Service Service



Acer Monitor B247Y Gbmiprzx 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	TPV Part No.	Description	ACER Part No.
1	LBB238NY1W0C004X0F	Panel TPM238WF1-FHBNY1.K 4W50A FQ	NA
6	PLPCND193GYA2	POWER BOARD	NA
9	CBPT3TMC0Q6	MAIN BOARD	NA
12	KEPC4QC2	KEY BOARD	NA
19	USB4QC2	USB BOARD	NA
20	USB4QCE	USB BOARD	NA
	395G179Q30G645M000	FFC MBSB 30P 1.0 2f 370mm CPET conx1 B(MB TO PANEL)	NA

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. Press the button to remove the stand-base ass'y.







S2. Release the screws then use a tool (shown as below) to open all latches for removing the rear cover. (Be careful the position of the key board.).

Disconnect the cable to remove the rear cover.

S3. Release the screws to remove the key board.

S4. Tear off the tapes and disconnect the pin. Release the screw to remove the USB board.

S5.Disconnect the pins to remove the speakers.

S6. Tear off the tapes. Disconnect the pin to remove the main frame.

S7. Release the screws to separate the panel and middle frame.

S8. Remove the Mylar and release the screws to remove the power board, main board and USB board from mainframe.

S9. Disconnect the cables.

2.2 Assembly Procedures:

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

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

S3. Assemble the middle frame and the panel. Use a screwdriver to tighten the screws.

S4. Put the shield on panel. Connect the cable and paste the pin. Turn over the shield and connect the FFC cable. Paste the tapes.

S5. Assemble the speakers and connect all pins.

S6.Assemble the USB board and use a screwdriver to tighten the screw. Paste the tapes.

S7. Prepare a rear cover. Assemble the key board.

S8. Connect the pins and assemble the rear cover. Use a screwdriver to tighten the screws.

S9. Assemble the stand-base ass'y.

3. Firmware Upgrade Process 1. Materials list and connection

2.Install USB driver.

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

```
🔵 win10 CDM20600.exe
C:\Users\Bront.li\AppData\Local\Temp\ckz_NDDV\DPInst_Monx64.exe
64-bit OS detected
"C:\Users\Bront.li\AppData\Local\Temp\ckz_NDDV\DPInstx64.exe"
Installing driver......
```

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.

S RTD Customer Tool V3.4				
Option Debug message C	Communication Option			
Access method: FTDIUsb	Scaler: RTD2537T-CG Stop Run Reset			
A SealtekUSB	Path Last modified time: 2017/09/07 10:51:36 Che	eckSu	m Len	Refresh
	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430,	35	65536	••••
	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430_V1	08	65536	
CTS CTS 2	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430_V1	E2	65536	
DP Tx DPTxCtrl 3	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430_V1	1D	65536	
Flash Flash	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430_V1	15	65536	
5 G	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430_V1	08	65536	
	C:\Users\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_20140430_V1	EB	65536	
Ready HDCP , 7				
HS Delay	Big Bin CheckSum(0x): 0395 0144			
IIC I2C	Even March			
Last	Auto Frase			5
Line				•
NewEDID				
OD OD	ISP Туре	_		
OPCD DPCD	💿 1 To 1 👘 1 To 4		- 5	\$
V	US8: 🖧			

ISP		um Len	Rofroch
didte.	ISP Option		Renear
MCU McuRe	Basic Setting Flash Setting WP Pin Setting Erase Setting Flash Partition Setting		
CTS CTS	Erase Type		
DP Tx DPTxC			
Flash Flash	Save Start Addr 0x 0 Len 0		
Gamm	☑ Bank 7 → Del		
HOLD HDCP	Sector Erase Sector Count 10 Auto		
HS De	Save Start Addr 0x 0 Len 0		
	Bank Del		
110 120	Sector Erase Sector Count Auto	ØR.	
Last			
Last Line		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Last Line	Save Start Addr 0x 0 Len 0	- 76	
Last Line EDID NewE	Save Start Addr 0x 0 Len 0 Del Add	74	
		1 Sh	

