Acer Monitor B247W

LIFECYCLE EXTENSION GUIDE

Contents

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Safety Notice

Any person attempting to service this chassis must familiarize with the chassis and be aware of the necessary safety precautions to be used when serving electronic equipment containing high voltage

Important Safety Notice

Product Announcement:

This product is certificated to meet RoHS Directive and Lead-Free produced definition. Using approved critical components only is recommended when the situation to replace defective parts. Vender assumes no liability express or implied, arising out of any unauthorized modification of design or replacing non-RoHS parts. Service providers assume all liability.

Qualified Repairability:

Proper service and repair is important to the safe, reliable operation of all series products. The service providers recommended by vender should being aware of notices listed in this service manual in order to minimize the risk of personal injury when perform service procedures. Furthermore, the possible existed improper repairing method may damage equipment or products. It is recommended that service engineers should have repairing knowledge, experience, as well as appropriate product training per new model before performing the service procedures.

NOTICE:

! To avoid electrical shocks, the products should be connect to an authorized power cord, and turn off the master power switch each time before removing the AC power cord.

! To prevent the product away from water or explosed in extremely high humility environment.

! To ensure the continued reliability of this product, use only original manufacturer's specified parts.

! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

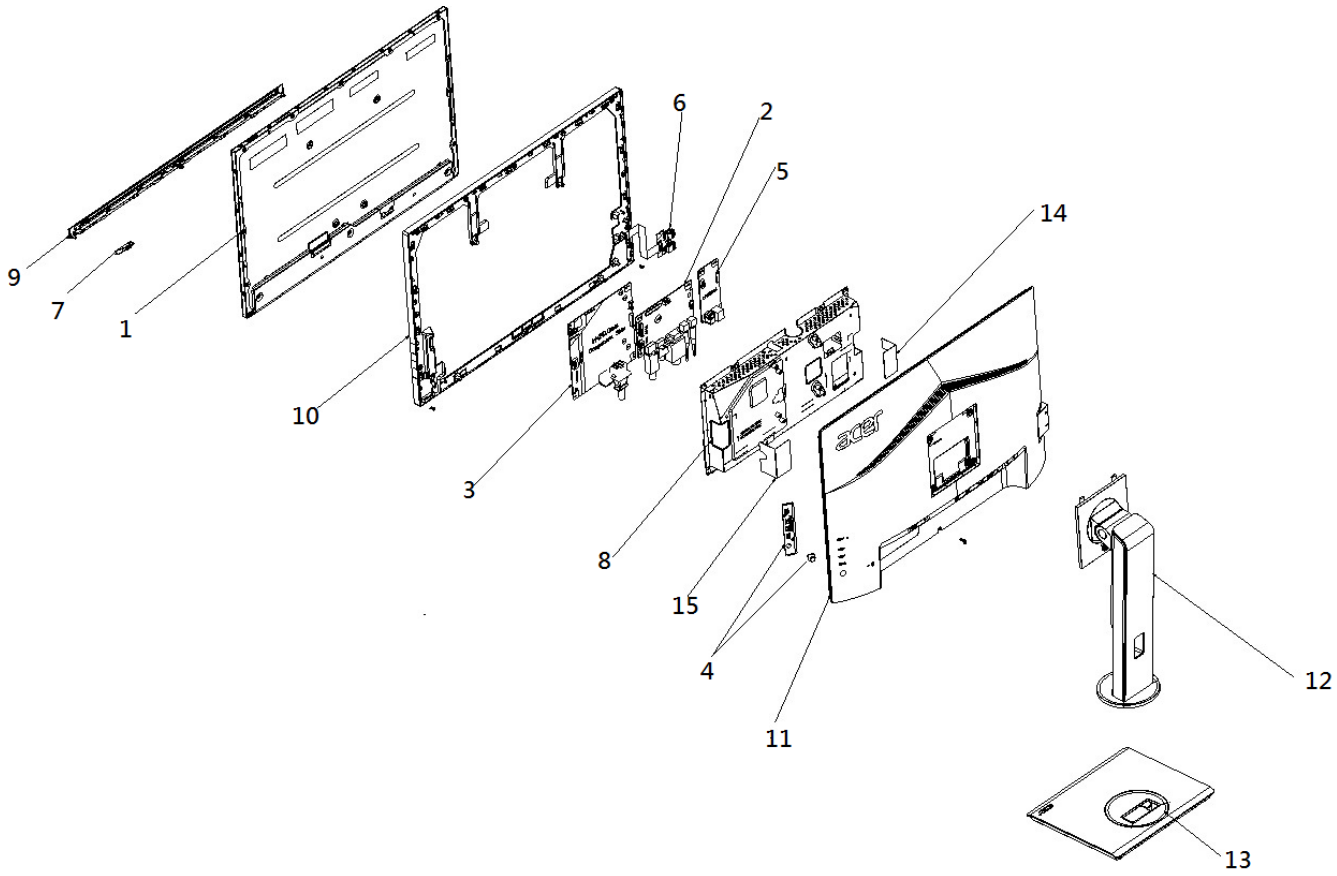
! To ensure using a proper screwdriver, follow the torque and force listed in assembly and disassembly procedures to screw and unscrew screws.

