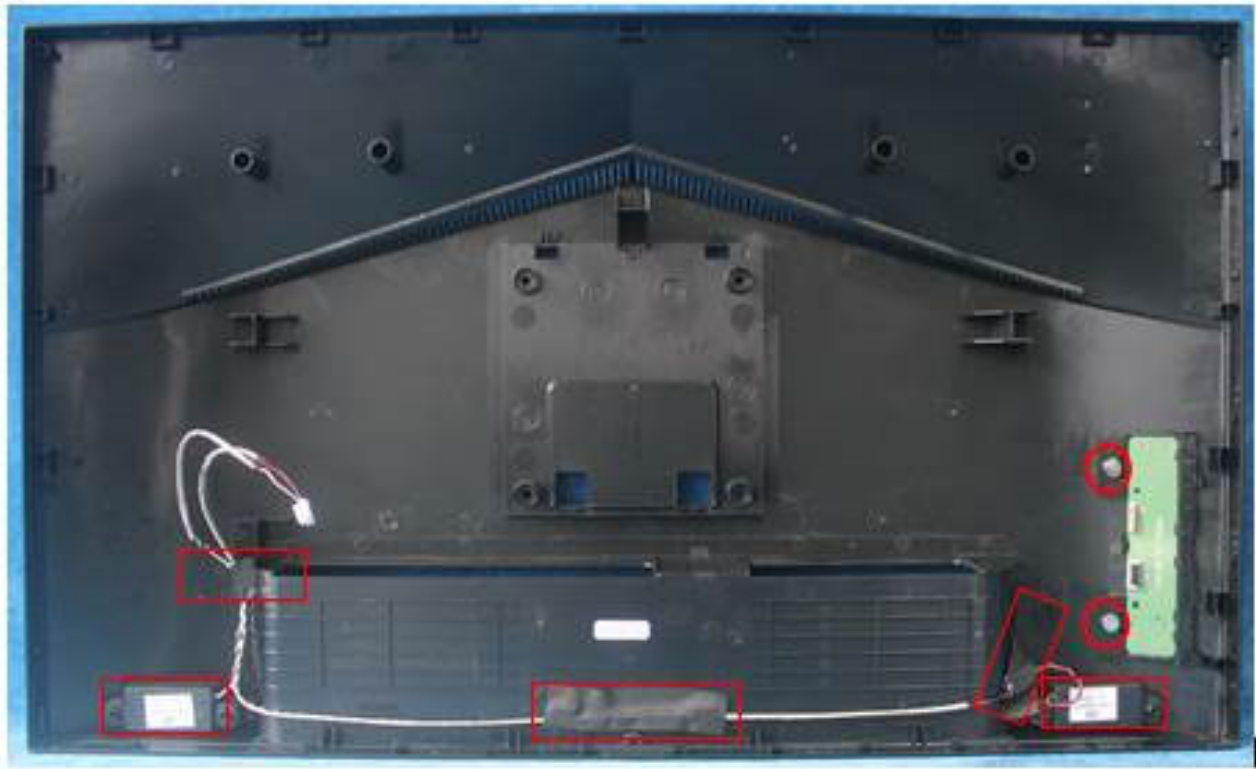


S2. Remove the rear cover. Use a tool (like picture using) to open all latches. (Be careful the position of the key board.)



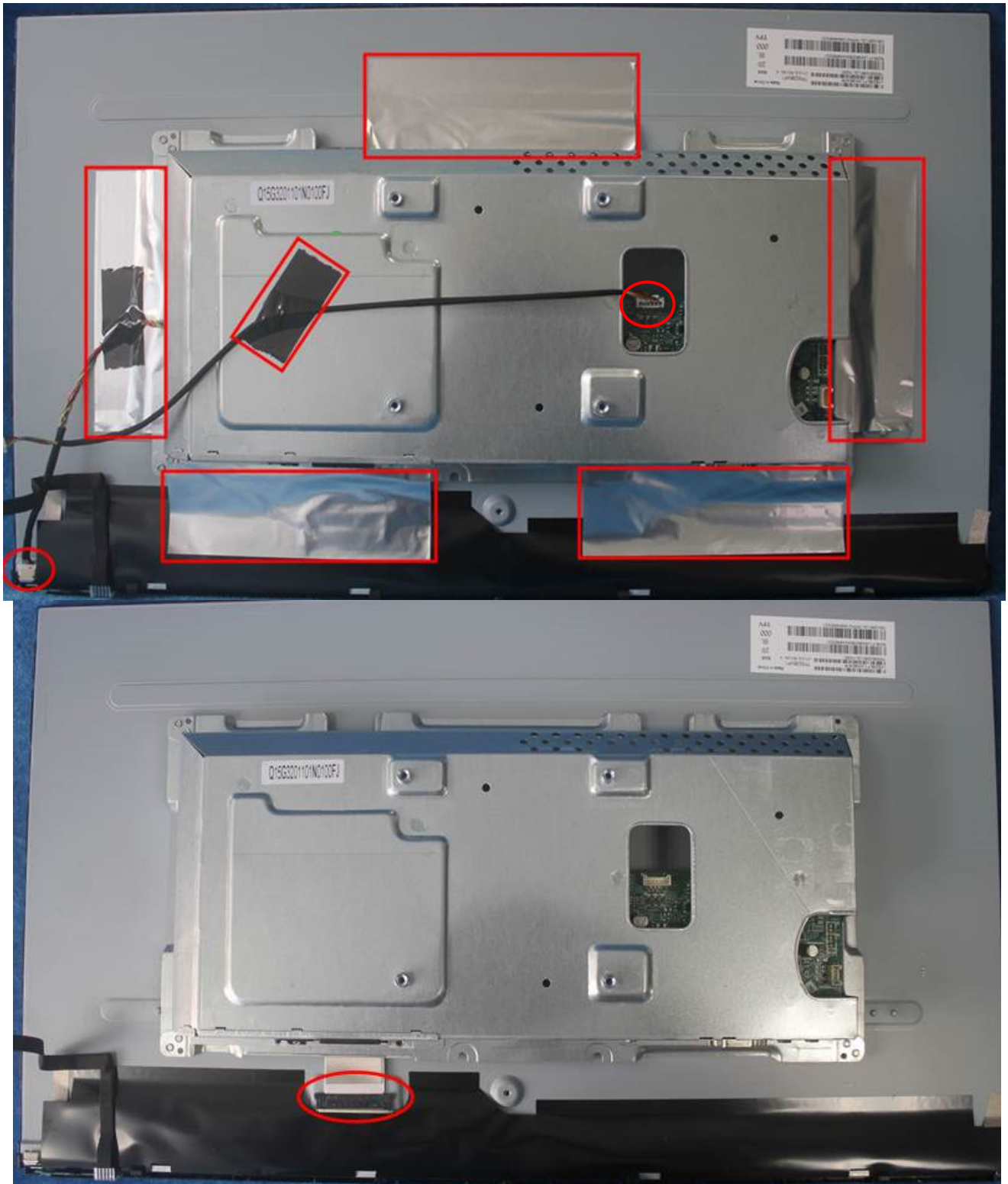
S3. Disconnect the cables (main board to Key board / LED board to Key board) and remove the screws to remove the key board from the rear cover. Disconnect the pins to remove the speakers.







