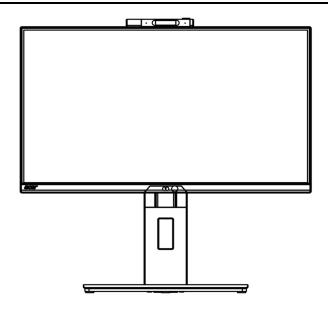
Service Service



Acer Monitor B248Y 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).

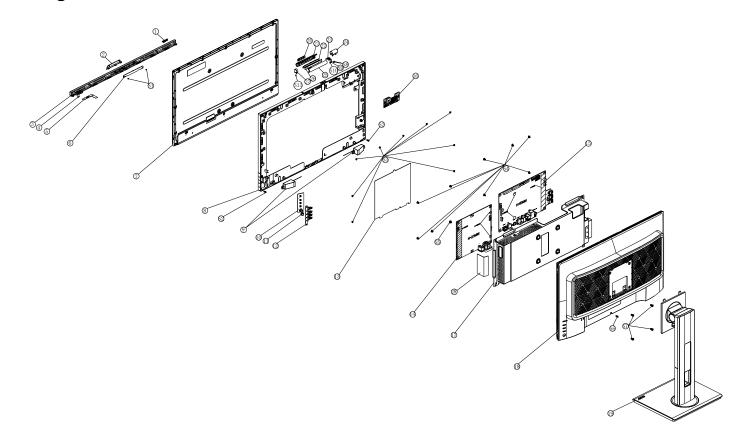
-Make certain that treatment person's body is grounded through wristband.

-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



ltem	Description	TPV Part No.	ACER Part No.
5	LED BOARD	LEPCLQA3	N/A
6	LCD M238HCA-L3E C1 NB INX	750GBN238H3E12N000	N/A
7	OPTION BOARD	PTPCPQB8	N/A
10	KEY BOARD	KEPCPQB8	N/A
14	ADAPTER BOARD	PLPCKE201IACC	N/A
15	MAIN BOARD	CBPRPTOC0Q1	N/A
16	IR BOARD	IRPCQ5	N/A
	395G179Q30P1530000	CABLE 30P 400MM (MB TO PANEL)	50.TPEM2.004

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:

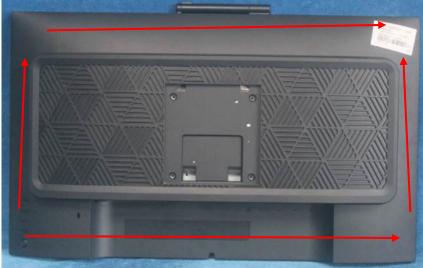
- Screwdriver (Phillip-head, Hexagonal head)
- Penknife

2.1 Disassembly Procedures:

S1. Push the button to remove the stand base assy, then unscrew the screws.



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



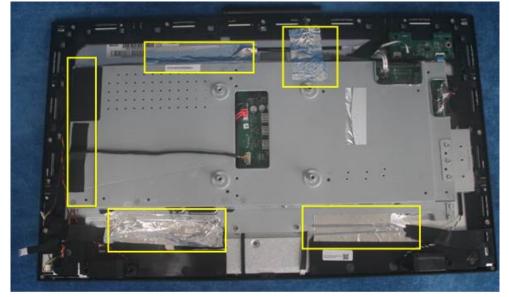
S3. Disconnect the cables to remove the rear cover.

