27" LCD Monitor ACER CB272U

Service Service

Service



Acer Monitor CB272U 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.

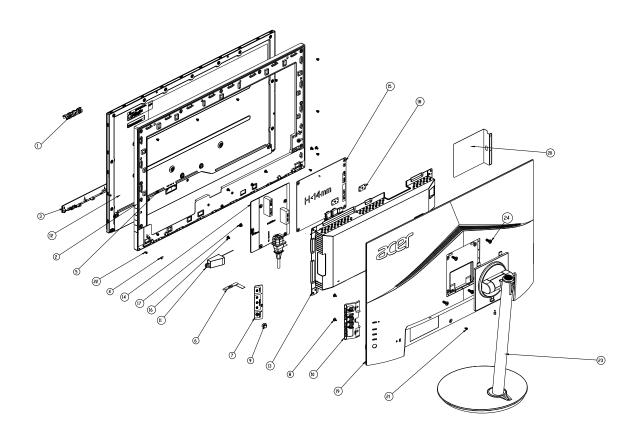
CAUTION -The use of optical instruments with this product will increase eye hazard.

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
12	750GBN270KCB52N000	LCD M270KCJ-L5B C5 NB INX	#N/A
14	PLPCJH541TCBU	ADAPTER BOARD G9541-P0B-X-000-0010	#N/A
15	CBPCJE2C1QG	CONVERSION 715G9539	#N/A
	CABLE 51+41P/40+34P 420/500MM(MB TO PANEL)	395GLM5140D5690000	50.TDGM2.004

2. Mechanical Instruction

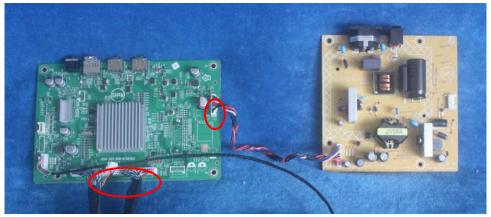
Tools Required

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:

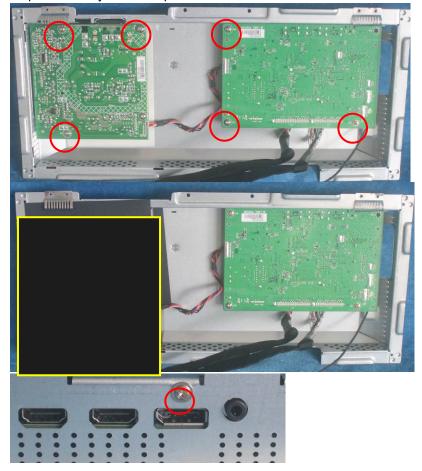
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

2.1 Disassembly Procedures:

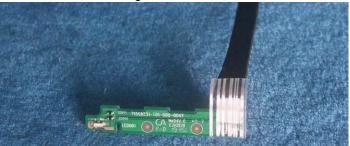
Prepare a main board, a power board and some essential cables. Connect every cable as the below picture.



Use a screwdriver to tighten the screws till the power board and main board with shield are firmly attached and paste the mylar on the power board.

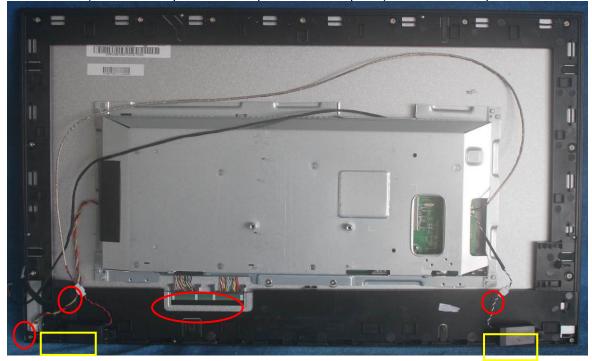


Assemble the LED board into the DECO Bezel. Assemble the panel, MIDDLE FRAME, DECO bezel and use a screwdriver to tighten the screws.