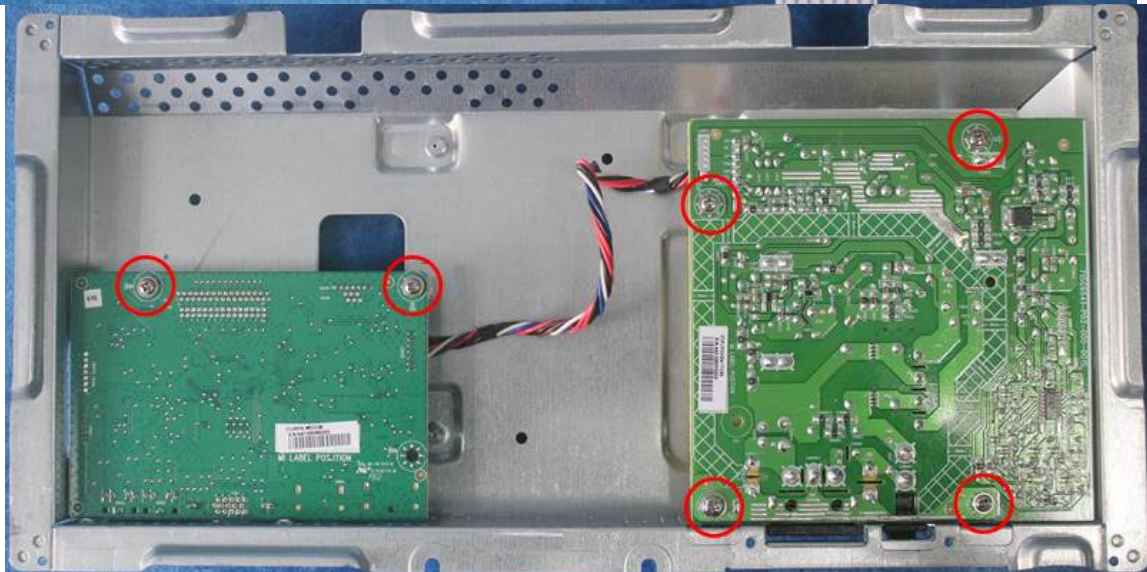
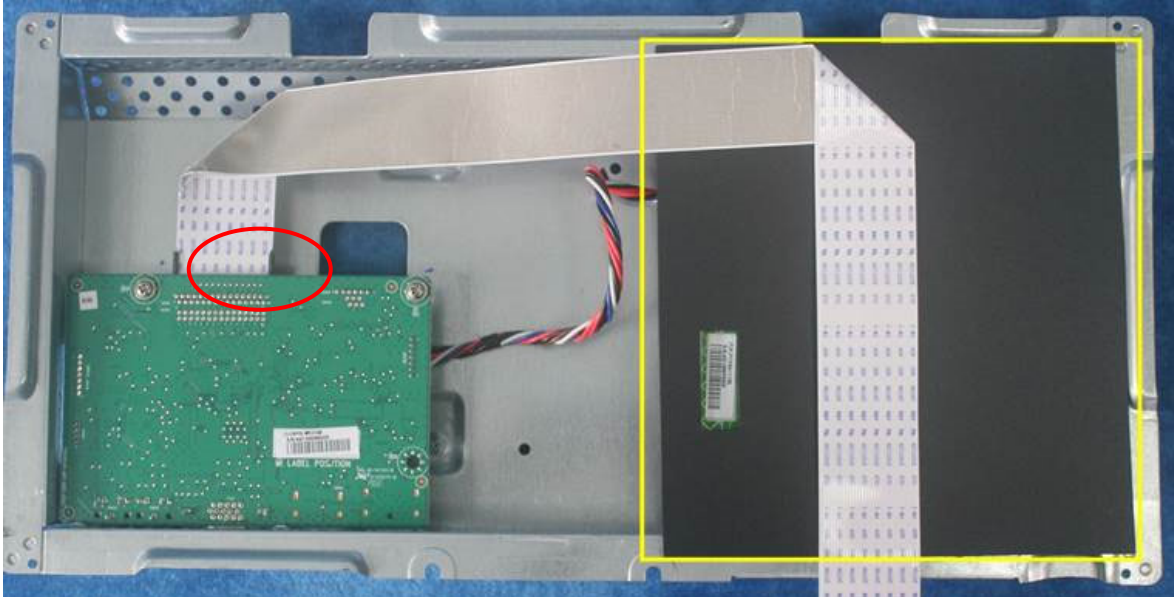
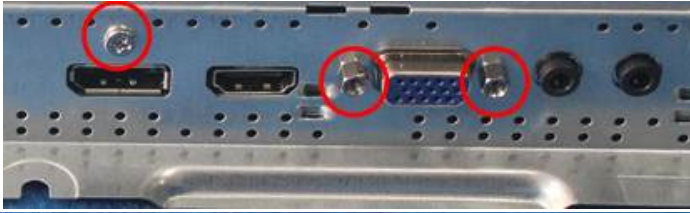
S4. Tear up all tapes and disconnect the cables (main board to panel), the cable (power board to panel). Unscrew the screw.



S5. Separate the panel, the DECO BEZEL and the LED board.



S6. Unscrew the screw of the main board, remove the mylar. Then unscrew the screws of the power board and main board to remove them from mainframe.







3. Firmware Upgrade Process

1. Materials



ISP JIG: 715GT089-C

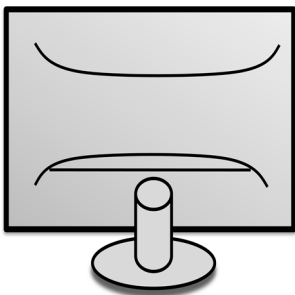


VGA cable

TPV P/N: 389G0728GAADBR



PC

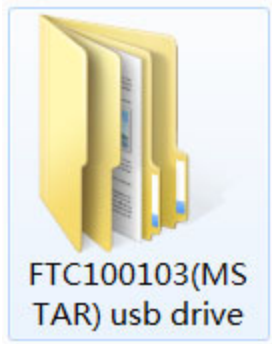


Monitor



USB cable

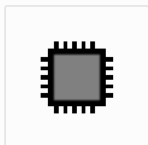
TPV P/N: 389G017508R1CG



USB port driver



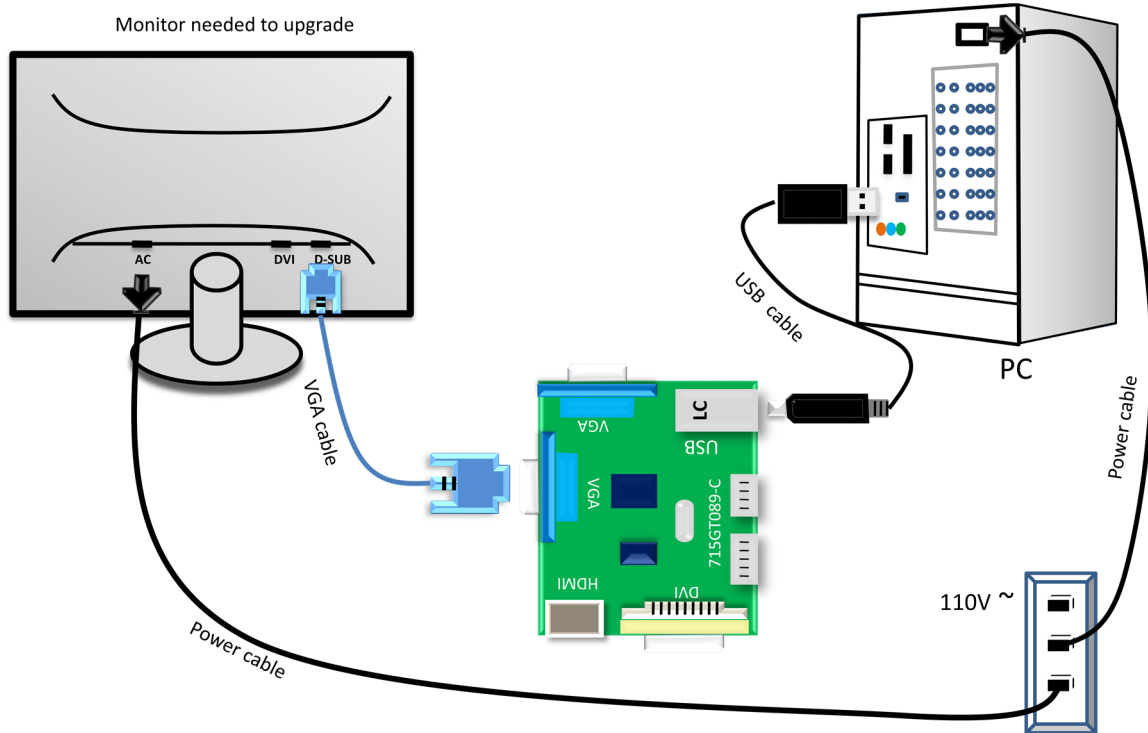
ISP tool:



Acer\_CB242Y\_A  
HDP\_VSL\_RTD2  
525AR\_TPM238  
WF1\_LF1L0\_2...

New F/W

## 2.Connection

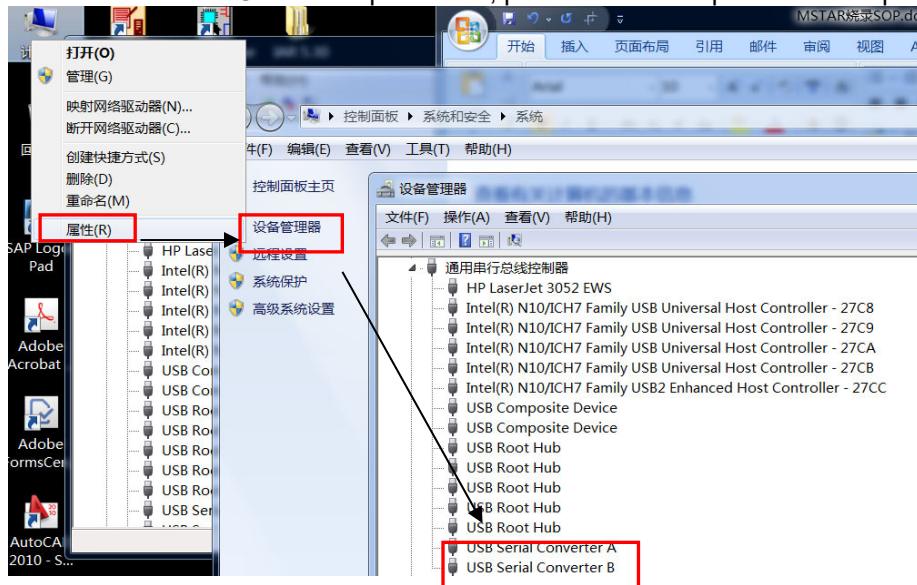


## 3.Install USB driver.

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.