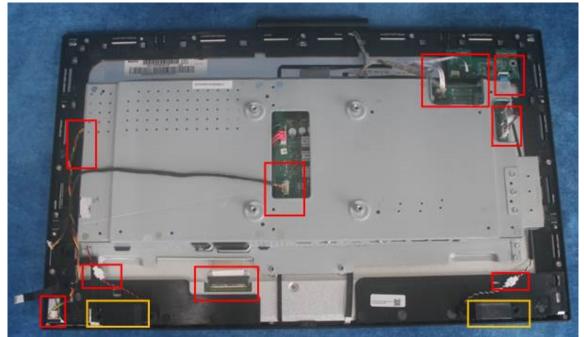


S4. Remove the key board

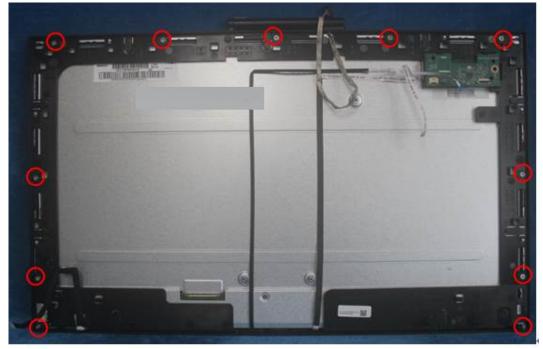


S5. Tear up all the tapes, disconnect the cables and remove the speakers.



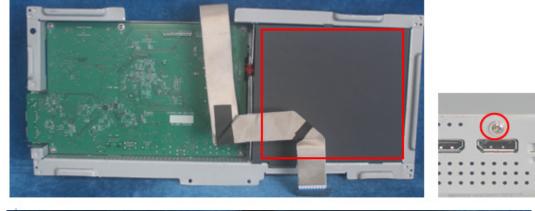


S6. Remove the screws to separate the panel and the Middle Frame/Optional Board / IR Board/ Webcam and the DECO BEZEL.





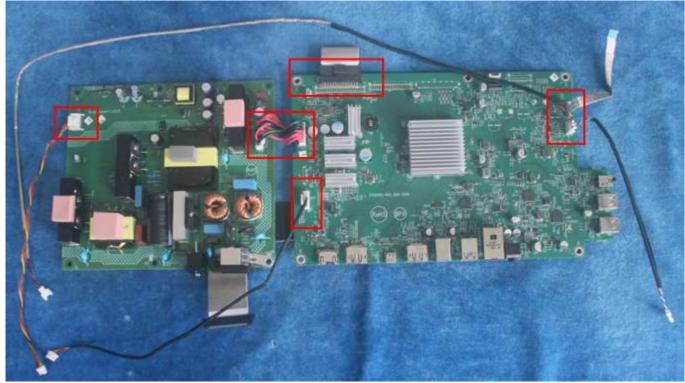
S7. Remove the Mylar sheet and the all of the screws to remove the main board / Power board from mainframe





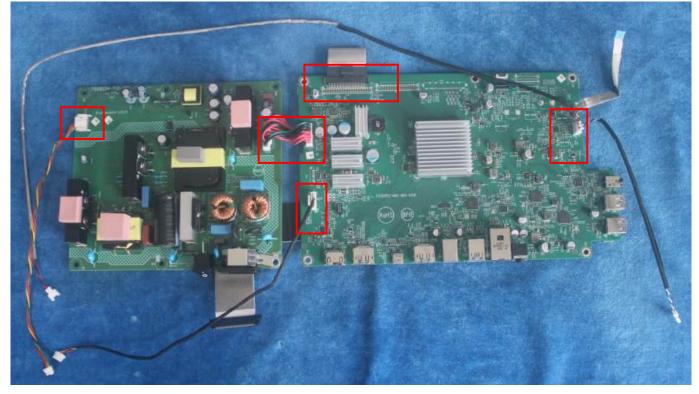


S8. Remove the cables.