! Using Lead-Free solder to well mounted the parts.

! The fusion point of Lead-Free solder requested in the degree of 220°C.

1. Exploded Diagram

1.1 Product Exploded Diagram



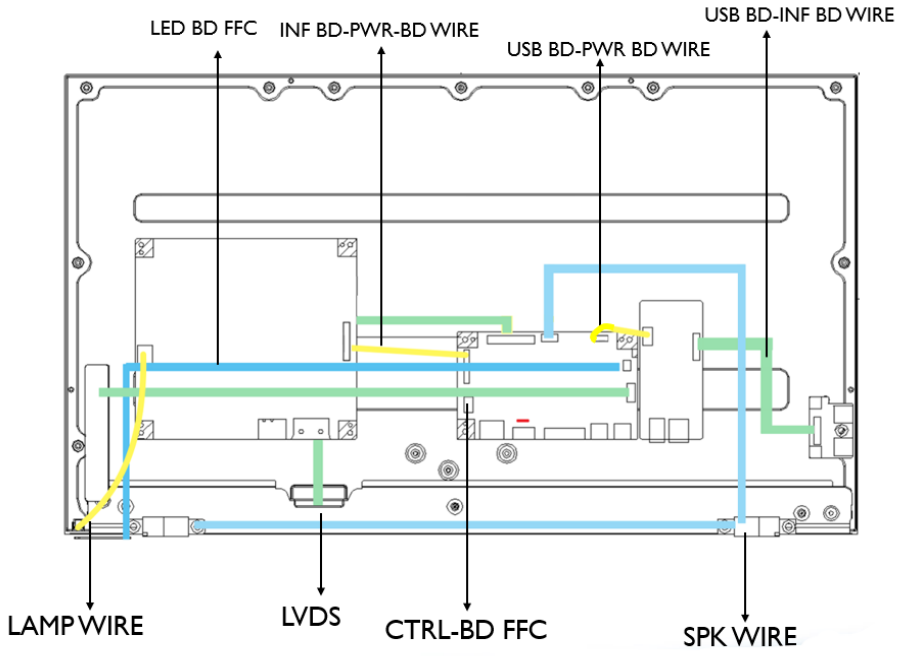
ITEM	PARTS DESCRIPTION
1	LED LCD Panel
2	MAIN BOARD
3	POWER BOARD
4	FUNCTION KEY BOARD
5	USB BOARD
6	USB SIDE BOARD
7	LED BOARD
8	MAIN SHIELDING AH+DP+S+L+U
9	BEZEL FOR B247W LOGO
10	MIDDLE FRAME B247W
11	BACK COVER AH+DP+S+L+U
12	STAND NECK
13	STAND BASE
14	MAIN BOARD MYLAR
15	POWER BOARD MYLAR ON SHIELDING

2. Wiring connectivity diagram

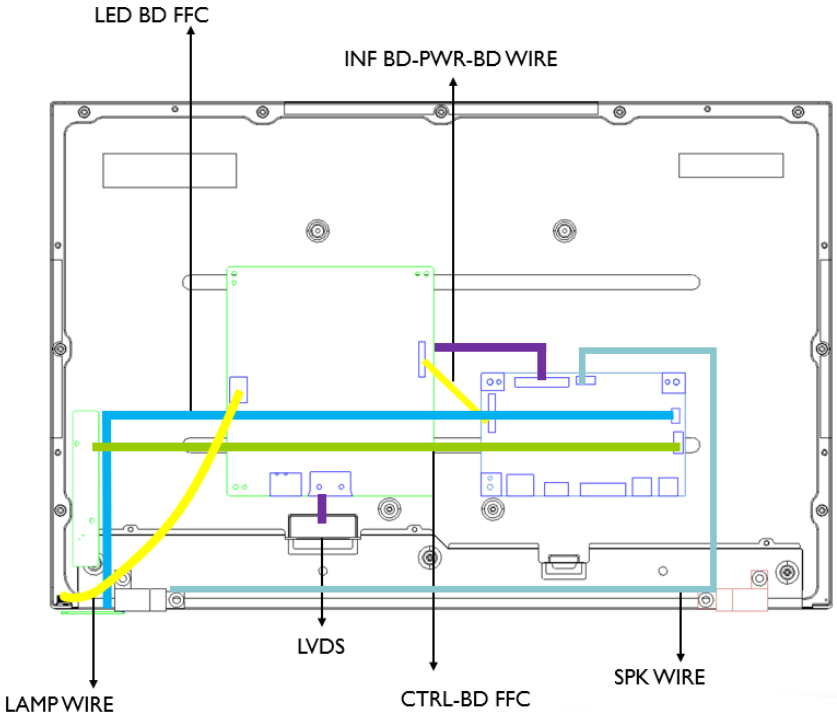
There are two types of wiring diagrams for model B247W. The wiring connectivity position will be different according to the ACTUAL PCBA connector position. Please base on different SKU refer to below diagram.