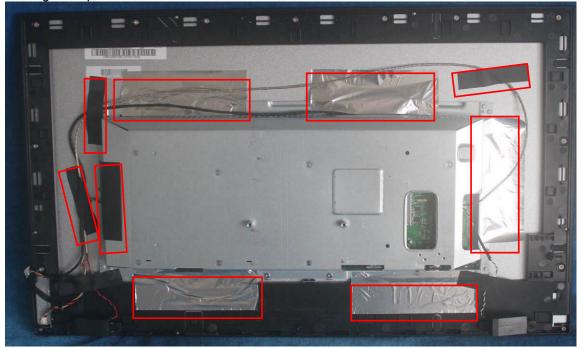
Connect cables (mainboard to panel and the power board to panel). Assemble the speakers.



Pasting the tapes.

S5

S4

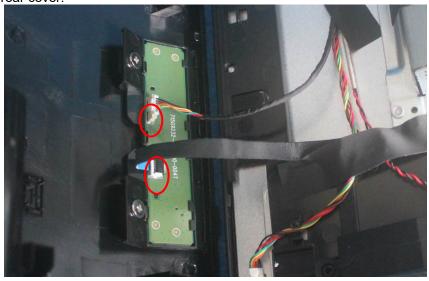


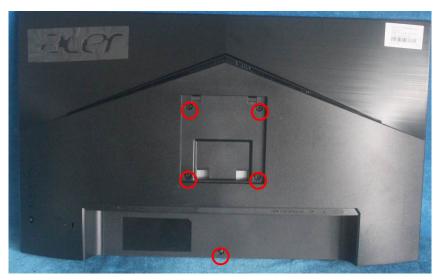
Prepare a rear cover and a key board and use the screws to lock the key board.

S6



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





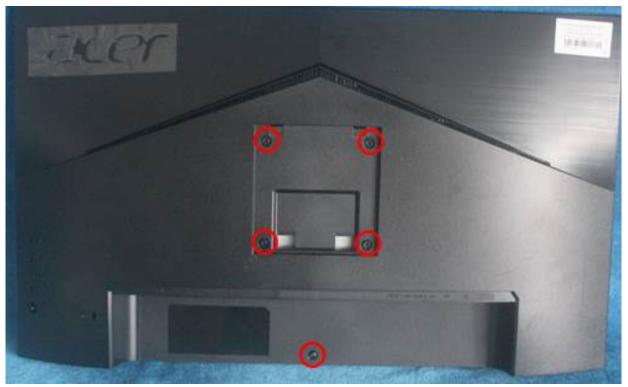
Assemble the stand and base ASS'Y.





4.2 Disassembly procedures:S1 Push the button to remove the stand ASS'Y and unscrew the screw on rear cover.

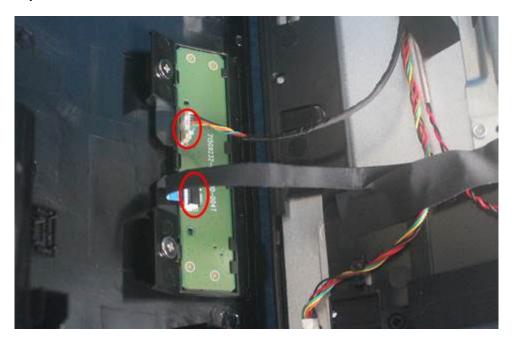




Remove the rear cover. Use a tool (like picture using) to open all latches. (Be careful the position of the key

