ACER Monitor_SA270

LIFECYCLE EXTENSION GUIDE





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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 exposed in extremely high humility environment.

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

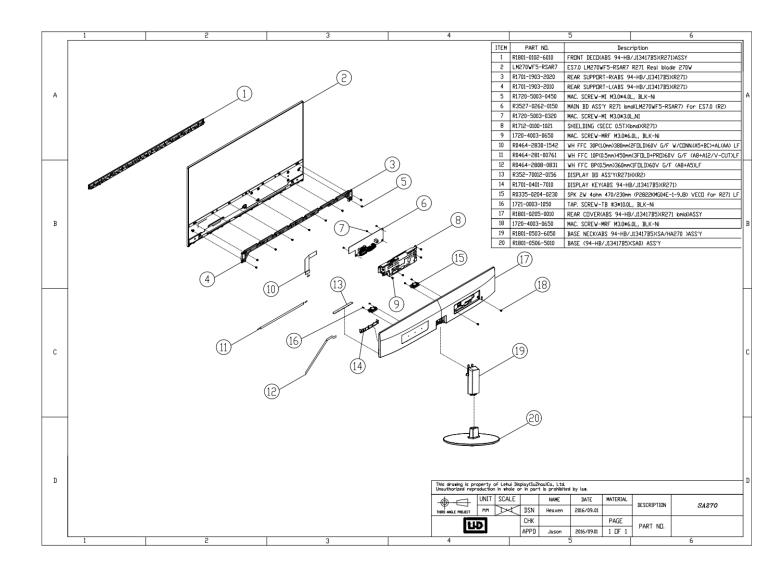
! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

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

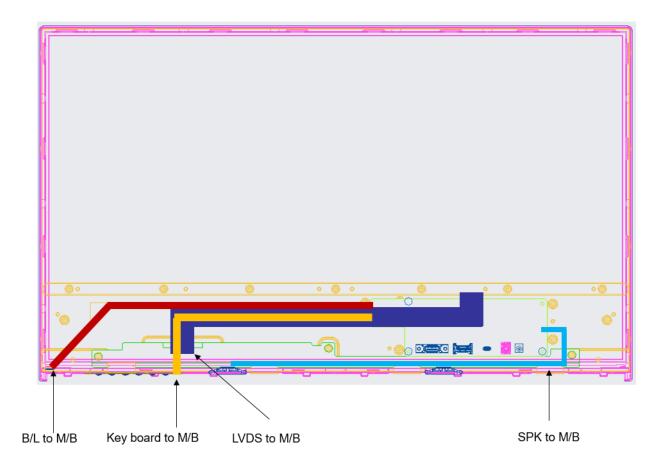
! Using Lead-Free solder to well mounted the parts.

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

1. Exploded Diagram



2. Wiring Connectivity diagram



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
- Knife
- glove
- cleaning cloth
- ESD protection

4. Assembly and Disassembly Procedures

Disassembly Procedure
Step. 1 Pull the base & stand assembly out



Step.2 Unscrew two screws at the I/O area



Disassemble rear cover by a thin plastic tool from a slot at the bottom of rear cover Step.3



Step 4. Pull up the rear cover and pull out all connectors

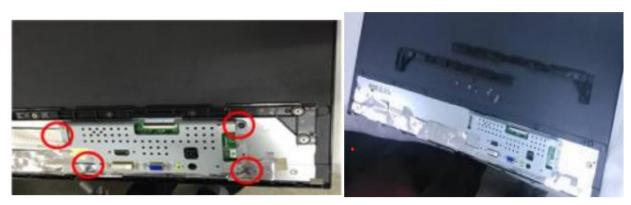


Step.5 Disassemble deco cover.



Step.6 Unscrew screws on main shielding case and disassemble Frame L&R.