NOTE: INF BD= Interface Board, PWR BD=Power Board, CTRL BD= Control Board

1. SKU with USB.



2. SKU without USB.



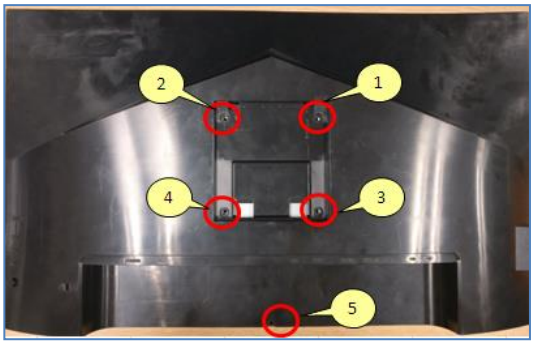
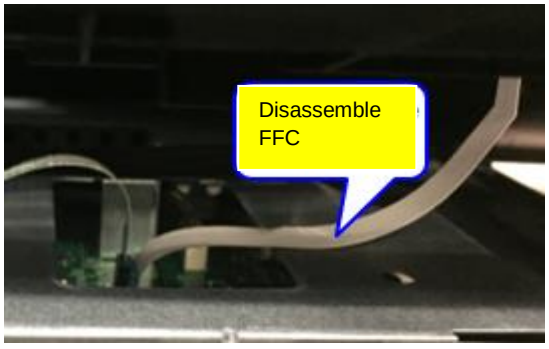
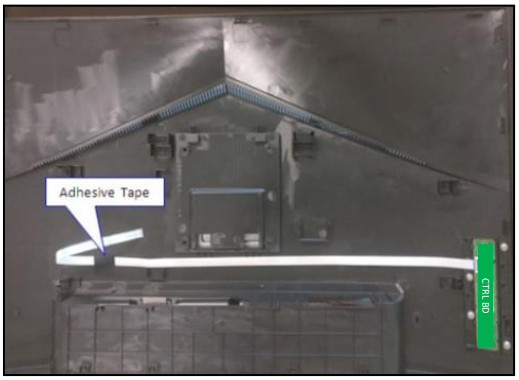
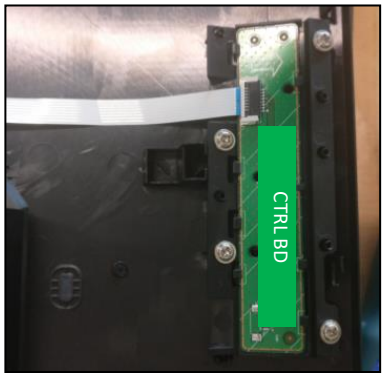
3. Mechanical Instruction

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:

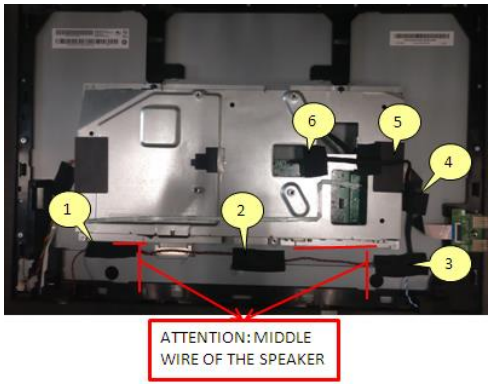
- working table
- Screw-driver: Philips-head screwdriver, Hex-head screwdriver
- Knife
- glove
- cleaning cloth
- ESD protection

4. Disassembly and Assembly SOP

B247W

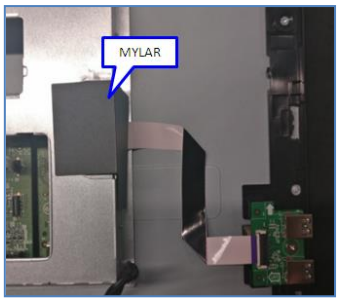
4.1 Disassembly Procedures	
Preparation before disassemble 1.Clean the room for disassemble 2.Identify the area for monitor 3.Check the position that the monitors be placed and the quantity of the monitor ;prepare the area for material flow; according to the actual condition plan the disassemble layout 4.Prepare the implement, equipment, materials as bellow: 1) working table 2) Screw-driver 3) knife 4) glove 5) cleaning cloth 6) ESD protection ⚠ After unplugging the power cord, the power board still have power energe. Please pay attention when disassembling/assembling Power BD.	
S1 Disassemble the RC, stand and base	Disassemble base and column from the RC. Unlock RC screws. Disassemble RC from monitor and Disassemble FFC CTRL from the PCBA.
	