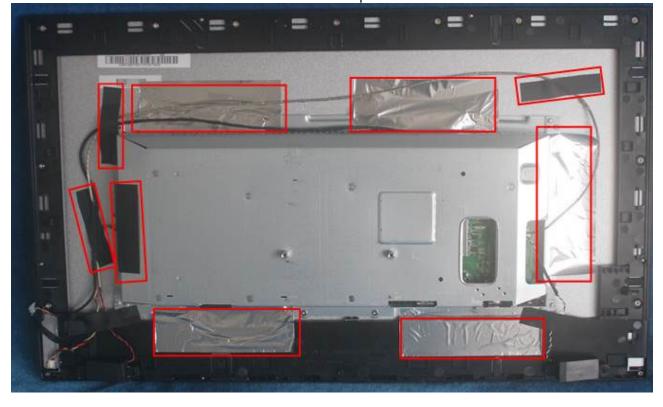


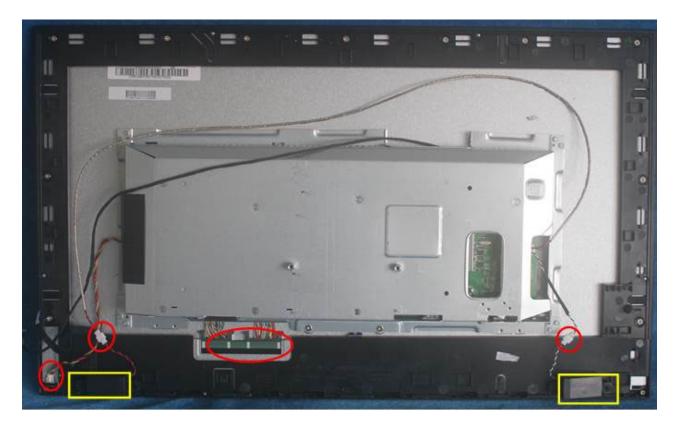
Disconnect the cable (main board to Key board / LED board to Key board) and remove the screws to remove the key board from the rear cover.





Tear up all tapes and disconnect the LVDS cable (main board to panel), lamp power cable (power board to panel). Remove the screws to remove the mainframe. Remove the speakers.





Remove the screws to separate the panel and the Middle Frame, DECO BEZEL and the LED board.

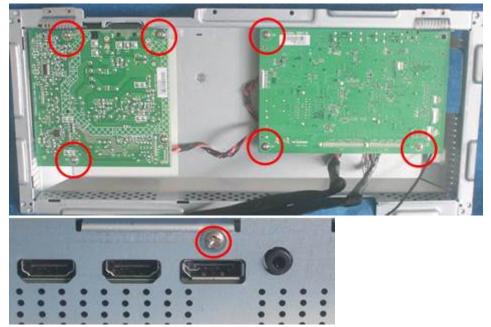
S5





S6 Take off the mylar. Turn over the shield and unscrew the screws on main board and power board.



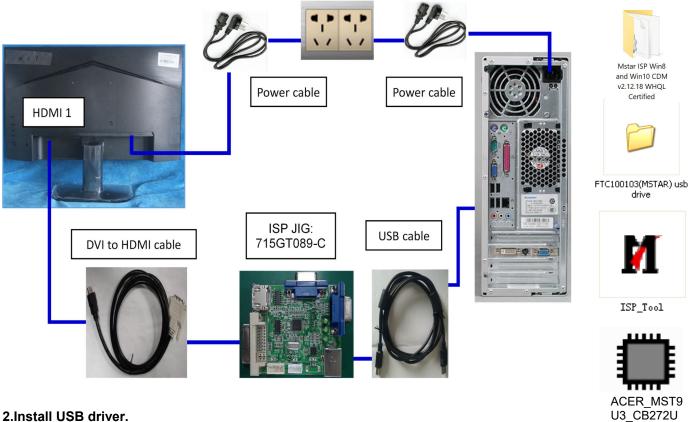


Remove the main board and power board. Disconnect the cables.



3. Firmware Upgrade Process

1. Materials list and connection



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

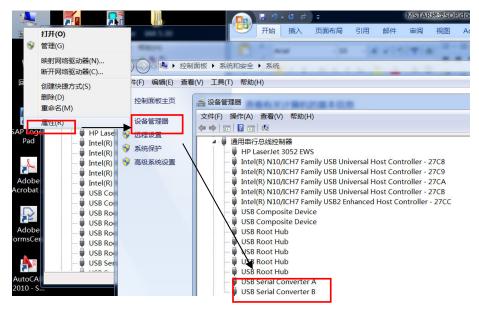


C:\Users\Bront.li\AppData\Local\Temp\ckz_NDDV\DPInst_Monx64.exe



2.2 When insert the USB cable to PC USB port, will pop up a Hardware Wizard to help you install the USB driver if you use this ISP board first time it can auto install success by itself Remark: The USB driver files path: D:\FTC100103(Mstar)\FTCUSB.INF

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



3. Install the ISP tool.

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

3.1 Copy the three file in one folder.



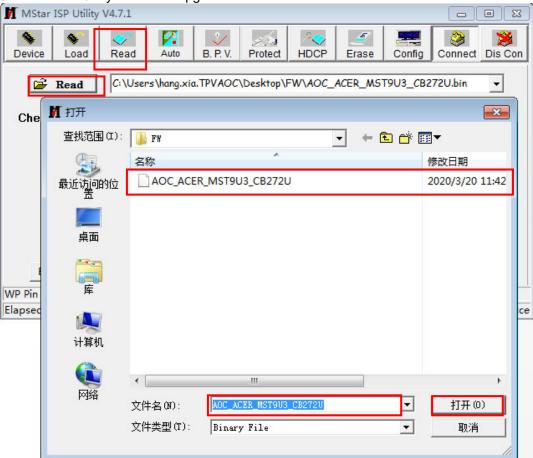
3.2 Double-click MStar Semiconductor, Inc. to run the ISP tool.