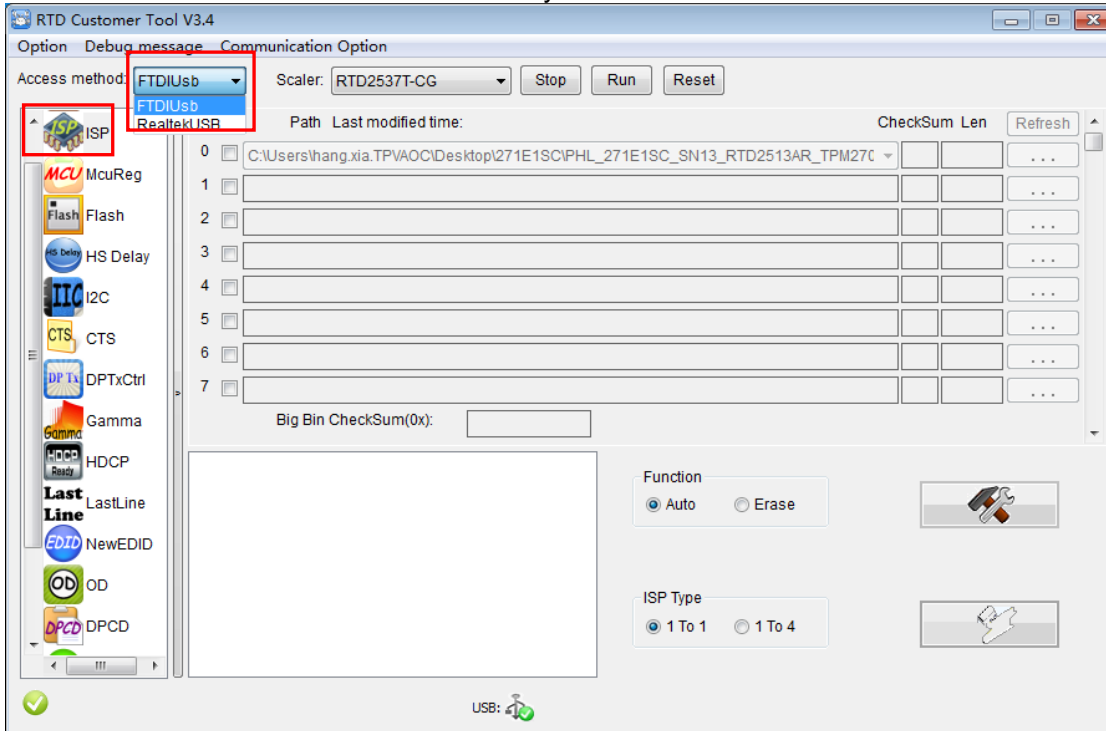
**Note:** If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the EDID writing tool before running the F/W Upgrade tool.



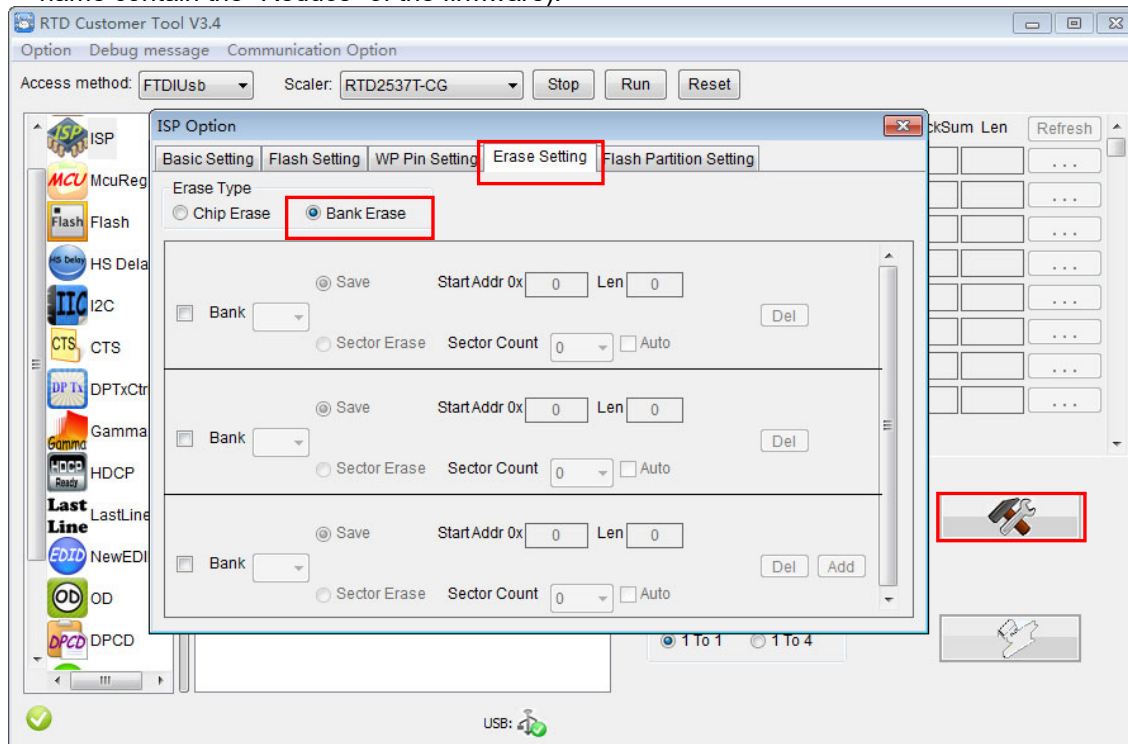
4.1. **RTDTool.exe** double-clicks the icon to run it.

**Note:** Must to install driver firstly

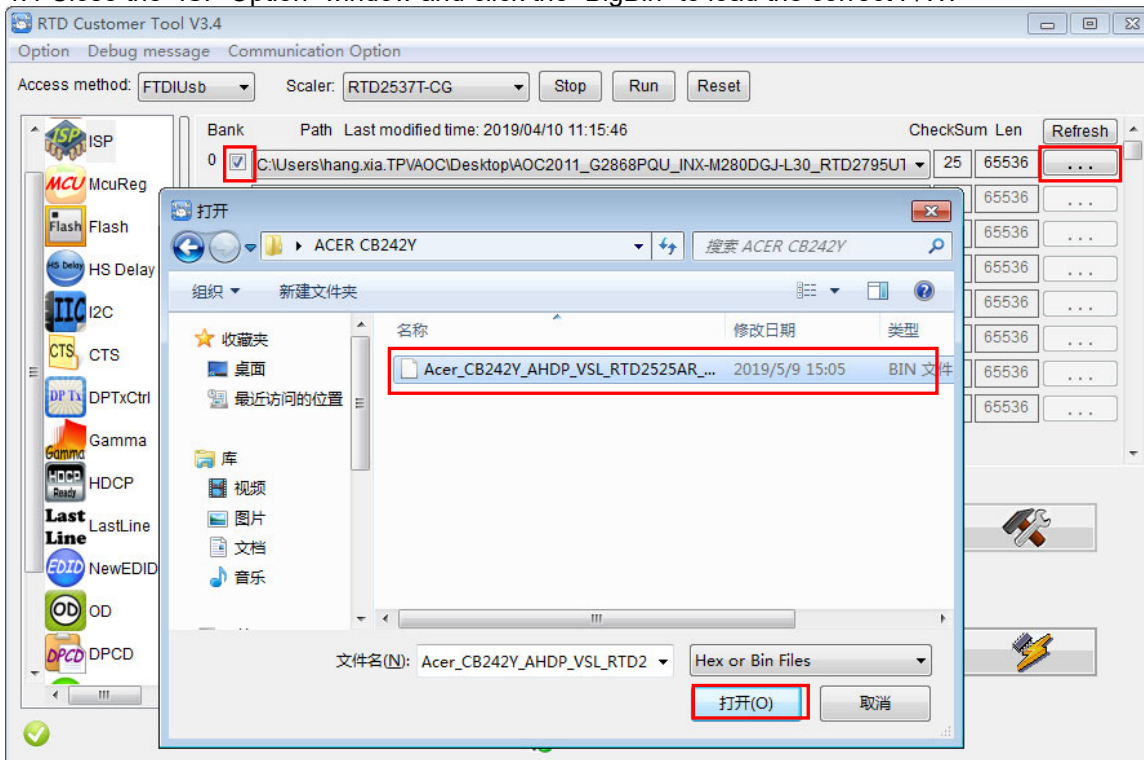
4.2. Choose the FTDIUSB communication way.