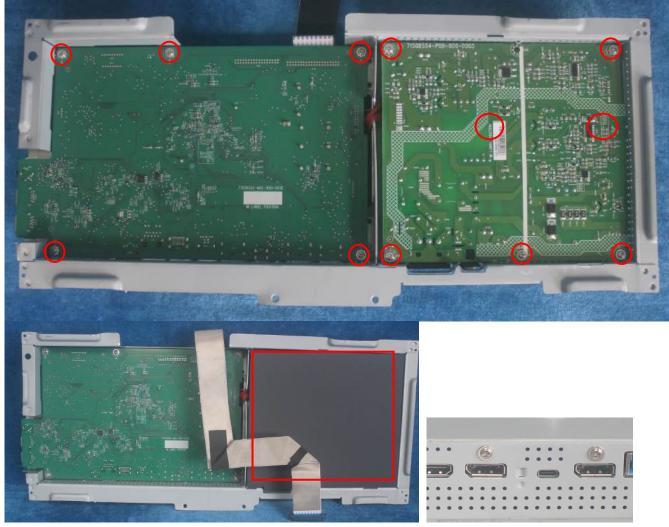


2.2 Assembly Procedures:

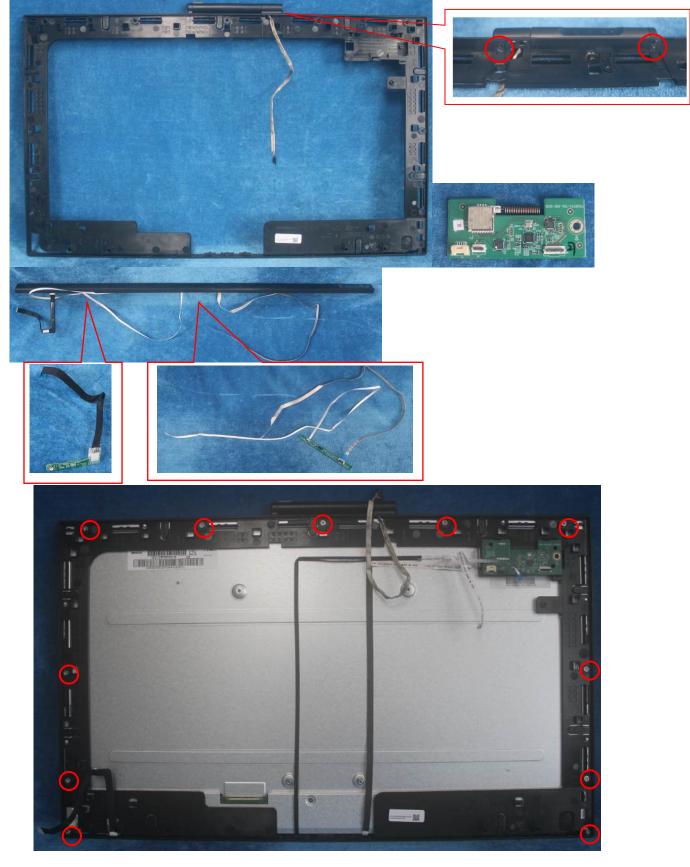
S1. Prepare a main board, a power board and the cables, Connect the cables as below picture



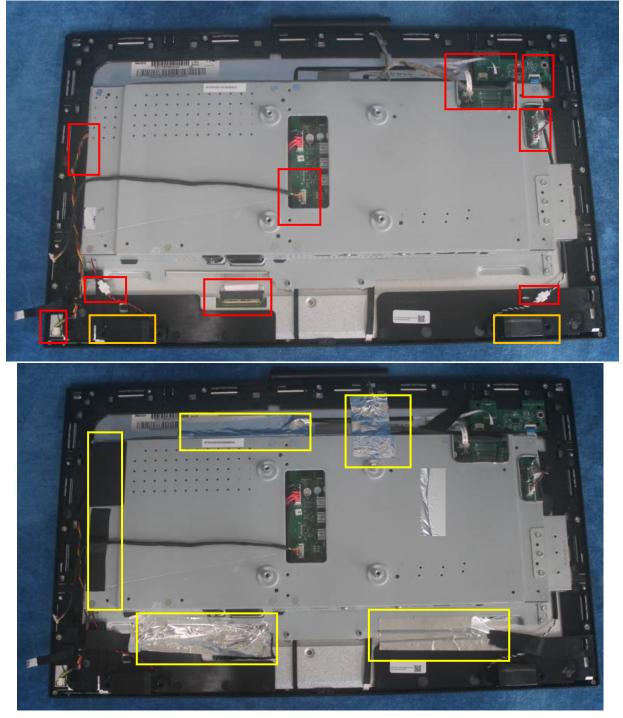
S2. Use a screwdriver to tighten the screws till the boards with shield are firmly attached. Then paste the Mylar sheet on the adapter board



S3. Assemble the MIDDLE FRAME, DECO bezel, LED board, IR board, Webcam, OPTION BOARD and the panel. Use a screwdriver to tighten the screws.