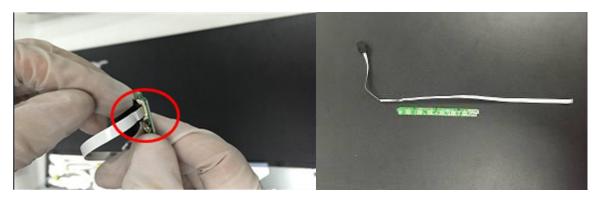




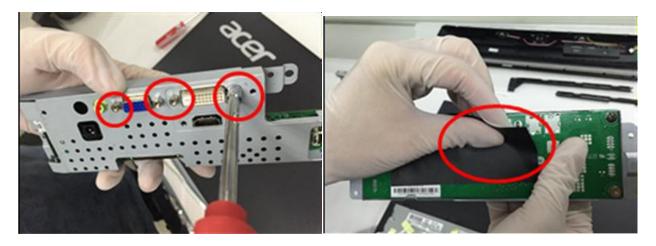
Step.7 Remove F/B and take out the LCM, then separate Key board from F/B and LVDS cable from LCM



Step.8 Remove FFC from display board

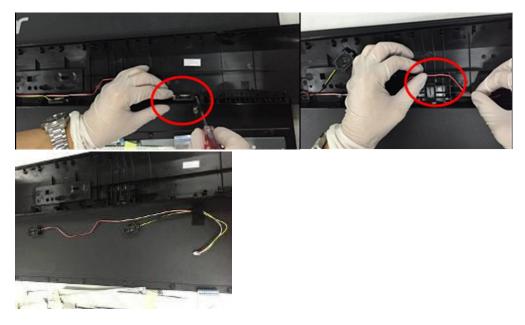


Step.9 Unscrew four hex nuts and six screws and remove main board PCBA from main shielding.





Step.10 Disassemble rear cover assembly



Step11. Unscrew two screws and separate base &neck assembly



Step12. Remove one screw and separate all silicon rubbers



Step.13 Unscrew two screws and separate all small parts



> Assembly Procedure

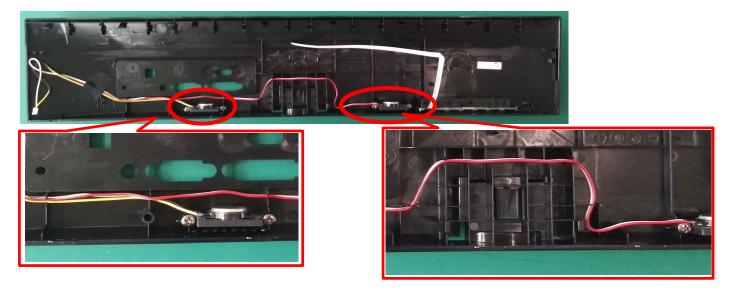
Step1. Assembly 8pin FFC to key board



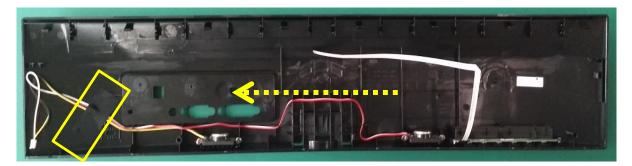
Step2. Assembly key board to rear cover



Step3. If with speaker model, assembly speaker in rear cover and lock screw to fix.



Step4. Tape speaker cable with acetate cloth tape (in yellow circle).



Step5. Assemble deco cover to panel.