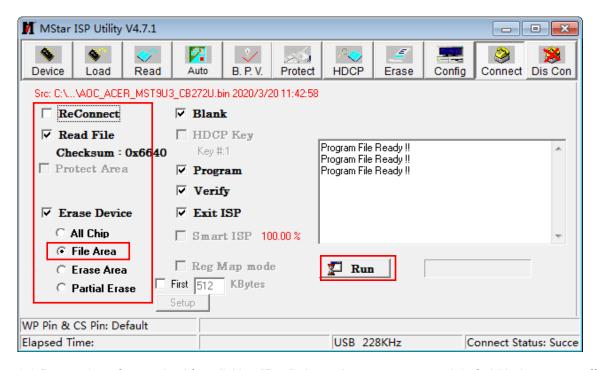
3.3 Connect to the monitor. Click "Connect". If the tool communicate with monitor successfully, the tool will detect the flash type of monitor.



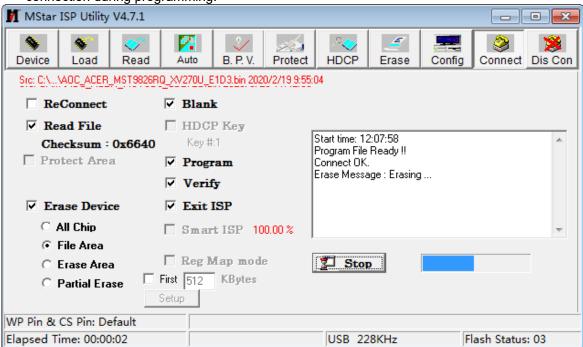
3.4 Load the F/W you want to upgrade.



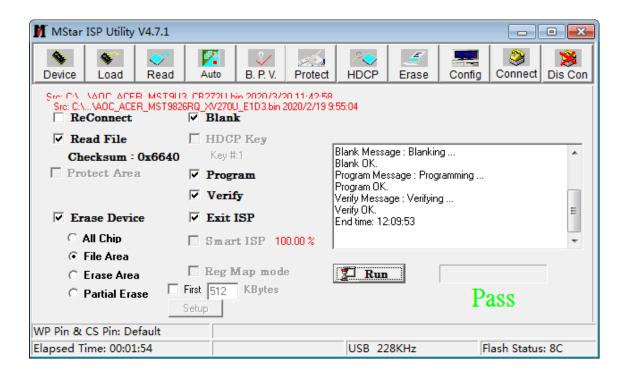
- * Remark: In order to prevent HDCP KEY data loss, please must load the file name contain the "Reduce" of the firmware)
- 3.5 Set parameter in "Auto" window.



3.6 Processing of upgrade. After clicking "Run", the tool start to program. It is forbided to power off monitor or switch off connection during programming.

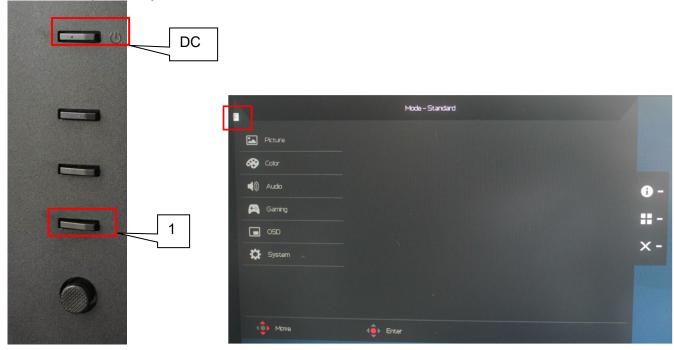


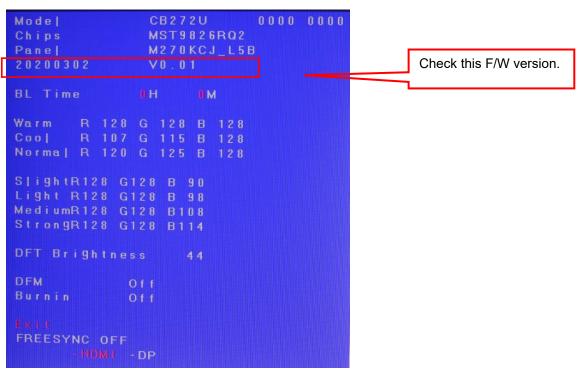
3.7 Successful upgrade. When upgrade successful, there will be green Pass letter appearing.