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

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

8 RTD Customer Tool V3.4	l	N N
Option Debug message Communication Option		
Access method: FTDIUsb 🔹 Scaler: RTD2537T-CG 🔹 Stop Run Reset		
Bank Path Last modified time:	CheckSum Len	Refresh ^
0 CUUSers\effi.chen\Desktop\BENQ_BL2411PT_2486TD_LGD_LVDS_LM240WU8_2014043/	0 -	
DPTXCtri		
组织 ▼ 新建文件夹 800 ▼		
HP_RECOVERY A 名称 修改日期	类型	
Gamma KINGSTON (H		
HDCP 94 MAG Acer_B247Y_RTD2525AR_AHDPHUB 2017/9/13 8:24	BIN 文件	
Bin HS Delay 図 回放法		
AG251FG		•
Last		IR.
Line AOC I240SXH	2	
EFFI EFFI		
OD OD TABLE 20 T		
		2
又作当(N): Acer_B247Y_RTD2525AR_AHDF	;*.bin) ▼	
17 π (0) ▼	取消	

3.5 Click **1** to start programming.

🔄 RTD Customer Too	V3.4	c	2 0 2
Option Debug mess	age Communication Option		
Access method: FTDI	Jsb 🔹 Scaler: RTD2537T-CG 🔹 Stop Run Reset		
^ @RISP	Bank Path Last modified time: 2017/09/13 08:24:06 Che	ckSum Len	Refresh
	0	3D 65536	····
MCC MCuReg	1 C:\Users\effi.chen\Desktop\EFFIACER B247Y\Acer_B247Y_RTD2525AR_AHDPHUB_MV238FH	55 65536	
CIS CTS	2 C:\Users\effi.chen\Desktop\EFFIACER B247YAcer_B247Y_RTD2525AR_AHDPHUB_MV238FH	44 65536	
DP Tx DPTxCtrl	3 C:Users\effi.chen\Desktop\EFFIACER B247YAcer_B247Y_RTD2525AR_AHDPHUB_MV238FH	4E 65536	
Flash Flash	4	43 65536	
Gamma	5 V FW Update Progress	0E 65536	
	6 √ H	00 65536	
HS Delay			Ŧ
IIIC I2C	Current flash is MX/KH25L40XX Function	-	~
Last LastLine	Bank 6 erase successfully. O Erase		
	ISP Type		
DPCD DPCD	© 1 To 1 ○ 1 To 4	1	5
4			
	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 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.

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

Mode1: B2	47	Y								
Chips: RT	02	52	5 A	IR						
Panel: BO	E	мν	23	8F	H	М	N20			
Date :20	17	09	13	ιv	e	rs	ion		Ø.	02
AutoColo				P	R!	SS				
Gain	R	16	7	G	11	62	В	1	44	
Offset	R	10	8	G	11	07	В	1	14	
	BR	I	7	'5		С	ON		50	
Warm	R	12	8	G	13	28	в	1	28	
Normal	R	12	5	G	12	22	B	1	28	
Cool	B	11	1	G	1	10	R	1	28	
Slight	R	12	8	G	1:	28	R	1	15	
Light	R	12	8	G	12	28	R	1	n9	
Medium	B	12	R	G	1	28	B	•	qq	
Strong	R	12	8	G	12	28	B		91	
	-	-	-	-						
DFM :				п	FF	F				
Burn In:				n	FI	F				
NURAM In	i t	ia	1		• •					
Force Lo	an	n	f f	п	E	=				
HW Autor	nl	nr		E		гі				
SSC 9	01		nc	6			0.0.+		7	
Fxit			63	Ľ	u		ent		3	
- ni c										

4.2. Do factory reset in user menu.(1)Restart the monitor after open factory menu. And then open the user menu.

	Mode	- sRGB				
Picture	Brightness				30	
🍪 Color	Contrast				50	
Audio	Black Boost				5	
Performance	Blue Light		•	Off	•	0 -
SD OSD	АСМ		•	Off	•	
🗱 System	Super Sharpness		•	On	•	-
	Auto Config				•	×-
	H.Position			-	50	
		-				
Move	🔶 Enter					11111

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

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

Writing EDID Process

1.Materials list

2. Install driver.

3. Prepare the EDID written.

3.1. Change the EDID files name as below rule. VGA EDID → WA.dat DP EDID → WP.dat

HDMI EDID → WH.dat

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

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

3.4 Set the config as below.

🖡 Config.ini - 记事本
文件(F) 编辑(E) 格式(0) 查看(
[TPVDDCD]g]
PokavokeFlag=0
Language=1
CELL1=1
ConnectSFISF1ag=0
UserID=
Board=1
[Setting]
ScoppingBoncodo=0
Scanningbar Code=0

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.