S2 Disassemble FFC Ctrl from the PCBA.	Tear off the adhesive tape from the RC. Tear off the FFC CTRL on the RC as picture 1. Disassemble the CTRL BD from the RC. Disassemble the FFC CTRL from the CTRL BD as picture 2.
PICTURE 1 	PICTURE 2 

S3 Disassemble the speaker from the MF	Tear off tapes on the speaker wire. Extract the connect of the speaker from the PCBA. Disassemble the speaker from the MF(Middle Frame).

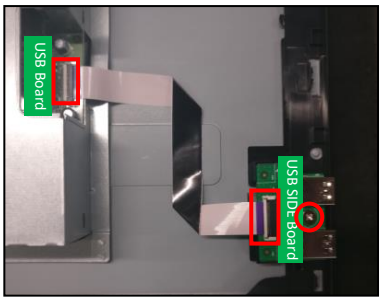


S4 Disassemble the USB SIDE BD	Tear off the Mylar on the right hole of the SHD as picture 1. Disassemble USB-FFC from the USB BD. Unlock the screw from the USB SIDE BD and disassemble the USB SIDE BD. Disassemble the USB-FFC from the USB SIDE BD as picture 2. Disassemble the gasket from the back of the panel as picture 3.

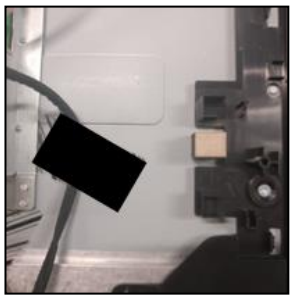
PICTURE 1



PICTURE 2

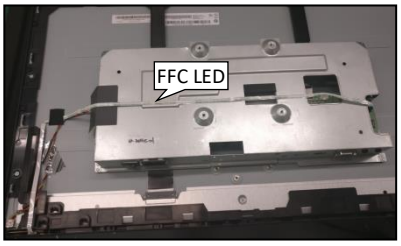


PICTURE 3

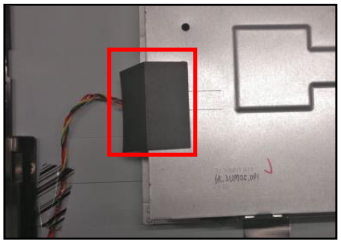


S5 Disassemble the lamp wire	Extract the FFC LED from the I/F BD. Tear off the FFC LED from the SHD as picture 1. Tear off the Mylar on the left hole of the SHD as picture 2. Tear off the BOPP tape on the lamp wire. Extract the big connector of the lamp wire form the P/BD as picture 3.

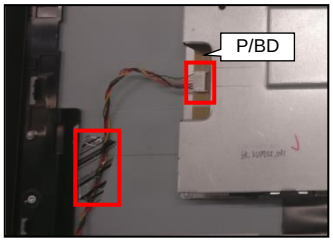
PICTURE 1



PICTURE 2

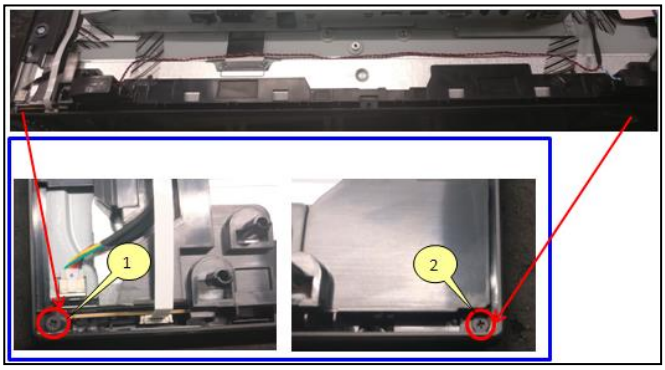


PICTURE 3

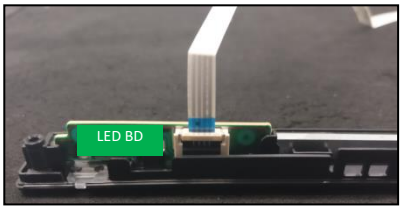


S6 Disassemble the Trim	Unlock two screws from the ASSY TRIM as picture 1. Disassemble the ASSY TRIM from the MF. Disassemble the PCBA LED BD from the ASSY TRIM as picture 2. Disassemble FFC LED from the PCBA LED BD as picture 3