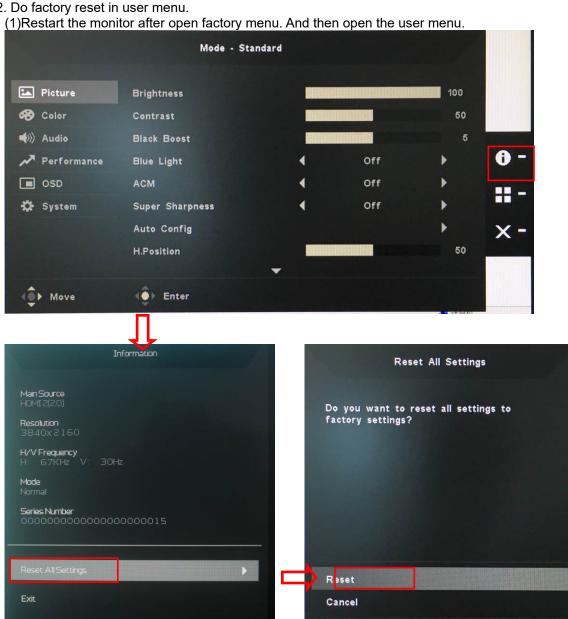
4. Check the FW version after upgrade.

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





4.2. Do factory reset in user menu.



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

Move

(●) OK

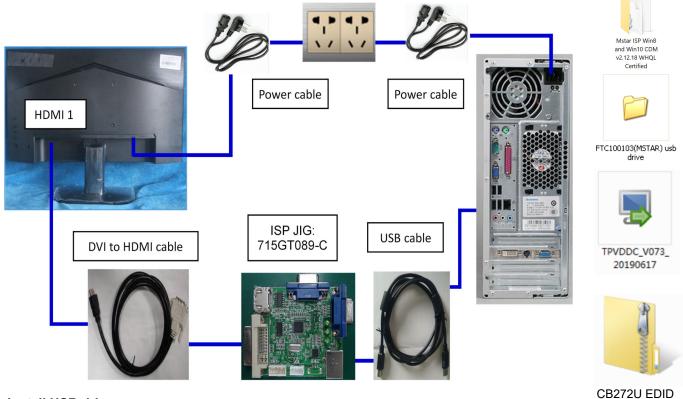
5. Troubleshooting.

- 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.

OK

- (3) AC off the monitor for a while and retry it.
- (4) Change other vervion ISP program.
- (5) Change ISP JIG or cable.
- (6) Change PC.

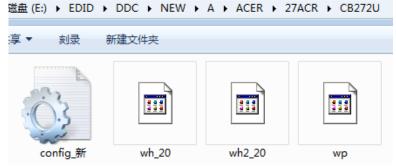
4. Writing EDID Process1. Materials list and connection



- 2. Install USB driver
- 3. Prepare the EDID written.
- 3.1. Change the EDID files name as below rule.

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

3.2. Copy these files to one folder named as ACER CB272U must contains "config.ini" file.



3.3. Copy ACER CB272U to DDC folder and put DDC and ISP tool together.



3.4 Set the config as below.



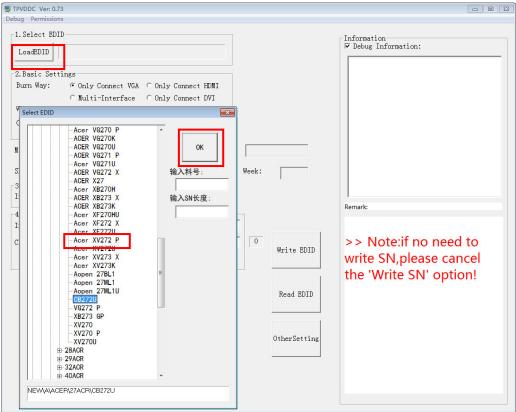
4. Run the ISP tool

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.