S4. Put the main frain on panel, connect cables. Assemble the speakers. Pasting all tapes.



S5. Prepare a rear cover, Assemble the key board.





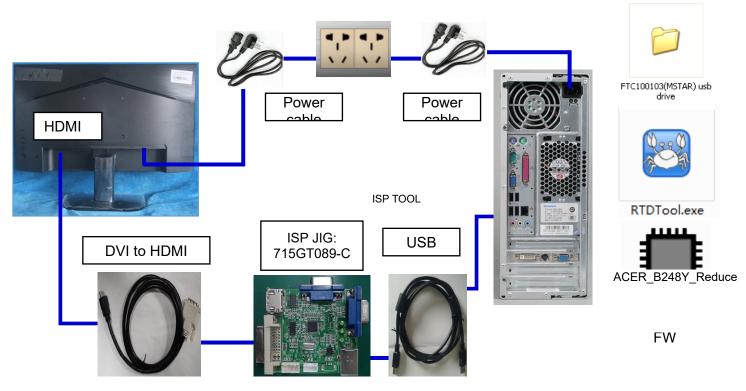
S6. Connect the pins and tighten the screws.



S7. Assembly the stand base ass'y.



3. Firmware Upgrade Process 1. Materials list and connection

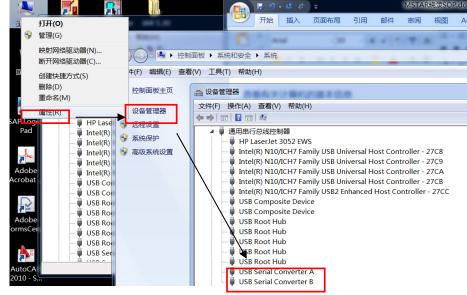


2.Install USB driver.

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"



3. Install RTD tool.

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



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

3.2. Choose the FTDIUSB communication way.

🕃 RTD Customer Tool V3.8		- • •
Option Debug message Communication Option		
Access method FTDIUsb Scaler: RTD2172 Stop Run Reset		
Bank Path Last modified time:	CheckSum Len	Refresh
0 C:Users\hang.xia.TPVAOC\Desktop\ASUS_MB16AC_RTD2556T_INX_N156HCA_EBA_FF0C	-	
MCU McuReg 2		
CTS CTS 3		
Dither 4		
DPTxCtrl 7		
Flash Flash Big Bin CheckSum(0x):		-
Gamma		
GPIO Auto Erase		S
HDCP HDCP		•
ISP Type		
● 1 To 1 ○ 1 To 4	Ž	3
📀 USB: 🖓		

3.3 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)

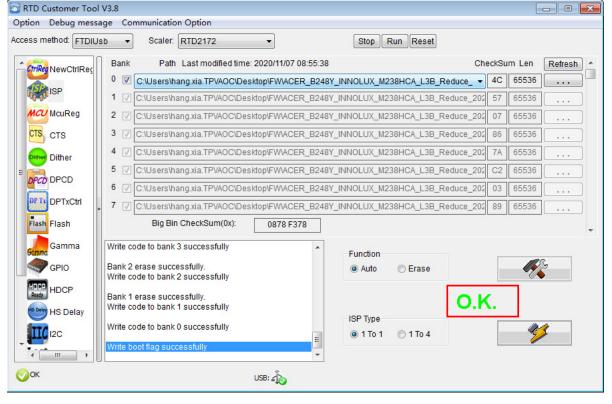
RTD Customer		
	message Communication Option	
Access method:	FTDIUsb Scaler: RTD2172 Kun Reset	
	ISP Option	ckSum Len Refresh
ISP	Basic Setting Flash Setting WP Pin Setting Erase Setting Flash Partition Message Setting FHD • •	
Abdr.	Erase Type	
McuReg	g Chip Erase 🖲 Bank Erase	
CTS CTS		
Dither Dither	Save Start Addr 0x 0 Len 0	
DPCD DPCD		
DP TX DPTxCt		
	⊚ Save Start Addr 0x 0 Len 0	
Flash Flash	Bank Del	-
Gamma Gamma	a Sector Erase Sector Count 0 - Auto	
GPIO		
	Save Start Addr 0x 0 Len 0	
Heady HS Dela	Bank Del Add	
	Sector Erase Sector Count _ Auto	02
- III 12C		
< <u> </u>		
V	USB: 🛵	
-		