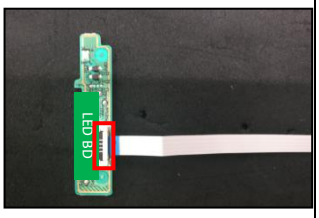
PICTURE 1



PICTURE 2

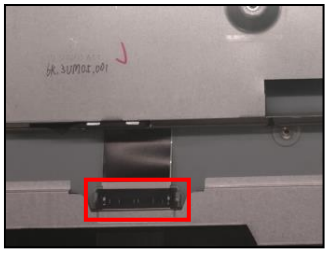


PICTURE 3

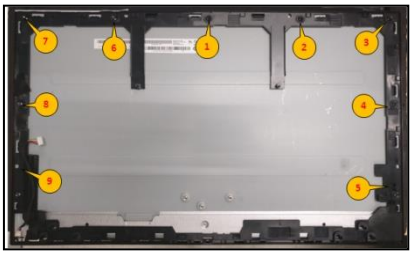


S7 Disassemble the MF from panel.	Extract FFC wire from the panel as picture 1. Unlock 9 screws from the MF as picture 2. Disassemble the MF from the panel. Extract the lamp wire from the panel as the picture 3.

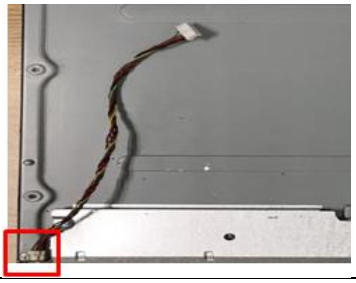
PICTURE 1



PICTURE 2

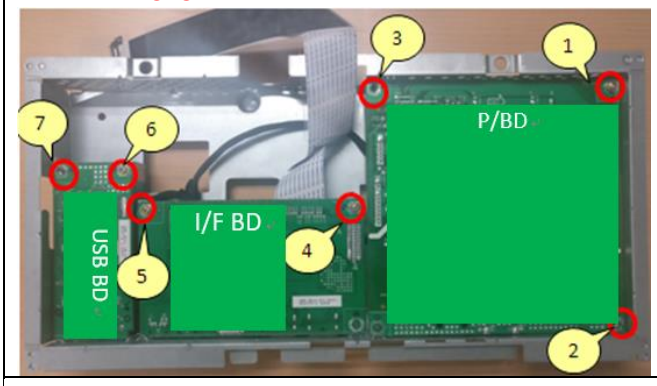


PICTURE 3



S8 Disassemble the USD BD, I/F BD and P/BD from SHD.	Unlock 7 screws from the PCBA as the picture 1. Disassemble the USB BD from the SHD and extract the wire from the USB BD. Disassemble the I/F BD from the SHD and extract the P/BD wire. Extract the FFC LVDS from the I/F BD. Disassemble the P/BD from the SHD and extract the USB-Power BD wire from the Power BD.

PICTURE 1



NOTE: Circuit boards >10 cm² has been highlighted with the yellow rectangle as above image shows. Please detach the Circuit boards and follow local regulations for disposal.

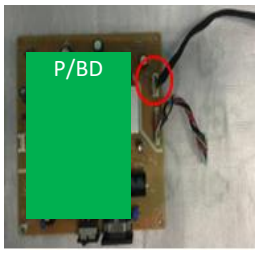
4.2 Assembly Procedures

Preparation before assemble:
1.Clean the room for work
2.Identify the area for material
3.Prepare the implement, equipment, materials as bellow：
1) working table
2) Screw-driver
3) Knife
4) glove
5) cleaning cloth
6) ESD protection

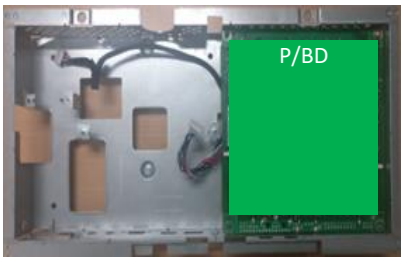
After unplugging the power cord, the power board still have power energe. Please pay attention when disassembling/assembling Power BD.

S1 Assemble the MAIN board, power board and USB board.	Put the SHD on the worktable. Insert USB-Power BD wire to the Power BD as the picture 1. Locate the Power BD into the SHD as the picture 2. Insert FFC LVDS to the I/F BD as picture 3. Insert the wire on the P/BD to the I/F BD. Locate the I/F BD and the USB BD into the SHD as picture 4. Lock 7 screws as the picture 5.