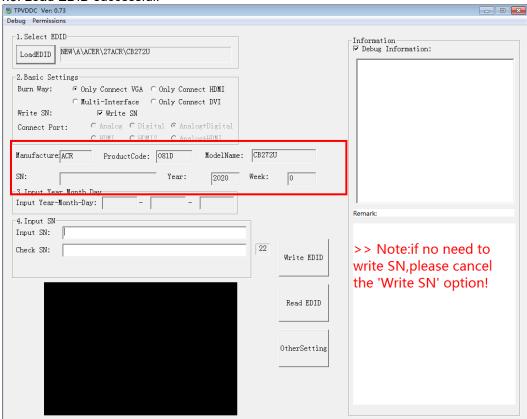


4.1. Double-click the icon to open the tool. TPVDDC Ver: 0.73
Debug Permissions -1. Select EDID Information ✓ Debug Information: LoadEDID 2.Basic Settings • Only Connect VGA ○ Only Connect HDMI Burn Way: ○ Multi-Interface ○ Only Connect DVI Write SN: ₩rite SN C Analog C Digital C Analog+Digital
C HDMI C HDMI2 C Analog+HDMI Connect Port: ModelName: ProductCode: Manufacture: 3. Input Year Month Day Input Year-Month-Day: 4. Input SN >> Please connect VGA1! Input SN: Check SN: Write EDID Read EDID OtherSetting

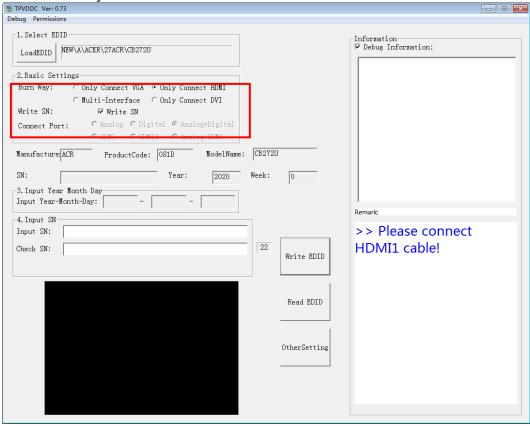
4.2. Select the EDID folder.



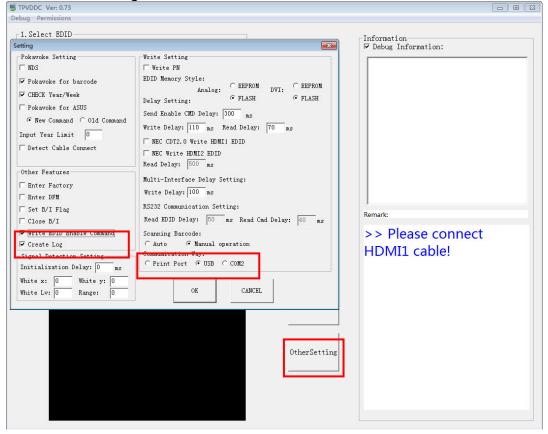
4.3. Load EDID successful.



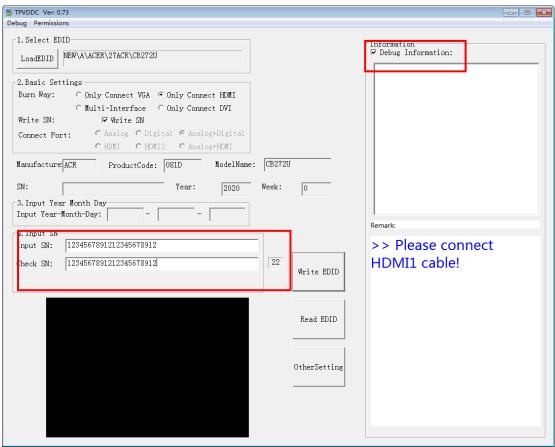
4.4 Tick the "Only connect HDMI and "Write SN"