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

🔄 RTD Customer Too	I V3.8	L		23
Option Debug mess	age Communication Option			
Access method: FTDIU	sb Scaler: RTD2172 Stop Run Reset			
	Bank Path Last modified time: 2020/11/07 08:55:38 CheckSur	n Len	Refresh	
ISP	0	65536		
10.0°	л . 1л.	65536		
MCU McuReg	() → FW ▼ 4 搜索 FW ♀	65536		ļ
CTS CTS	组织 ▼ 新建文件夹 Ⅲ ▼ □ 0	65536	<u> </u>	
Dither Dither		65536		
E DPCD DPCD		65536		
DP TX DPTxCtrl	■ 桌面 ACER_B248Y_INNOLUX_M238HCA_L3B_Reduce_202 2020/11/7 8 55 ③ 最近访问的位置 =	65536 65536		1
Flash Flash		00030		ļ
	🧊 库			*
Gamma			-	
GPIO			5	
HS Delay				
IIC I2C	文件名(N): ACER B248Y INNOLUX M238ł ▼ Hex or Bin Files (*.h**;*.bin) ▼	4	\$	
	打开(O) 取消			
•				

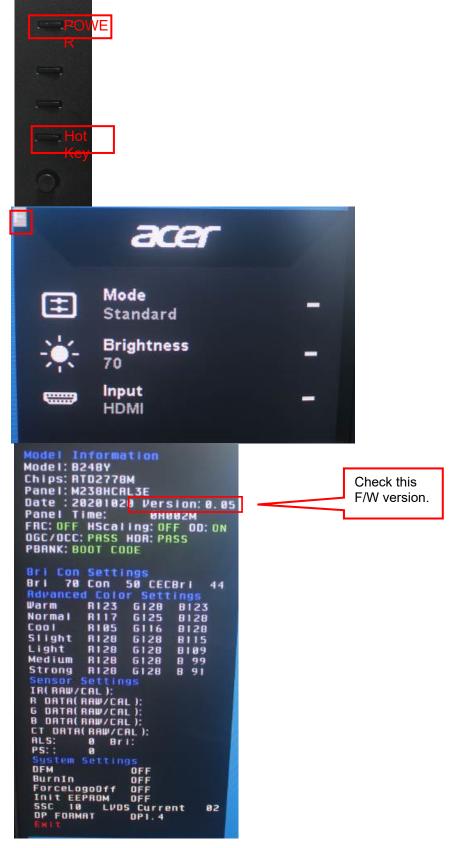
3.5 Click	to start programming.		_		
RTD Customer Tool				- •	23
	age Communication Option				
Access method: FTDIU	sb V Scaler: RTD2172 V Stop Run Reset				
	Bank Path Last modified time: 2020/11/07 08:55:38	Chec	kSum Len	Refresh	_
	0 🖉 C:\Users\hang.xia.TPVAOC\Desktop\FWACER_B248Y_INNOLUX_M238HCA_L3B_Red	ice_ 🗸 4	4C 65536		
ISP	1 🖉 C:\Users\hang.xia.TPVAOC\Desktop\FW\ACER_B248Y_INNOLUX_M238HCA_L3B_Redu	ice_202 {	57 65536		
MCU McuReg	2 C:\Users\hang.xia.TPVAOC\Desktop\FWACER_B248Y_INNOLUX_M238HCA_L3B_Redu	ice_202 (07 65536]
CTS CTS	3 C:\Users\hang.xia.TPVAOC\Desktop\FWACER_B248Y_INNOLUX_M238HCA_L3B_Redu	ice_202 {	86 65536]]
Dither Dither	4 C:\Users\hang.xia.TPVAOC\Desktop\FWACER_B248Y_INNOLUX_M238HCA_L3B_Redu	ice_202	7A 65536]
E DPCD DPCD	5 🗹 🛛 FW Update Progress	202 (C2 65536]]
	6 🛛 🛛	202 (03 65536]]
DPTxCtrl ,	99	202 8	89 65536]
Flash Flash					-
Gamma	Current flash is MX25L32XX Function				
GPIO	Bank 0 erase successfully Auto Erase			3	
HDCP	Bank 17 erase successfully.		-0		
Ready					
HS Delay	ISP Type				
IIC I2C	💿 1 To 1 💿 1 To 4		9	\$	
Ок	USB: 💫				