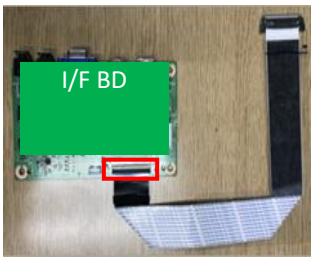
PICTURE 1



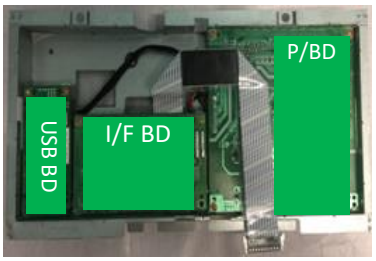
PICTURE 2



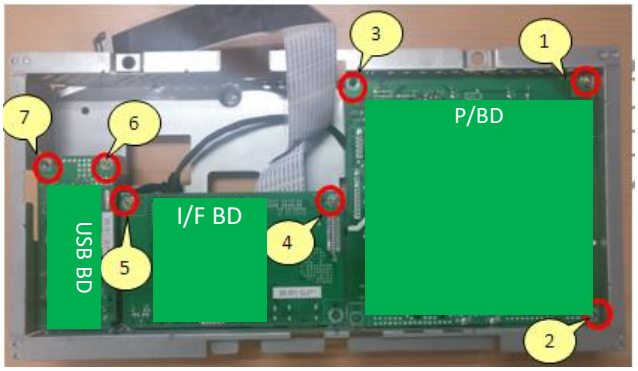
PICTURE 3



PICTURE 4

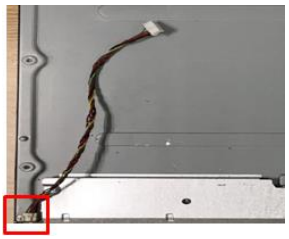
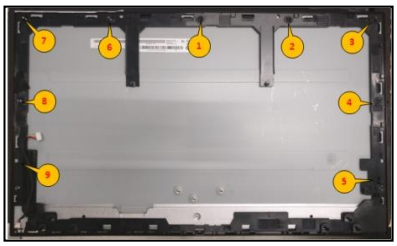


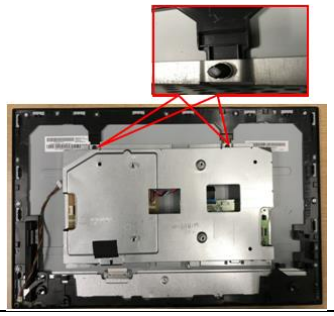
PICTURE 5



S2 Assemble the MF and panel	Take the Panel on the sponge cushion. Insert the little connector of the lamp wire to panel as the picture 1, thread the lamp wire out of the hole of the MF. Assemble the MF onto the panel. Lock 9 screws to the MF as the picture as the picture 2. Insert the FFC wire to the Panel as the picture 3. Assemble the SHD on the MF as the picture 4.

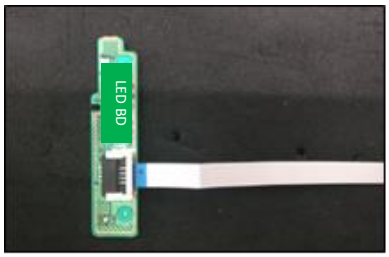
PICTURE 1 PICTURE 2 PICTURE 3 PICTURE 4

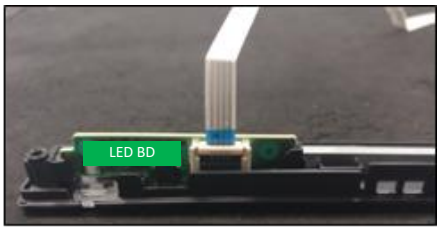





S3 Assemble the ASSY TRIM	Assemble FFC LED to the PCBA LED BD as the picture 1. Assemble the PCBA LED BD into the ASSY TRIM. Assemble the ASSY TRIM on the MF and lock two MD screws to the ASSY TRIM as the picture 3

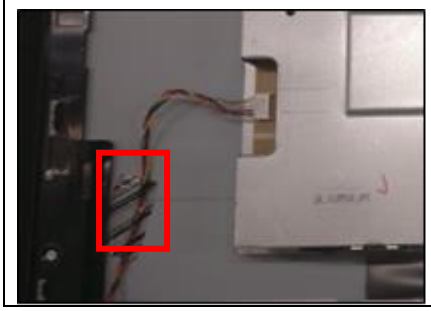
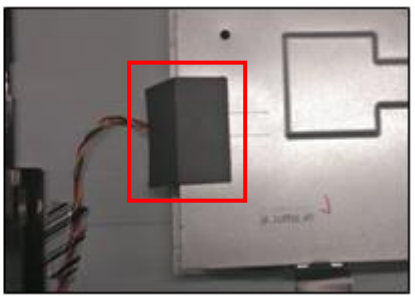
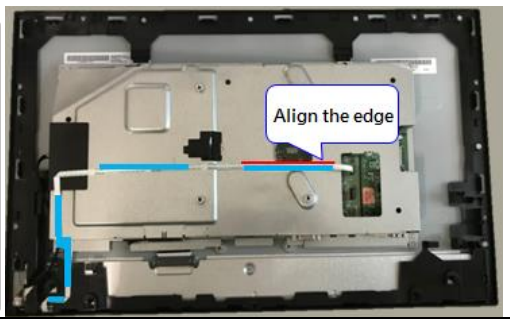
PICTURE 1 PICTURE 2 PICTURE 3