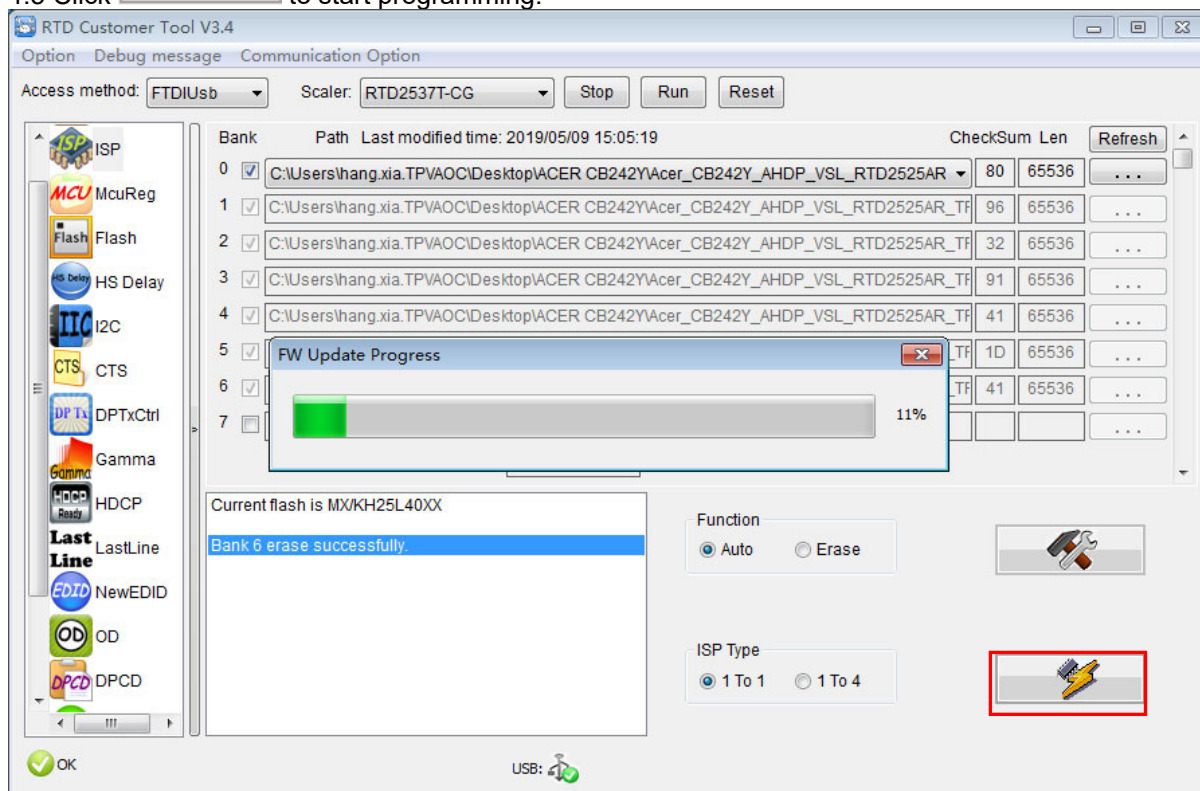
4.3 Click “ISP” and “ISP Option” to set as below. (In order to prevent HDCP KEY data loss, please must load the file name contain the “Reduce” of the firmware).



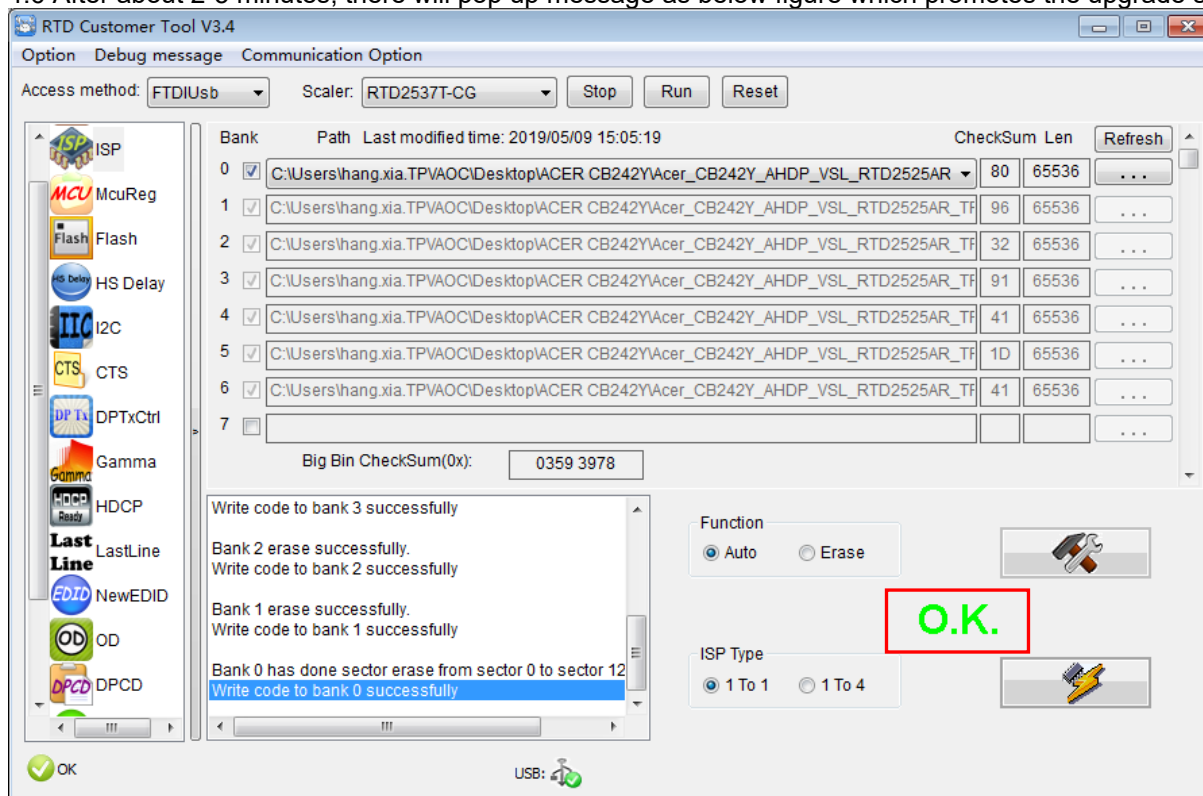
4.4 Close the “ISP Option” window and click the “BigBin” to load the correct F/W.



4.5 Click  to start programming.



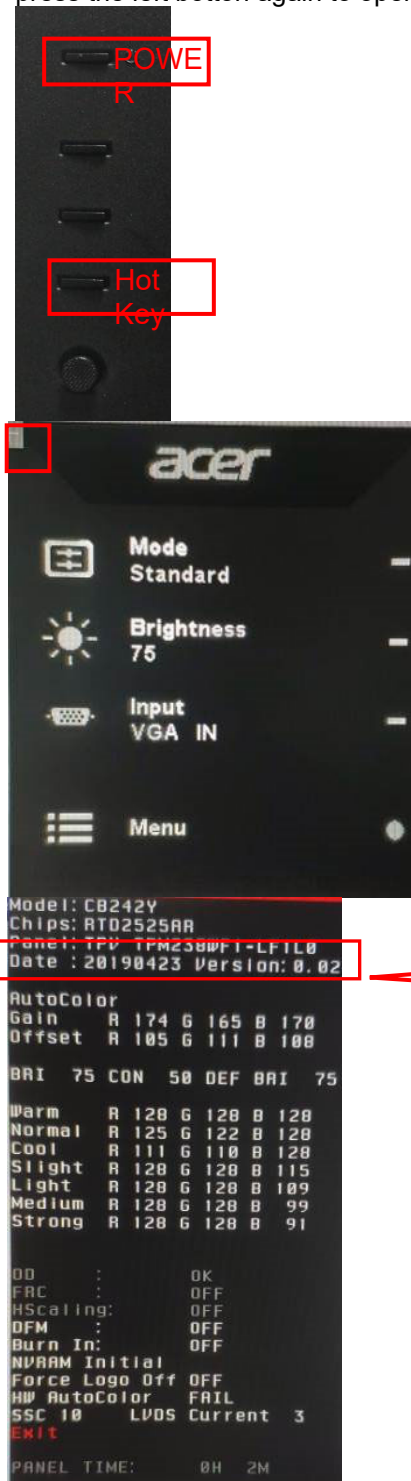
4.6 After about 2-5 minutes, there will pop up message as below figure which promotes the upgrade successful.



## 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: Pressing the hot key button and DC on, when the screen lights, release the key and press the left button again to open the menu with "F" and select "F" to open factory menu.



Check this F/W version.