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



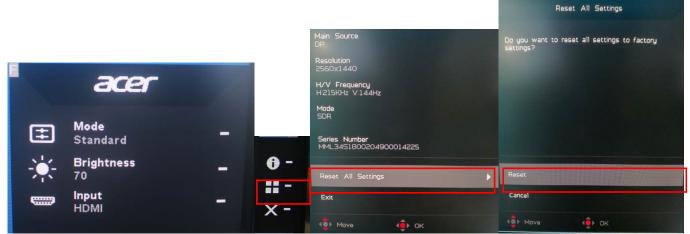
4. Check the FW version after upgrade.

- 4.1. The way to open factory menu.
- (1) Connect signal source to monitor and turn it on.
- (2) DC off the MNT, then 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.



4.2. Do factory reset in user menu.

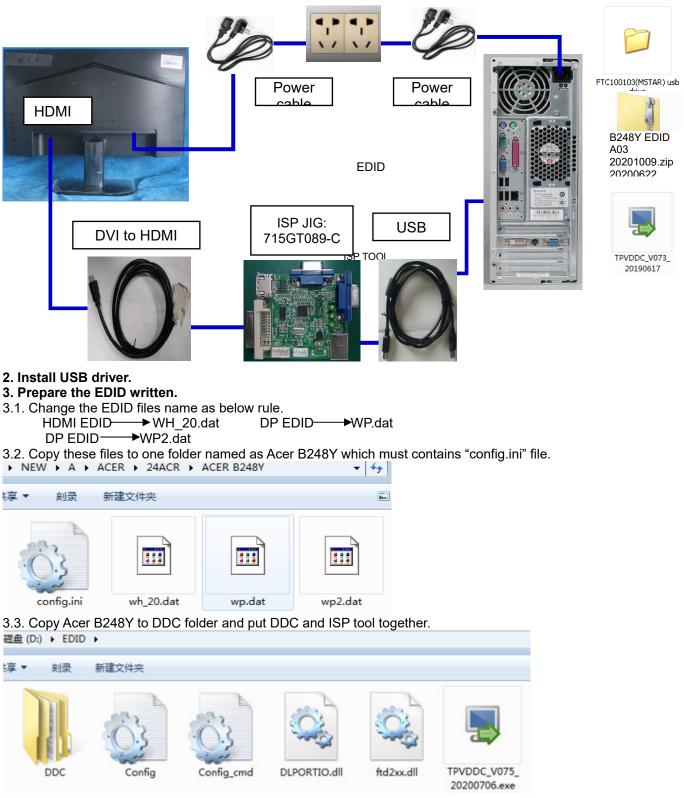
(1)Restart the monitor after open factory menu. And then open the user menu.