VDDC Ver: 0.66		
VDDC Ven 0.66 g Permissions .Select EDID LoadEDID .Basic Settings Surn Way: © Only Connect VGA C Only Connect HDMI C Multi-Interface C Only Connect DVI Write SN:	Time: 0 S :	Information Debug Information: Remark Information: >> Please connect VGA

4.2. Select the EDID folder.

Debug Permissions I. Select EDID LoadEDID 2. Basic Settings Burn Way: © Only Connect VGA C C © Multi-Interface C C Write SN: F Write SN Connect Port: C Analog C Digita C HDMI C HDMI2 Manufacture ProductCode: # 20ACR # 22ACR #	Debug Permissions 1. Select EDID Information 2. Basic Settings Durn Way: © Only Connect VGA C C C Multi-Interface C G Write SN: F Write SN Connect Port: C Analog C Digita C HDUI C HDUIC # 15ACR # 197ND # 207ND # 207ND # 207ND <th>TPVDDC Ver: 0.66</th> <th>-</th> <th></th> <th></th>	TPVDDC Ver: 0.66	-		
1. Select EDID Information LoadEDID □ Debug Information: 2. Basic Settings □ Burn Way: © Only Connect VGA ⊂ Q C Multi-Interface ⊂ Q Write SN: F Write SN Connect Port: C Analog ⊂ Digita C HDMI C HDMI2 Manufacture ProductCode:	1. Select EDID Information 2. Basic Settings Burn Way: © Only Connect VGA C of C Multi-Interface Image: C Multi-Interface OK Write SN: © Write SN © HDMI C HDMI2 Image: C HDMI C HDMI2 Image: C HDMI C HDMI2 Manufacture ProductCode: ProductCode: E 220FND Image: C HDMI C HDMI2 SN:	Debug Permissions			
SN: ⊕ 223 km 3. Input Year Month Day ⊕ 23FND Input Year-Month-Day: − 4. Input SN: − Input SN: − Check CNL − Acer B244HL − Acer CB241H − Acer CB240HL −	Check SN: Acer K242H0K Acer K242H0L Acer K24H0L Acer K24H0	TPVDDC Ver 0.66 Debug Permissions 1. Select EDID 2. Basic Settings Burn Way: © Only Connect VGA C G	Select EDID C A C ACER D 15ACR D 16ACR D 16ACR D 19ACR D 19ACR D 19ACR D 20ACR D 20FND D 20FND D 21ACR D 22ACR D 22ACR D 22ACR D 23FND D 24ACR ACER B243WL ACER B243WL	OK K Information:	

4.3 Tick the "Only connect VGA and "Write SN", and then click "Debug Information".

TPVDDC Ver: 0.66				
Debug Permissions				
1.Select EDID LoadEDID NEW\A\ACER\24ACR\ACER B247Y			□Information Information:	
2. Basic Settings Burn Way: © Only Connect WGA © Only Connect HDMI C Multi-Interface © Only Connect DVI Write SN: IF Write SN Connect Port: C Analog Digital C HDMI C HDMI2 C Analog+HDMI Manufacture ACR ProductCode: 063F	Time: ACER B	0 S		
SN: Year: 2017 3. Input Year Month Day Input Year-Month-Day:	Week:	29		
4. Input SN Input SN: Check SN:	22	Write EDID	Kemark Information:	
		Read EDID		
		OtherSetting		