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

```

Model: CB242V
Chips: RTD2525AA
Panel: TPV TPM230WF1-LFIL0
Date : 20190423 Version: 0.02

AutoColor PASS
Gain R 54 G 42 B 55
Offset R 206 G 228 B 202

BRI 75 CON 50 DEF BRI 75

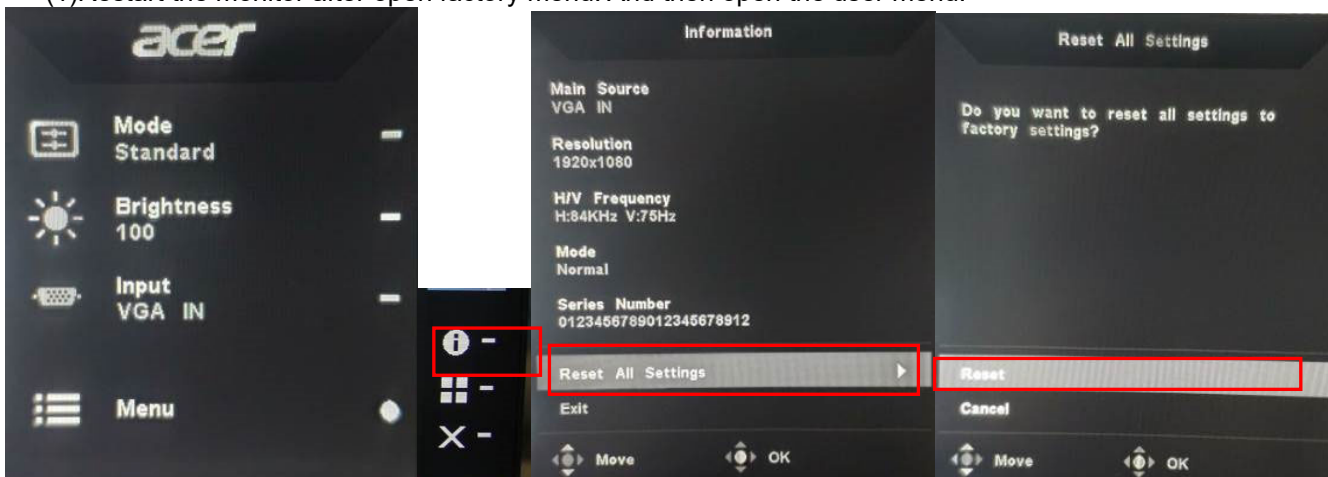
Warm R 128 G 128 B 128
Normal R 125 G 122 B 128
Cool R 111 G 110 B 128
Slight R 128 G 128 B 115
Light R 128 G 128 B 109
Medium R 128 G 128 B 99
Strong R 128 G 128 B 91

OD : OK
FRC : OFF
HScaling: OFF
OFM : OFF
Burn In: OFF
NVRAM Initial
Force Logo Off OFF
HW AutoColor FAIL
SSC 10 LVDS Current 3
Exit

PANEL TIME: 0H 4M
  
```

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:

```

Model: CB242V
Chips: RTD2525AA
Panel: TPV TPM230WF1-LFIL0
Date : 20190423 Version: 0.02

AutoColor
Gain R 174 G 165 B 170
Offset R 105 G 111 B 108

BRI 75 CON 50 DEF BRI 75

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

OD : OK
FRC : OFF
HScaling: OFF
OFM : OFF
Burn In: OFF
NVRAM Initial
Force Logo Off OFF
HW AutoColor FAIL
SSC 10 LVDS Current 3
Exit

PANEL TIME: 0H 2M
  
```

Set the burn in to “OFF”



## 4. Writing EDID Process

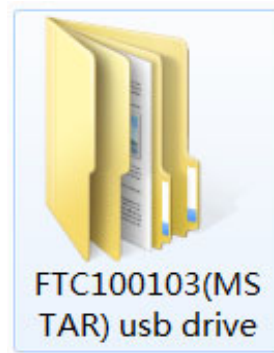
### 1. Materials list



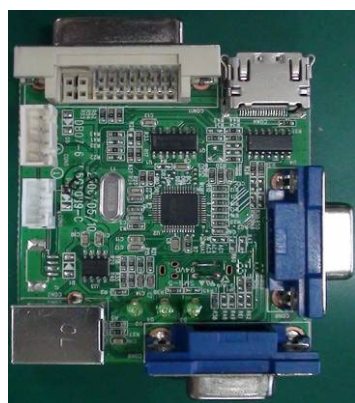
VGA cable  
TPV P/N: 389G0728GAADBR



USB cable  
TPV P/N: 389G017508R1CG



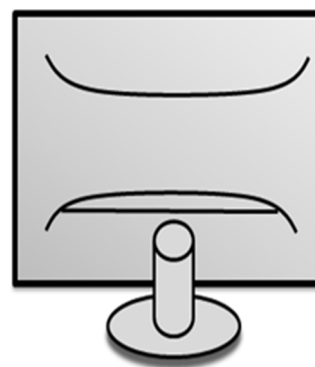
USB port driver



ISP JIG: 715GT089-B



PC

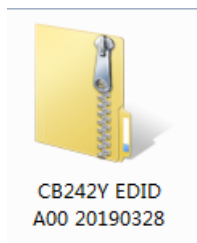


Monitor



TPVDDC\_V066\_  
20170512.exe

ISP tool

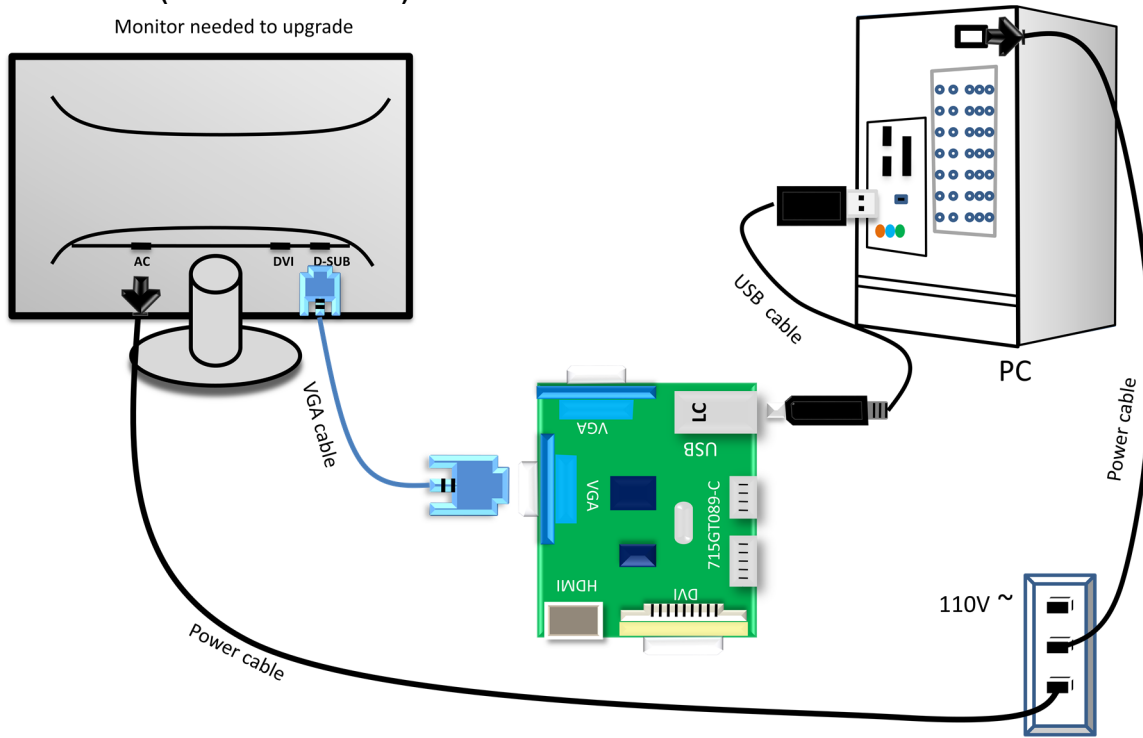


EDID



## 2. Connection(DC on the monitor)

Monitor needed to upgrade



## 3. Install USB driver.

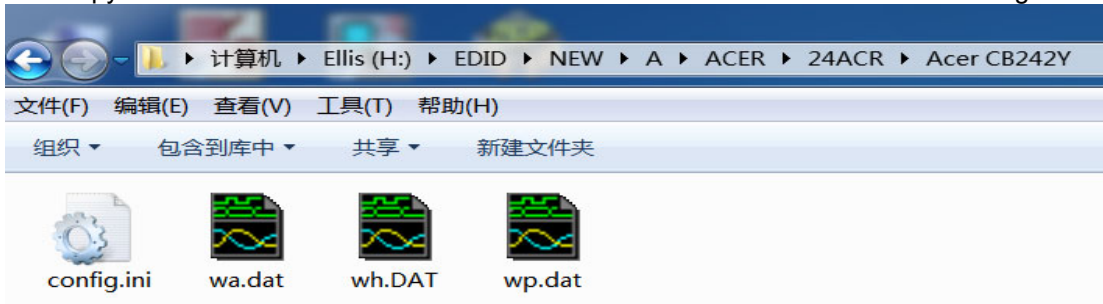
### 4. Prepare the EDID written.