(2)Factory reset will turn off "Burn in" mode which screen color switches among red, green, blue and black. 4.3 How to close the burn in mode:

Model Information Model: 8248Y Chips: RT02778M Panel: M238HCRL3E Date : 20201020 Version: 0.05 Panel Time: 0H002M FRC: OFF HScaling: OFF OD: ON OGC/OCC: PASS HDR: PASS PBANK: BOOT CODE	
Bri Con Settings	
Bri 70 Con 50 CEC8ri 44	
Advanced Color Settings	
Warm R123 G128 B123	
Normal R117 G125 B128	
Cool R105 G116 B128	
Slight R128 G128 B115	
Light R128 6128 8109 Medium R128 6128 8 99	
Strong R128 G128 B 99	
Sensor Settings	
IR(RAW/CAL);	
R DATA(RAW/CAL);	
G DATA(RAW/CAL):	
B DATA(RAW/CAL): CT DATA(RAW/CAL):	
ALS: 0 Bri:	
PS:: 0	Set the burn
System Settings DFM DFF	
Burnin OFF	in to "OFF"
ForceLogoDii OFF	
Init EEPROM OFF	
DP FORMAT DP1.4	
ENIX	

4. Writing EDID Process 1. Materials list and connection



4. Run the ISP tool

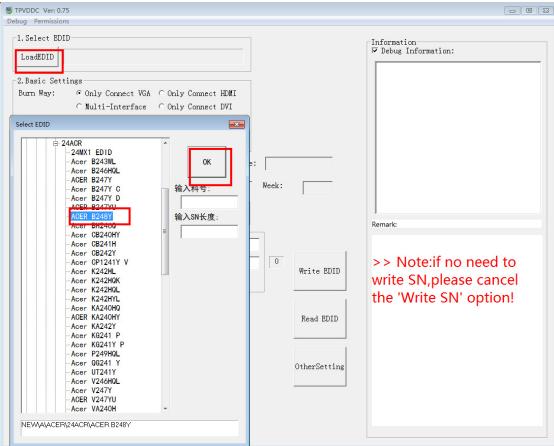
Note: If the F/W Upgrade use the same ISP tool as the EDID writing, you must close the F/W Upgrade tool before running the EDID writing tool.



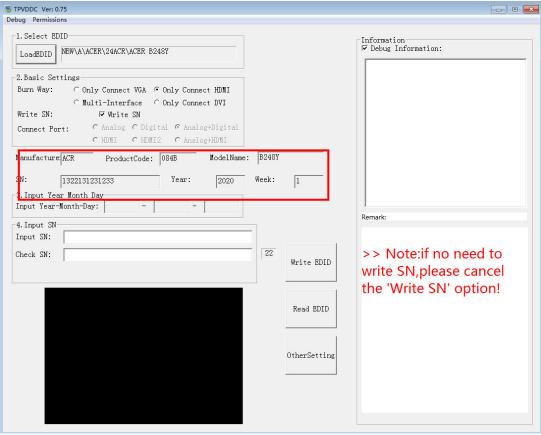
20200706.exe 4.1. Double-click the icon to open the tool.

TPVDDC Ver: 0.75		
Debug Permissions		
TPVDDC Ver: 0.75 Debug Permissions 1. Select EDID LoadEDID 2. Basic Settings Burn Way: © Only Connect VGA C Only Connect HDMI C Multi-Interface C Only Connect DVI Write SN: F Write SN Connect Port: C Analog C Digital © Analog+Digital C HDMI C HDMI2 Manufacture: ProductCode: SN: Year: 3. Input Year Month Day Input SN Check SN:	Week:	Information ✓ Debug Information: Remark: > Please connect VGA1!
	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".