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

bug Permissions	
1.Select EDID	Information
LoadEDID NEW\A\ACER\24ACR\ACER B247Y	₩ Debug Information:
2. Basic Settings Burn Way: © Only Setting	
Burn Way: C Only C Multi Pokavoke Setting Pokavoke Setting NDS Pokavoke for barcode C CHECK Year/Week Pokavoke for ASUS C Check SN: A Input Year Month Day: 4. Input SN Check SN: C Check SN: C C C C C C C C C C C C C C C C C C C	Vrite Setting Vrite FM EDID Memory Style: Analog: CEPRON DVI: CEPROM Delay Setting: CFLASH CFLASH Send Enable CMD Delay: 300 ms Vrite Delay: 110 ms Read Delay: 70 ms FNEC CDI2.0 Vrite HDMI1 EDID Read Delay: 500 ms Multi-Interface Delay Setting: Vrite Delay: 100 ms R5232 Communication Setting: Read EDID Delay: 50 ms Read Cmd Delay: 40 ms Scanning Barcode: C Auto C Manual operation Communication May: C Print Port C USB C COM2 OK CANCEL

bug Permissions	
1. Select EDID LoadEDID NEW\A\ACER\24ACR\ACER B247Y	□Information □ Debug Information:
2. Basic Settings Burn Way: © Only Connect VGA C Only Connect HDMI C Multi-Interface C Only Connect DVI Write SN: ♥ Write SN Connect Port: C Analog C Digital © Analog+Digital C HDMI C HDMI2 C Analog+HDMI Manufacture[ACR ProductCode: 063F ModelName: SN: Year: 2017 3. Input Year Month Day	Time: 0 S ACER B247Y Week: 29
Input Year-Month-Day: - - 4. Input SN - - - Check SN: 1234567890123456789012 - - Check SN: 1234567890123456789012 - -	Write EDID Remark Information:
	Read EDID
	OtherSetting

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

4.6 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 uaually include in FW,can't read out it.
- 2. If it appears all "FF", it shows that the EDID data of the Main board is empty, you must writing the EDID again.

6. Troubleshooting.

6.1. Can't write!

(1) AC on the monitor and turn on it.(Restart the monitor)

- (2)Take apart the monitor and connect the 7pin of EEPROM to GND to diable write protection then write EDID one by one.
- (3) Set the Burn in on last to try again

4. FRU (Field Replaceable Unit) List This list is for reference only, please contact Acer local service center to order the correct replacement part and availability.

Category	Picture	Description	
BOARD		MAIN BOARD FOR Panel TPM238WF1-FHBNY1.K 4W50A FQ DP+HDMI+SPK+USB- CBPT3TMC0Q6 (100GBRVD128NT1SXXY)	
		POWER BOARD FOR Panel TPM238WF1- FHBNY1.K 4W50A FQ DP+HDMI+SPK+USB	
		KEY BOARD	
		USB BOARD	
		USB BOARD	
LCD		Panel TPM238WF1-FHBNY1.K 4W50A FQ	
SPEAKER		PS SP 2.5W 31x16x25 BOX 1F W100 94V1 4 R	
		FFC Othe 30P 0.5 1f 175mm CPET conx0 B (USB TO USB)	
CABLE		FFC MBSB 30P 1.0 2f 370mm CPET conx1 B(MB TO PANEL)	

	HNf LBCA 6P 2.00 6P 1.00 200 MP(MB TO PANEL L/B)
	HNS MBOTH 8P 1.25 8P 1.25 100 M9(MB TO USB)
	HNS PBMB 4P 2.00 4P 2.00 100 M19(MB TO PB)
	HNS Key 6P 1.25 6P 1.25 650 M19(MB TO KEY)
	HNS SP 4P 2.00 2P 2.0Tr 600+200 M19 2P 2 (MB TO SPK)
CASE/COVER/BRACKET ASSEMBLY	KEY_POWER
CASE/COVER/BRACKET ASSEMBLY	KEY_FUNCTION
CASE/COVER/BRACKET ASSEMBLY	REAR_COVER L238W-Hacer3-cp3
CASE/COVER/BRACKET ASSEMBLY	MIDDLE_FRAME L238W-Hacer3-cp3
CASE/COVER/BRACKET ASSEMBLY	stand ass'y Other OT HS 1400

CASE/COVER/BRACKET ASSEMBLY	P acer	BASE_ASS'Y L238W-Hacer3-cp3 N/A
CASE/COVER/BRACKET ASSEMBLY		MAINFRAME
CASE/COVER/BRACKET ASSEMBLY		INSULATING SHEET 135*136.7*0.43
SCREW		SCREW M4 10

5. 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.

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.

DP/HDMI /VGA Mode (Optional)