Step6. Assemble main board into shielding and put MB on panel side



Step7. Assemble frame L&R and lock crews to fix

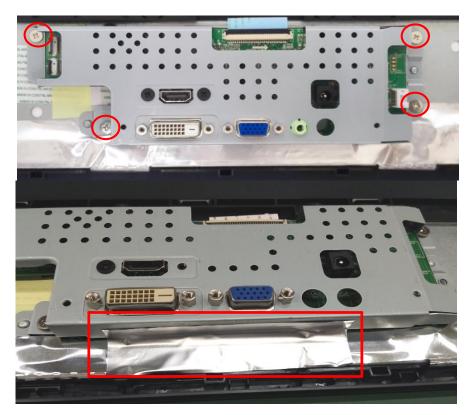




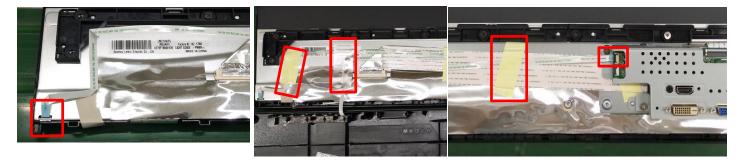
Step8. Insert 30pin LVDS to panel and MB



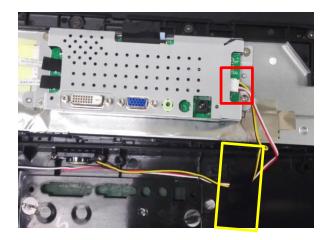
Step9. Lock crews to fix MB and use tape to tape cables



Step10. Insert 10pin FFC to panel and MB, use yellow and AL tape to fix.



Step11. Insert speaker cable to main board , use acetate cloth tape to fix.



Step12. Insert 8pin FFC to MB .



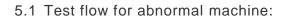
Step13. Assembly rear cover, and push around the surrounding to assembly well.



Step14. Lock rear cover screw (in red circle)