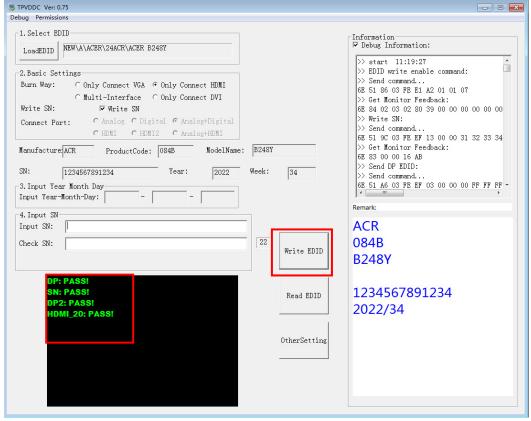
TPVDDC Ver: 0.75	
bug Permissions	
1. Select EDID	□ Information □ Debug Information:
LoadEDID NEW\A\ACER\24ACR\ACER B248Y	Debug Internation.
2.Basic Settings	
Burn Way: C Only Connect VGA 🤄 Only Connect HDMI	
⊂ Multi-Interface ⊂ Only Connect DVI Write SN: ▼ Write SN	
Connect Port: C Analog C Digital @ Analog+Digital	
CHDMI CHDMI2 CAnalog+HDMI	
Manufacture:ACR ProductCode: 084B ModelName: B2	487
SN: 1322131231233 Year: 2020 Wee	k: 1
3. Input Year Month Day	
Input Year-Month-Day:	
4. Input SN	Remark:
Input SN: 1234567891234567891234	>> Please connect
Check SN: 1234567891234567891234	HDMI1 cable!
	Write EDID
	Read EDID
	Kead EDID
	OtherSetting
Set the OtherSetting as below.	
/DDC Ver: 0.73 g Permissions	
Select EDID	T.C
ting	Information

1.Select EDID		Information
ietting	×	Debug Information:
Pokavoke Setting Pokavoke Setting WDS V Pokavoke for barcode V CHECK Year/Week Pokavoke for ASUS C New Command C Old Command Input Year Limit 0 Detect Cable Connect Other Features Enter Factory Enter DFM Set B/I Flag C Close B/I V Write EDID Enable Command V Create Log Cigael Detection Setting Initialization Delay: 0 ms White x: 0 White y: 0 White Lv: 0 Range: 0	Vrite Setting Vrite Setting Analog: CEPROM DVI: CEPROM Delay Setting: FLASH OVI: FLASH Send Enable CMD Delay: 300 ms Vrite Delay: 110 ms Read Delay: 70 ms NEC CDI2.0 Write HDMI1 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: Communication Way: Print Port OUSD C COM OK CANCEL	Remark: >> Please connect HDMI1 cable!

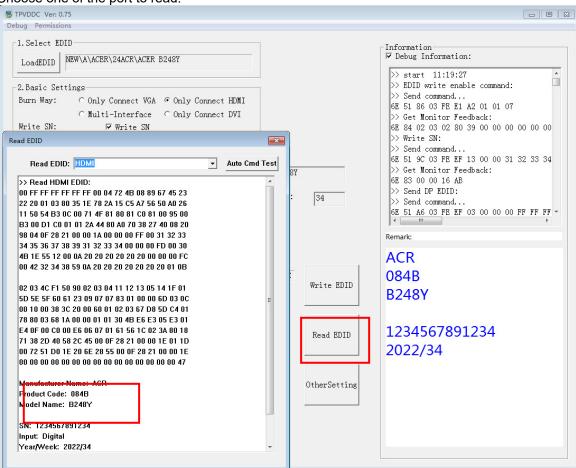
4.6 Type in the date and the 22 digit S/N and "Debug Information".

IPVDDC Ver: 0.75		
pug Permissions		
1. Select EDID LoadEDID NEW\A\ACER\24ACR\ACER B248Y 2. Basic Settings Burn Way: C Only Connect VGA © Only Connect HDMI C Multi-Interface C Only Connect DVI		Information V Debug Information:
Write SN: FWrite SN Connect Port: C Analog C Digital & Analog+Digital C HDMI C HDMI2 C Analog+HDMI		
Manufacture ACR ProductCode: 084B ModelName SN: 1322131231233 Year: 2020 3.Input Year Month Day Input Year-Month-Day:	: B248Y Week: 1	
4. Input SN Input SN: 1234567891234567891234		Remark: >> Please connect
Check SN: 1234567891234567891234	22 Write EDID	HDMI1 cable!
	Read EDID	
	OtherSetting	

4.7. 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) 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 B248Y 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.

Photo	Description	TPV PN	Acer PN
	Main board	756GQKCB0BA131000Q	NA
	Power board	PLPCKE201IACC	NA
	Key board	KEPCPQB8	NA
	LED board	LEPCLQA3	NA
	OPTION BOARD	PTPCPQB8	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.

DP/HDMI 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.