4.1. Change the EDID files name as below rule.

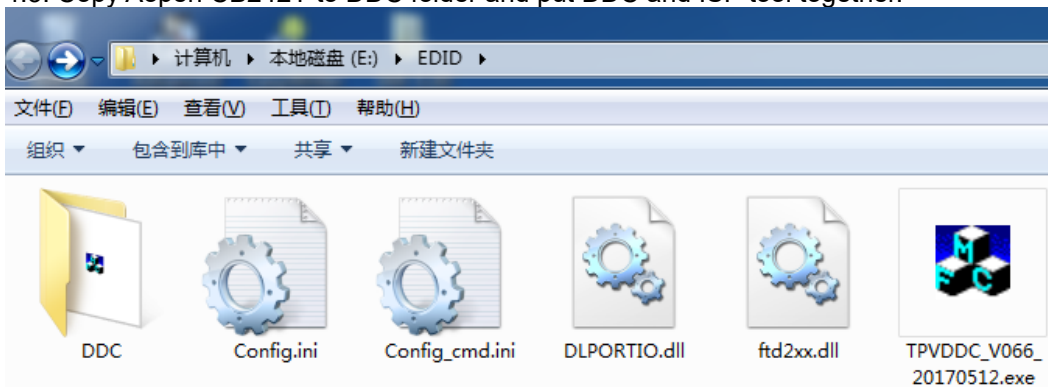
DP EDID → WP.dat

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

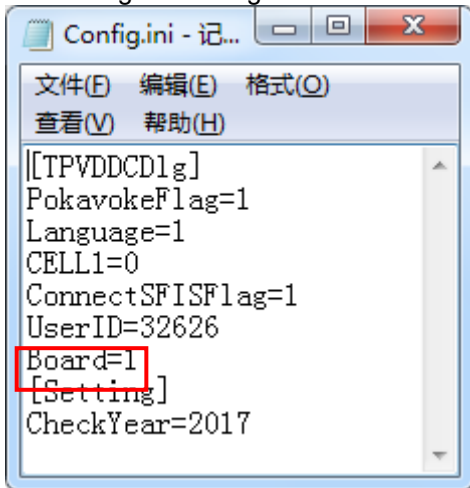
4.2. Copy these files to one folder named as Acer CB242Y which must contains "config.ini" file.



4.3. Copy Aopen CB242Y to DDC folder and put DDC and ISP tool together.

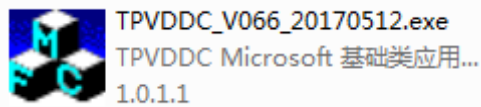


#### 4.4 Setting the Config as below.



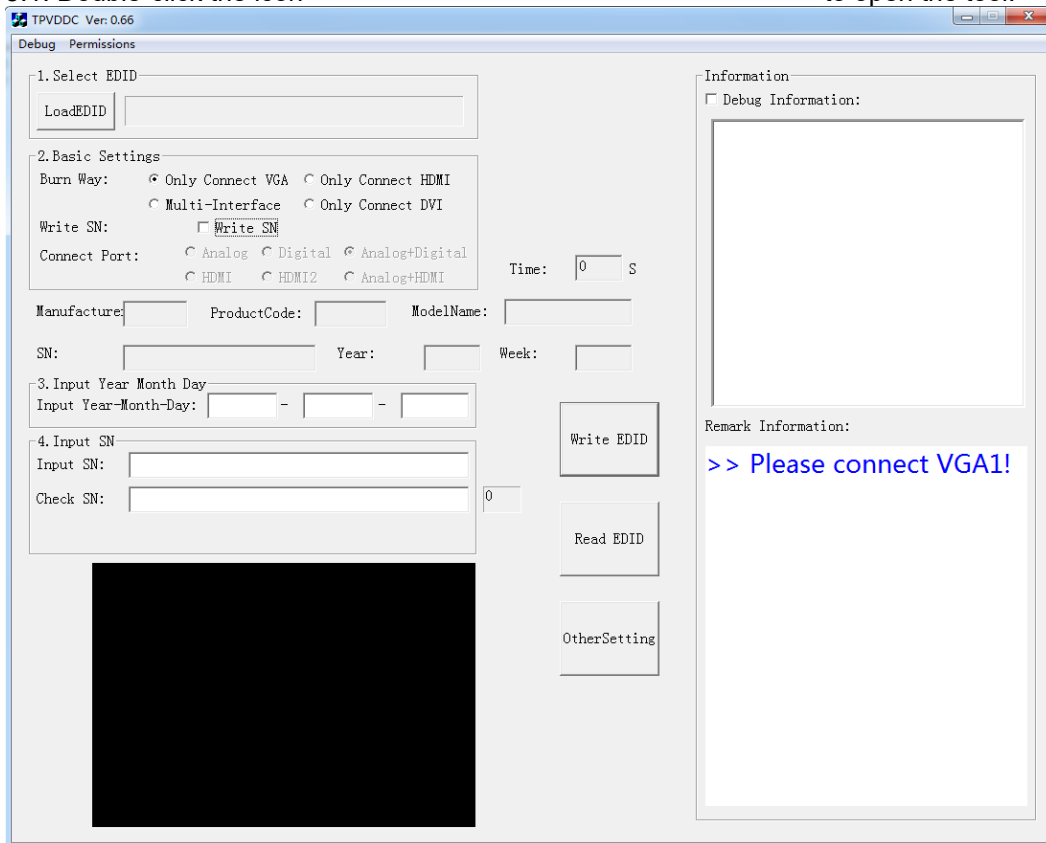
#### 5. Run the ISP tool

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.