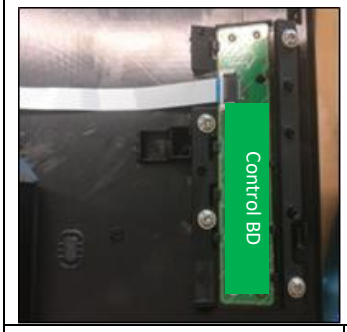
S4 Assemble the lamp wire	Insert the big connector of the lamp wire to the P/BD .Stick 1 piece BOPP tape to fasten the lamp wire as the picture 1. Affix a Mylar on the left hole of the SHD as the picture 2. Tear off the four gums on the FFC LED. Stick the FFC LED on regular mark wire on the SHD as the picture 3. Insert the FFC LED into the I/F BD

PICTURE 1 PICTURE 2 PICTURE 3

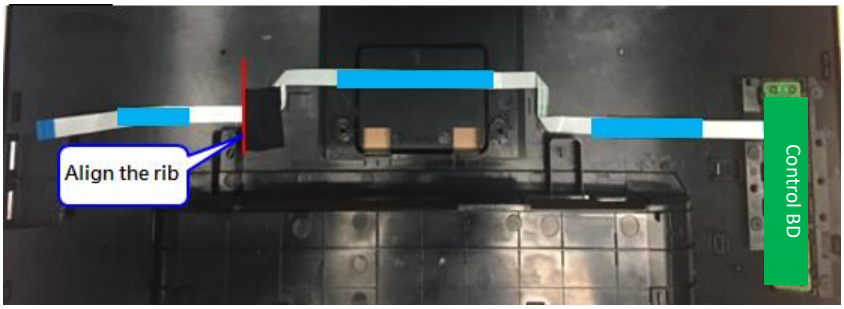




S5 Assemble the Ctrl PCBA on RC.	Assemble FFC Ctrl to the Ctrl PCBA as picture 1. Assemble Control BD to the RC. Tear off the gums on the FFC Ctrl and stick the FFC Ctrl on the RC. Stick 1 piece adhesive tape on the point of inflexion of the FFC Ctrl as picture 2.

PICTURE 1

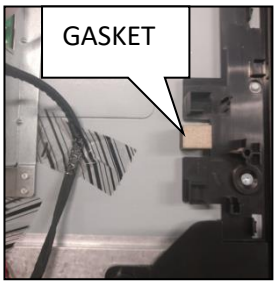


PICTURE 2

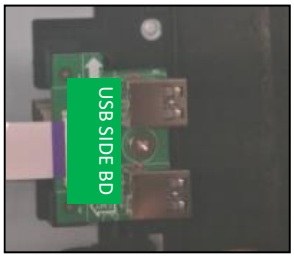


S6 Assemble the USB SIDE BD on MF.	Stick a gasket on the back of panel as picture 1. Assemble USB-FFC to the USB SIDE BD as picture 2. Assemble the USB-BD on the MF. Lock one screw to the USB SIDE BD. Tear off the gum of the USB-FFC and insert the USB-FFC another end into the USB-BD. Stick USB-FFC on the panel as picture 3. Affix a Mylar on the right hole of the SHD as picture 4.