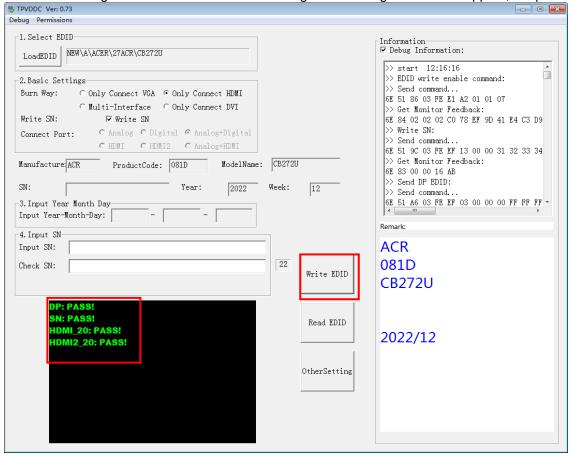
4.5 Set "other setting" as below.



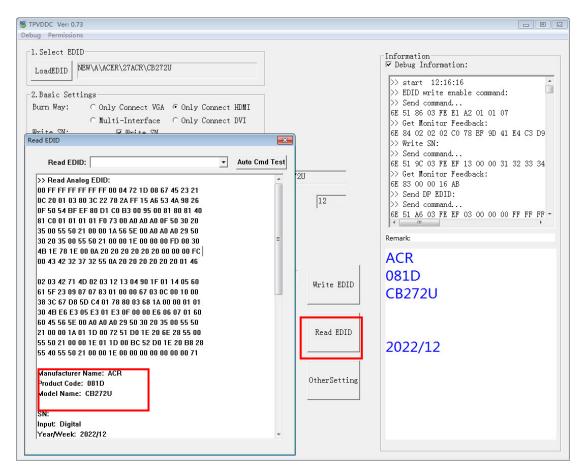
4.6 Type in the date and the 22 digit S/N and click "Debug Information".



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



4.8 After writing the EDID pass, you must read the EDID to ensure the EDID data had been write into the monitor. Choose one of the port to read.



- 1. If it appears all "00" when read the EDID data, you need reconnect the ISP tool or install the the driver of the ISP tool again.
- 2. If it appears all "FF", it shows that the EDID data of the Main board is empty, you must writing the EDID again.

5. Troubleshooting.

- 5.1. Can't write!
 - (1) AC on the monitor and turn on it.(Restart the monitor)
 - (2)Take apart the monitor and connect the 7pin of EEPROM to GND to diable write protection then write EDID one by one.
 - (3) Set the Burn in on last to try again.

5. FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER CB272U 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	756GQJCB0BA237000 Q	NA
	POWER BOARD	PLPCJH541TCBU	NA
1995-010-41345H (HDS)	FUNCTION KEY BOARD	KEPCLQA6	55.TCCM2.003
	LED BOARD	LEPCLQA2	55.TCCM2.004
	PANEL	750GBN270KCB52N000	NA
	SPEAKER 40HM 2.5W 63x22MM- 50MM (LEFT)	378G0025689YLA	23.TCCM2.001
	SPEAKER 40HM 2.5W 63x22MM- 50MM (RIGHT)	378G0025689YRA	23.TCCM2.002

HDMI CABLE 1500MM	389G0184GAA50200AL	50.TEAM2.001
DP CABLE 1500MM	389G1875AAA50100AL	50.LXPM2.008
CABLE 6P 200MM (POWER BOARD TO PANEL)	395G801406DJ61	50.T1BM2.002
CABLE 4P-2P 850/100MM(MB TO SPEAKER)	395GH20004WM159000	50.TDGM2.003
CABLE 6P 700MM(MB TO FUNCTION KEY BOARD)	395GH20006DM280000	50.TDGM2.002
CABLE 51+41P/40+34P 420/500MM(MB TO PANEL)	395GLM5140D5690000	50.TDGM2.004
POWER CORD 1800MM (EUROPE)	389G404A18NYHG	27.T1BM2.001
DECO BEZEO ASSY	705GQZCS034811	NA

MIDDLE FRAME	Q34G8801AEM01S0100	60.TFBM2.002
REAR COVER	A34G4569AEM0RS013 0	NA
KEY	A33G2236AEM01L0100	60.TBLM2.003
KEY_FUNCTION	A33G2238AEM01L0100	60.TCCM2.007
stand-base ass'y	Q37G0998101C0100ZA	NA
MAINFRAME	Q15G331620130100FJ	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.

HDMI2.0/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.