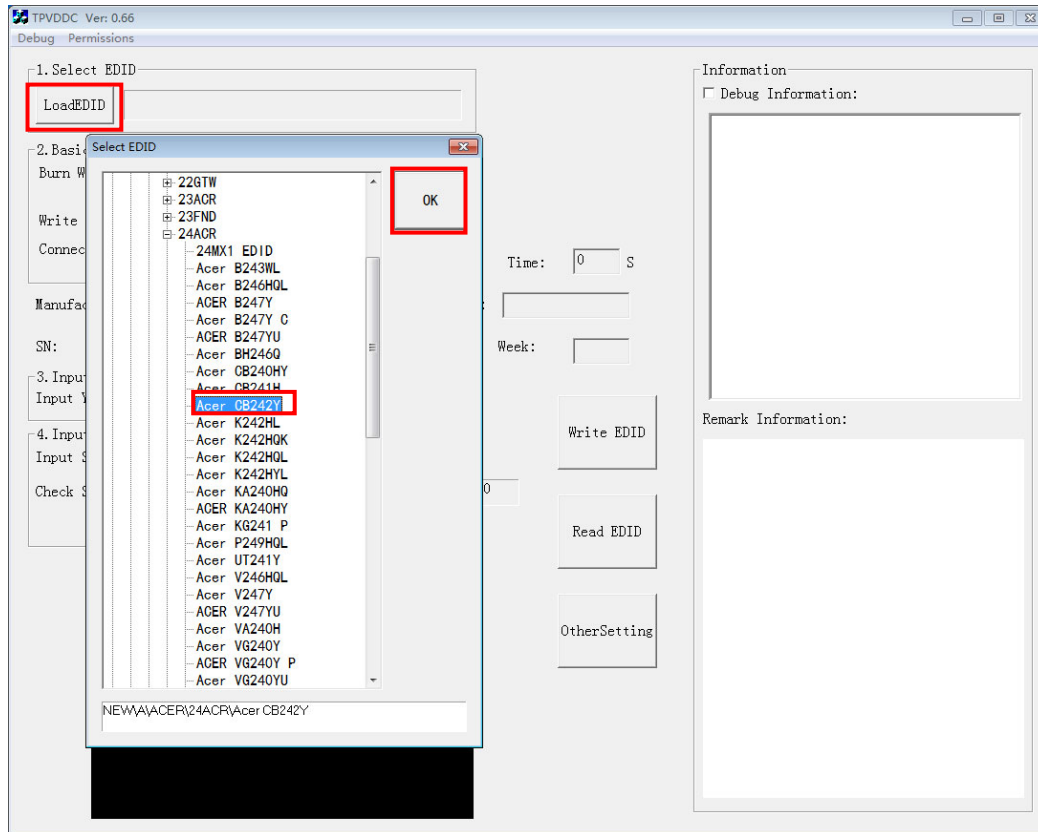


##### 5.1. Double-click the icon

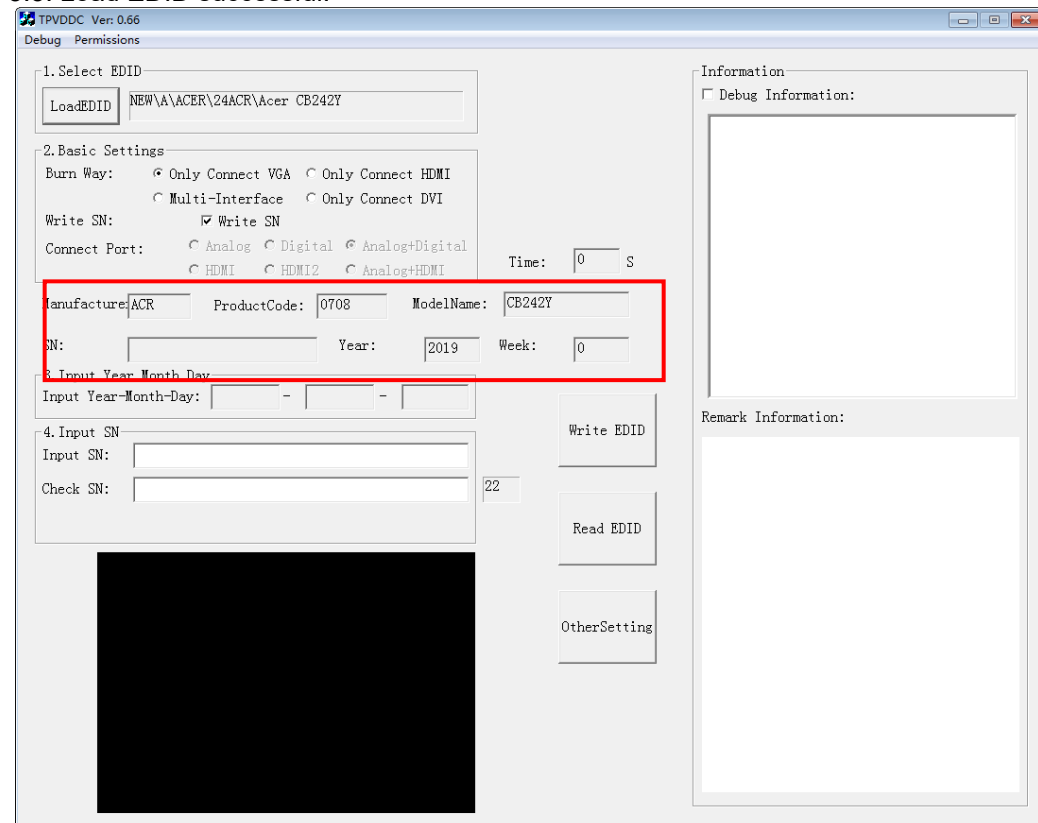
to open the tool.



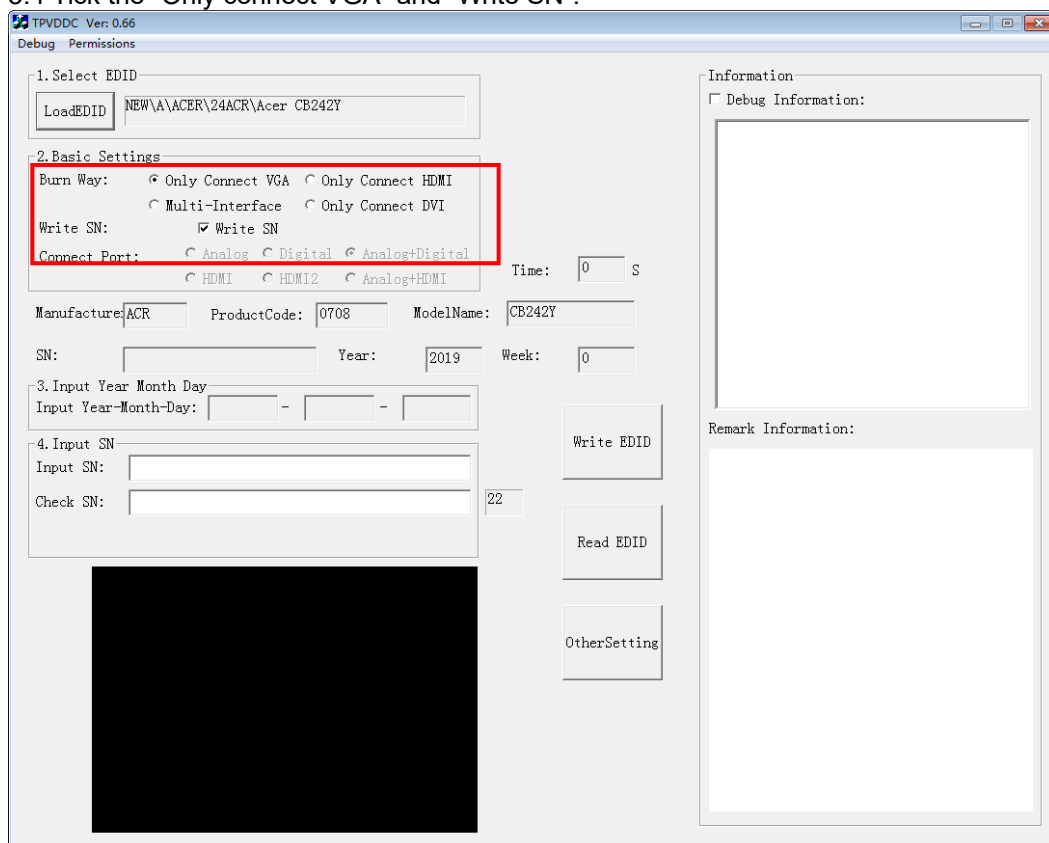
## 5.2. Select the EDID folder.



## 5.3. Load EDID successful.



## 5.4 Tick the “Only connect VGA” and “Write SN”.



TPVDDC Ver: 0.66  
Debug Permissions

1. Select EDID  
LoadEDID: NEW\A\ACER\24ACR\Acer CB242Y

2. Basic Settings

Burn Way: ☒ Only Connect VGA ☐ Only Connect HDMI  
☐ Multi-Interface ☐ Only Connect DVI

Write SN: ☒ Write SN

Connect Port: ☐ Analog ☐ Digital ☐ Analog+Digital  
☐ HDMI ☐ HDMI2 ☐ Analog+HDMI

Time: 0 S

Manufacture: ACR ProductCode: 0708 ModelName: CB242Y

SN: Year: 2019 Week: 0

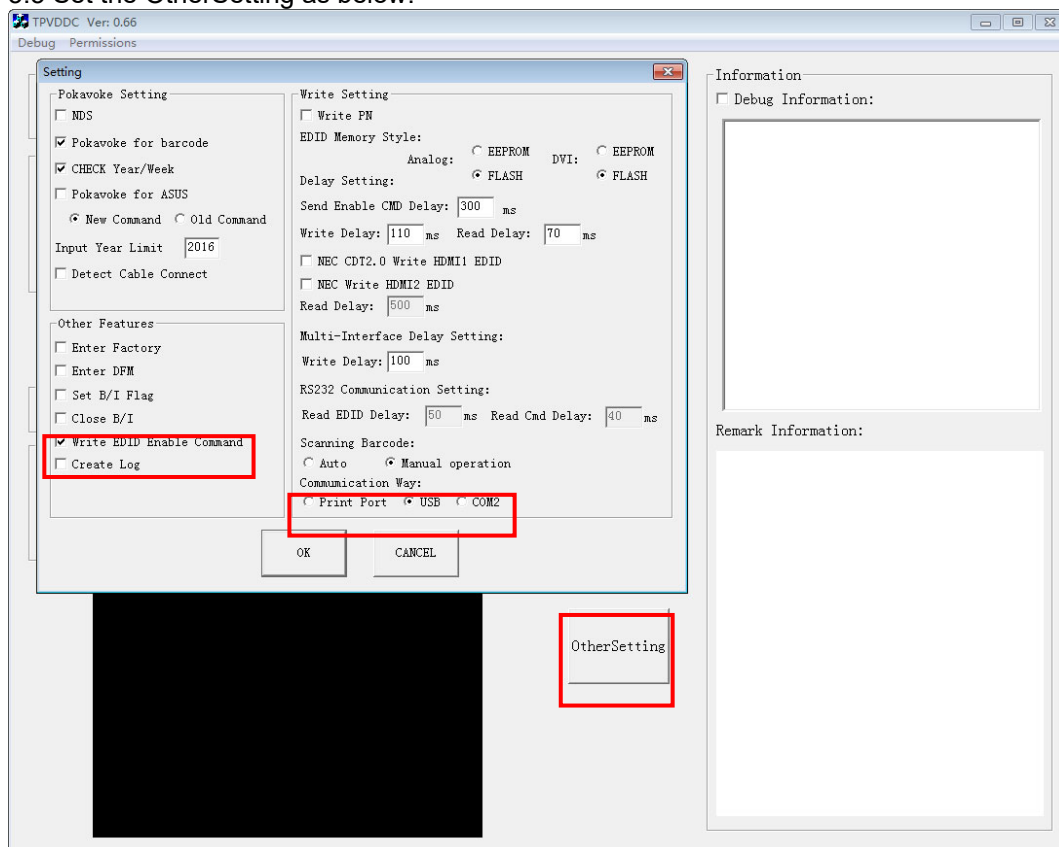
3. Input Year Month Day  
Input Year-Month-Day: - -

4. Input SN  
Input SN:   
Check SN: 22

Write EDID  
Read EDID  
OtherSetting

Information  
☐ Debug Information:  
 Remark Information:

## 5.5 Set the OtherSetting as below.



TPVDDC Ver: 0.66  
Debug Permissions

Setting

Pokavoke Setting  
☐ NDS  
☒ Pokavoke for barcode  
☒ CHECK Year/Week  
☐ Pokavoke for ASUS  
☒ New Command ☐ Old Command  
 Input Year Limit: 2016  
☐ Detect Cable Connect

Other Features  
☐ Enter Factory  
☐ Enter DFM  
☐ Set B/I Flag  
☐ Close B/I  
☒ Write EDID Enable Command  
☐ Create Log

Write Setting  
☐ Write FW  
 EDID Memory Style:  
 Analog: ☐ EEPROM DVI: ☐ EEPROM  
☒ FLASH ☒ FLASH

Delay Setting:  
 Send Enable CMD Delay: 300 ms  
 Write Delay: 110 ms Read Delay: 70 ms

☐ NEC CDT2.0 Write HDMI1 EDID  
☐ NEC Write HDMI2 EDID  
 Read Delay: 500 ms

Multi-Interface Delay Setting:  
 Write Delay: 100 ms

RS232 Communication Setting:  
 Read EDID Delay: 50 ms Read Cmd Delay: 40 ms

Scanning Barcode:  
☐ Auto ☒ Manual operation

Communication Way:  
☐ Print Port ☒ USB ☐ COM2

OK CANCEL

Information  
☐ Debug Information:  
 Remark Information:

OtherSetting



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

TPVDDC Ver: 0.66  
Debug Permissions

1. Select EDID  
LoadEDID: NEW\A\ACER\24ACR\Acer CB242Y

2. Basic Settings  
Burn Way: ☒ Only Connect VGA ☐ Only Connect HDMI  
☐ Multi-Interface ☐ Only Connect DVI  
Write SN: ☒ Write SN  
Connect Port: ☐ Analog ☐ Digital ☒ Analog+Digital  
☐ HDMI ☐ HDMI2 ☐ Analog+HDMI  
Time: 0 S

Manufacture: ACR ProductCode: 0708 ModelName: CB242Y  
SN: Year: 2019 Week: 0

3. Input Year Month Day  
Input Year-Month-Day: - -

4. Input SN  
Check SN: 0123456789012345678912  
Check SN: 0123456789012345678912 22

Write EDID  
Read EDID  
OtherSetting

Information  
☒ Debug Information:  
Remark Information:

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

TPVDDC Ver: 0.66  
Debug Permissions

1. Select EDID  
LoadEDID: NEW\A\ACER\24ACR\Acer CB242Y

2. Basic Settings  
Burn Way: ☒ Only Connect VGA ☐ Only Connect HDMI  
☐ Multi-Interface ☐ Only Connect DVI  
Write SN: ☒ Write SN  
Connect Port: ☐ Analog ☐ Digital ☒ Analog+Digital  
☐ HDMI ☐ HDMI2 ☐ Analog+HDMI  
Time: 5.944 S

Manufacture: ACR ProductCode: 0708 ModelName: CB242Y  
SN: Year: 2010 Week: 12

3. Input Year Month Day  
Input Year-Month-Day: - -

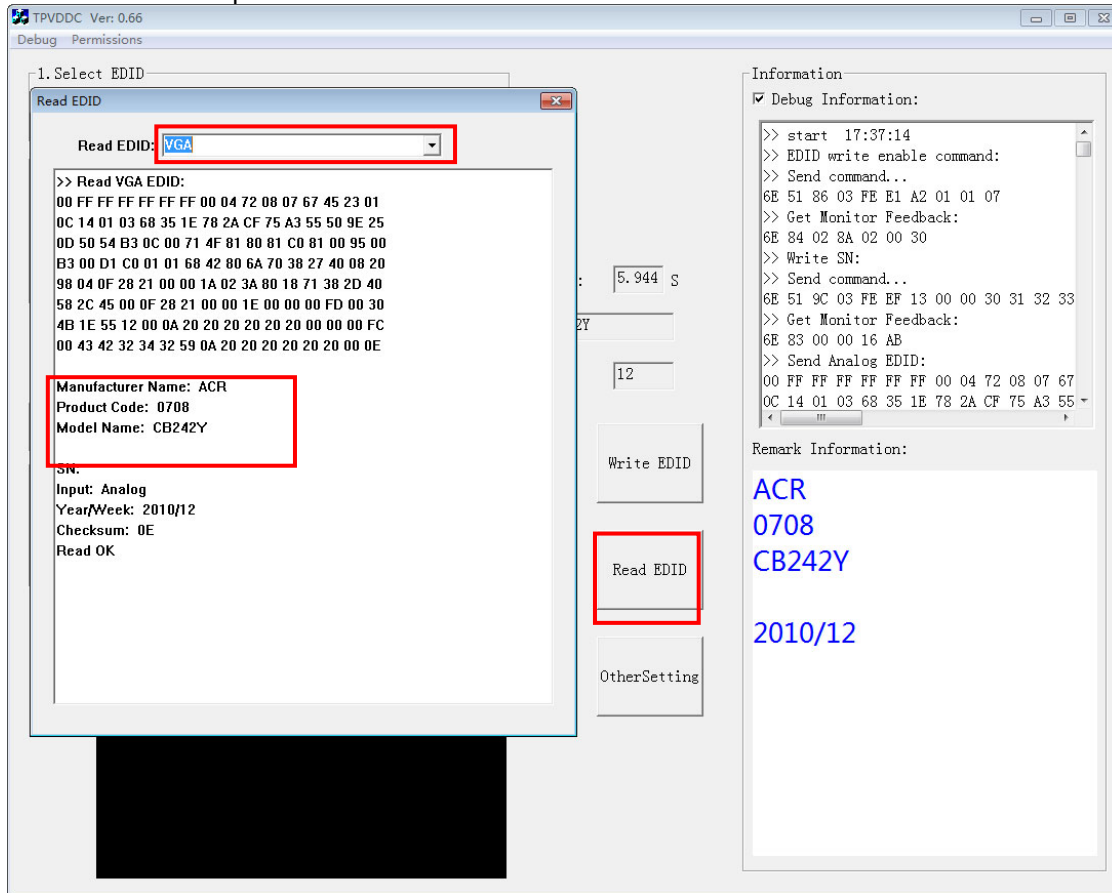
4. Input SN  
Check SN:   
Check SN: 22

Write EDID  
Read EDID  
OtherSetting

Information  
☒ Debug Information:  
>> start 17:37:14  
>> EDID write enable command:  
>> Send command...  
6E 51 86 03 FE E1 A2 01 01 07  
>> Get Monitor Feedback:  
6E 84 02 8A 02 00 30  
>> Write SN:  
>> Send command...  
6E 51 9C 03 FE EF 13 00 00 30 31 32 33  
>> Get Monitor Feedback:  
6E 83 00 00 16 AB  
>> Send Analog EDID:  
00 FF FF FF FF FF 00 04 72 08 07 67  
0C 14 01 03 68 35 1E 78 2A CF 75 A3 55  
Remark Information:  
ACR  
0708  
CB242Y  
2010/12

Analog: PASS!  
DP: PASS!  
HDMI: PASS!  
SN: PASS!

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 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 CB242Y 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	756GQJCB0BA012000Q	NA
	POWER BOARD	PLPCHI541TCB5	NA
	KEY BOARD	KEPCLQA6	55.TCCM2.003
	LED BOARD	LEPCLQA2	55.TCCM2.004
	PANEL	750GBV2381L4L1N000	KL.23806.003
	SPEAKER	378G0025689CLA	23.TCCM2.001
	SPEAKER	378G0025689CRA	23.TCCM2.002

	D-SUB CABLE 1800MM	089G-728CAA-2A	50.LZJM2.003
	HDMI CABLE 1800MM	389G1848LAA50200AL	NA
	DP CABLE 1800MM	389G1878AAA500	50.TBLM2.001
	AUDIO CABLE 1800MM	389G017356G53R	50.LXPM2.012
	FFC CABLE 30P- 30P 450MM(MB TO PANEL)	395G179M30B8370000	50.TCMM2.004
	CABLE 4P-2P+2P 550/160MM(MB TO SPEAKER)	395GS20004DM030000	50.TDNM2.006
	CABLE 6P-6P 360MM(MB TO KEY BOARD)	395GH20006XM302000	50.TDNM2.003



	CABLE 6P-6P 180MM(PB TO PANEL)	395G801406DG01	50.TDNM2.007
	AC POWER CORD 1800 for Europe	389G404A18NHLG	27.T1BM2.001
	BEZEL ASSY WITH LOGO	705GQICS034711	60.TDNM2.005
	REAR COVER	Q34G9123AEM05S0100	NA
	FUNCTION KEY	Q33G0890AEM01S0100	60.TCCM2.006
	Joystick BUTTON	A33G2238AEM02L0100	60.TCBM2.002
	STAND BASE ASSY	Q37G099810150100ZA	NA

	MAINFRAME	Q15G3201101N0100FJ	NA
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## 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.

### VGA IN/HDMI1.4/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.