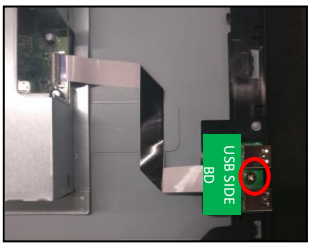
PICTURE 1



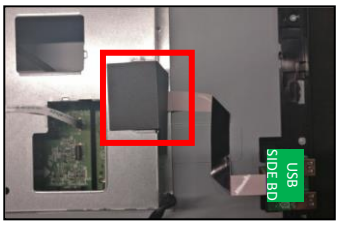
PICTURE 2



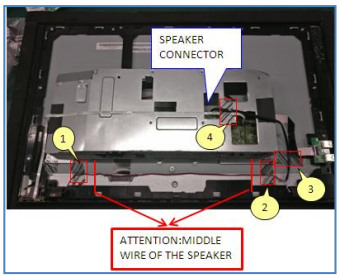
PICTURE 3



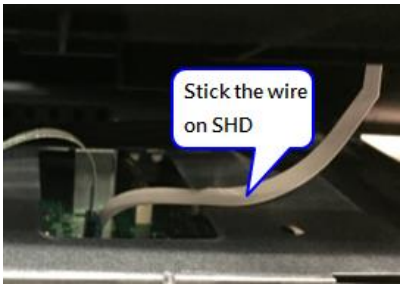
PICTURE 4

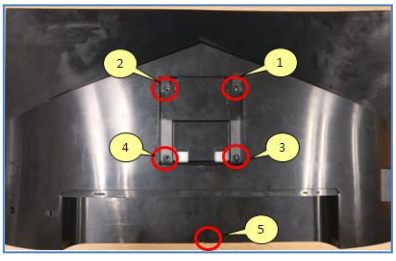


S7 Assemble the speaker on the MF	Insert the speaker connect to the I/F BD as the picture. Arrange the wire of the speaker (Attention: Keep the speaker wire straight, and the middle of the speaker wire is not allowed to be placed on the step of the panel.) Tear four BOPP tapes and stick them on the back of the panel to fasten the speaker wire as the picture.



S8 Assemble the RC, stand and base	Insert the FFC Crtl into the BD. Stick the FFC Ctrl on the SHD. Assemble the RC to the MF. Lock 5 RC screws. Assemble the column and base on the RC.





5. Troubleshooting

TROUBLESHOOTING

Before sending your LCD monitor for servicing, please check the trouble-shooting list below to see if you can self-diagnose the problem.

(VGA Mode)

Problems	Current Status	Remedy
No Picture	LED ON	• Using OSD, adjust brightness and contrast to maximum or reset to their default settings.
	LED OFF	• Check the power switch.
		• Check if AC power cord is properly connected to the monitor.
	LED displays amber color	• Check if video signal cable is properly connected at the back of monitor.
		• Check if the power of computer system is ON.
Abnormal Picture	Unstable Picture	• Check if the specification of graphics adapter and monitor is in compliance which may be causing the input signal frequency mismatch.
	Display is missing, center shift, or too small or too large in display size	• Using OSD, adjust RESOLUTION, CLOCK, CLOCK-PHASE, H-POSITION and V-POSITION with non-standard signals.
		• Using OSD, in case of missing full-screen image, please select other resolution or other vertical refresh timing. • Using OSD, in case of missing full-screen image, please select other resolution or other vertical refresh timing. • Wait for a few seconds after adjusting the size of the image before changing or disconnecting the signal cable or powering OFF the monitor.
Abnormal Sound (Only Audio-Input model) (Optional)	No sound, or sound level is too low	• Check the audio cable with the host PC is connected.
		• Check if the volume setup of the host PC is in minimum position and try to raise the volume level.

(HDMI/DP Mode)

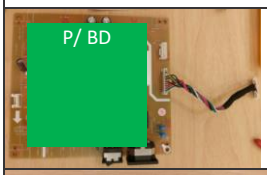
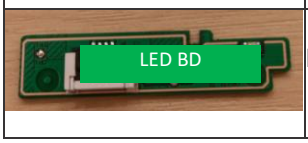
Problems	Current Status	Remedy
No Picture	LED ON	• Using OSD, adjust brightness and contrast to maximum or reset to their default settings.
	LED OFF	• Check the power switch.
		• Check if AC power cord is properly connected to the monitor.
	LED displays amber color	• Check if video signal cable is properly connected at the back of monitor.
		• Check if the power of computer system is ON.
Abnormal Sound (Only Audio-Input model) (Optional)	No sound, or sound level is too low	• Check the audio cable with the host PC is connected.
		• Check if the volume setup of the host PC is in minimum position and try to raise the volume level.

6. FRU List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of ACER B247W. 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 AUTHORIZED SERVICE PROVIDERS, your 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 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 office on how to return it.

Category	ACER DESCRIPTION	Description	PART NO.
LCD			
	LED LCD Panel AUO 24" WUXGA None Glare M240UAN02.0 00 1000:1 14ms 300nits	LCDM 24W M240UAN02.0 00 Z	KL.24005.032
BOARD			
	MAIN BOARD 1A1H1DP+S USB B247W	PCBA IF BD MI ADH+S USB B247W	55.TD3M3.001
	POWER BOARD USB+SPK WITH WIRE	PCBA SPS BD MI USB+SPK B247W	55.TD3M3.002
	FUNCTION KEY BOARD WITH BUTTON	PCBA CTRL BD MI B277	55.TBTM3.003
	USB BOARD	PCBA USB BD MI B277	55.TBTM3.004
	USB SIDE BOARD	PCBA USB SIDE BD MI B277	55.TBTM3.005
	LED BOARD	PCBA LED BD SMD B277	55.TBTM3.006