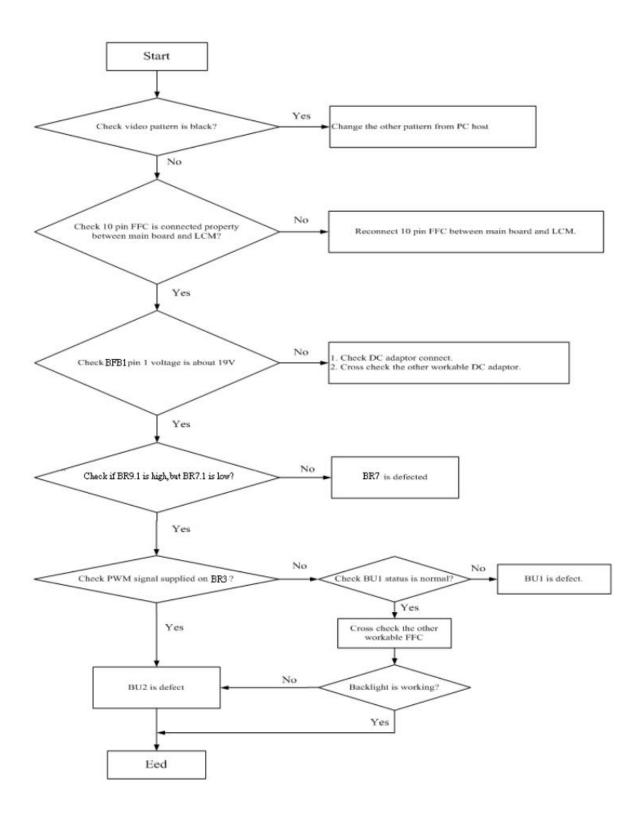


5. Troubleshooting

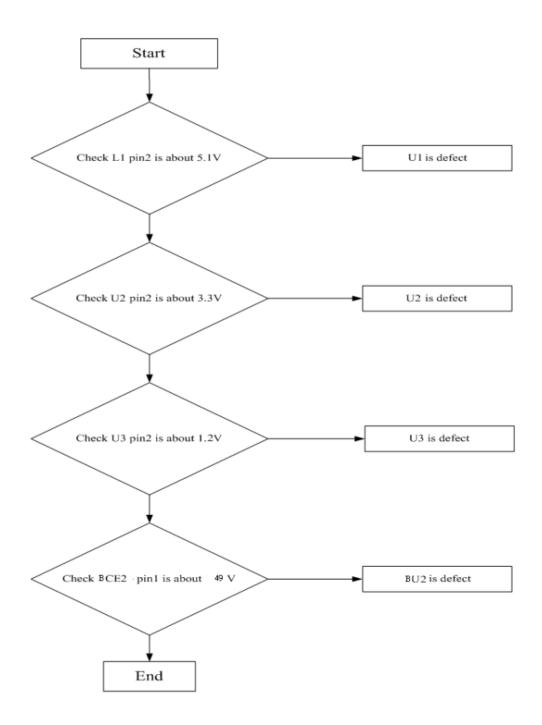




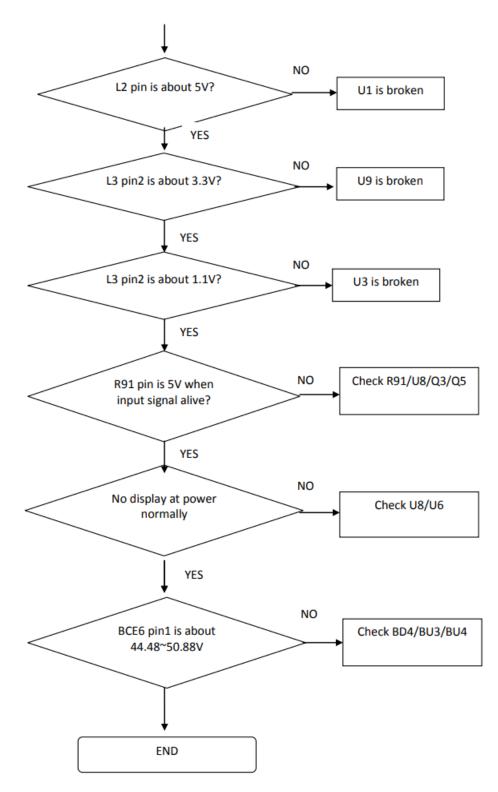
5.2 LED backlight debug flow(bid/bmid):



5.3 Power debug flow(bid/bmid):



5.4 Main board debug flow(bd/bmd)



6. FRU (Field Replaceable Unit) List

Parts Photo	SPL_Category	Acer PN 👻	Raken PN	ODM Description
	ADAPTER	25.T93M5.002	R030070133002	A-D adapter 3.42 A 19V ADP-65DE BU (5.5x1.7x 9 mm_90°_1500mm)
	ADAPTER	25.T0LM5.002	R030070131475	A-D adapter 1.58 A 19V ADS-40SI-19-3 19030E(VI) _ ACER G247HYL
	BOARD	55.T93M5.012	R352722820150	MAIN BD ASS'Y SA270 bmipux freesync+VRB ES8.0BA+ES7.0BLU ES logo
	BOARD	55.T93M5.014	R352722420150	MAIN BD ASS'Y SA270 bi freesync ES8.0BA+ES7.0BLU no ES logo
· · · · · · · · · · · · · · · · · · ·	BOARD	55.TERM5.002	R352701020156	DISPLAY BD ASS'Y(Aopen ML2)
	CABLE	50.T7AM5.001	R046728080821	WH FFC 8P(0.5mm)320mm(1FOLD)60V G/F (A8+A5)LF
,	CABLE	50.T7AM5.002	R046728100752	WH FFC 10P(0.5mm)415mm(3FOLD+PRO)60V G/F (A8+A12/V-CUT)LF
Sector Sector	CABLE	50.T60M5.012	R046728302010	WH FFC 30P(1.0mm)300mm(2FOLD)60V G/F W/CONN (A5+BC)+AL(AA)LF IP
2007	FAN SINK/SPEAK/EARPHONE/ RTC	23.T6LM5.001	R033502040230	SPK 2W 4ohm 470/230mm (P2822KMG04E-1-9JB) VECO for R271 LF
	LCD(black)	KL.27002.020	R352702220395	LCM ASS'Y ACER SA270 (ES8.0 LM270WF5-RSARB)