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.

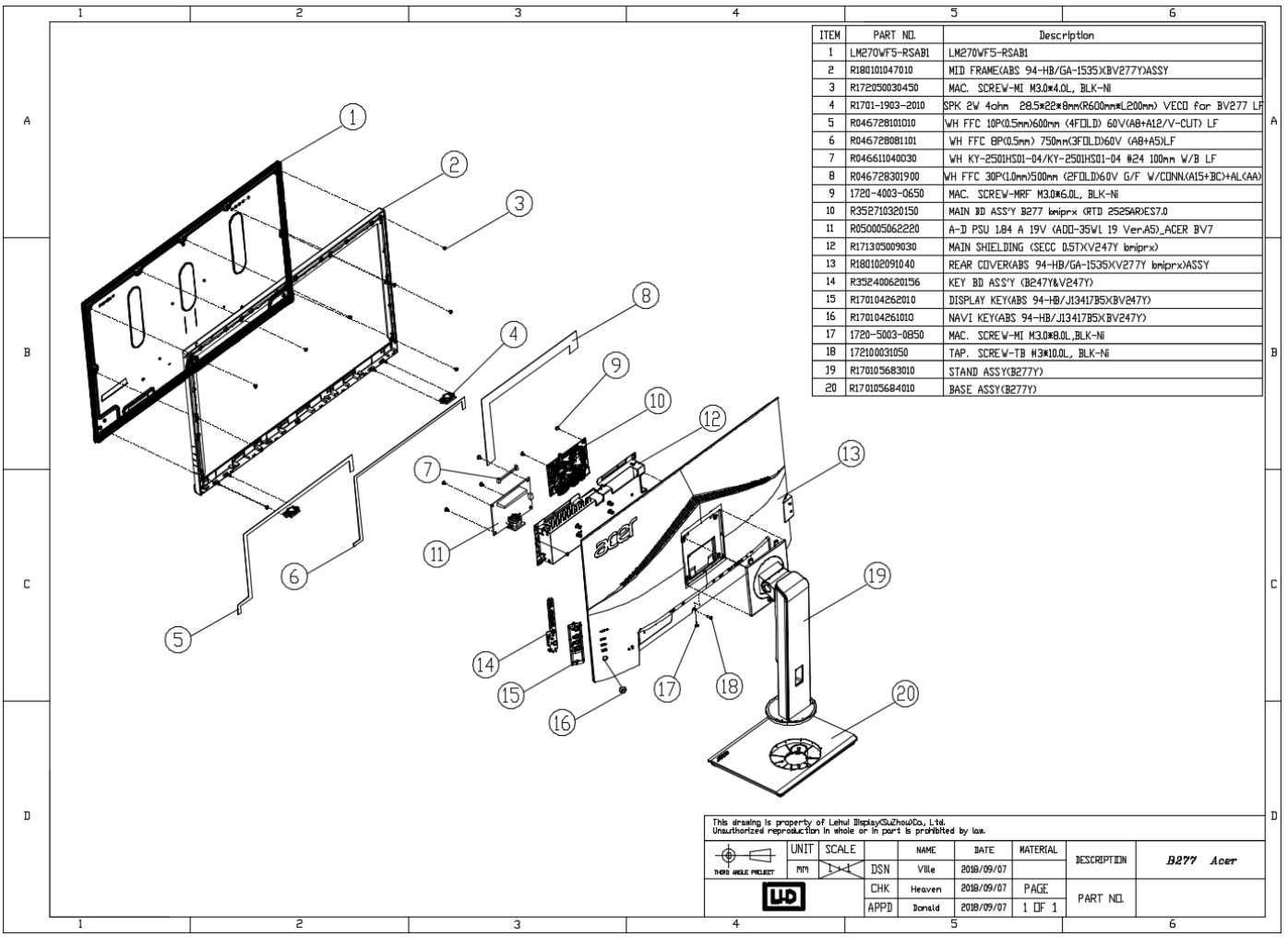
! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

! 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.

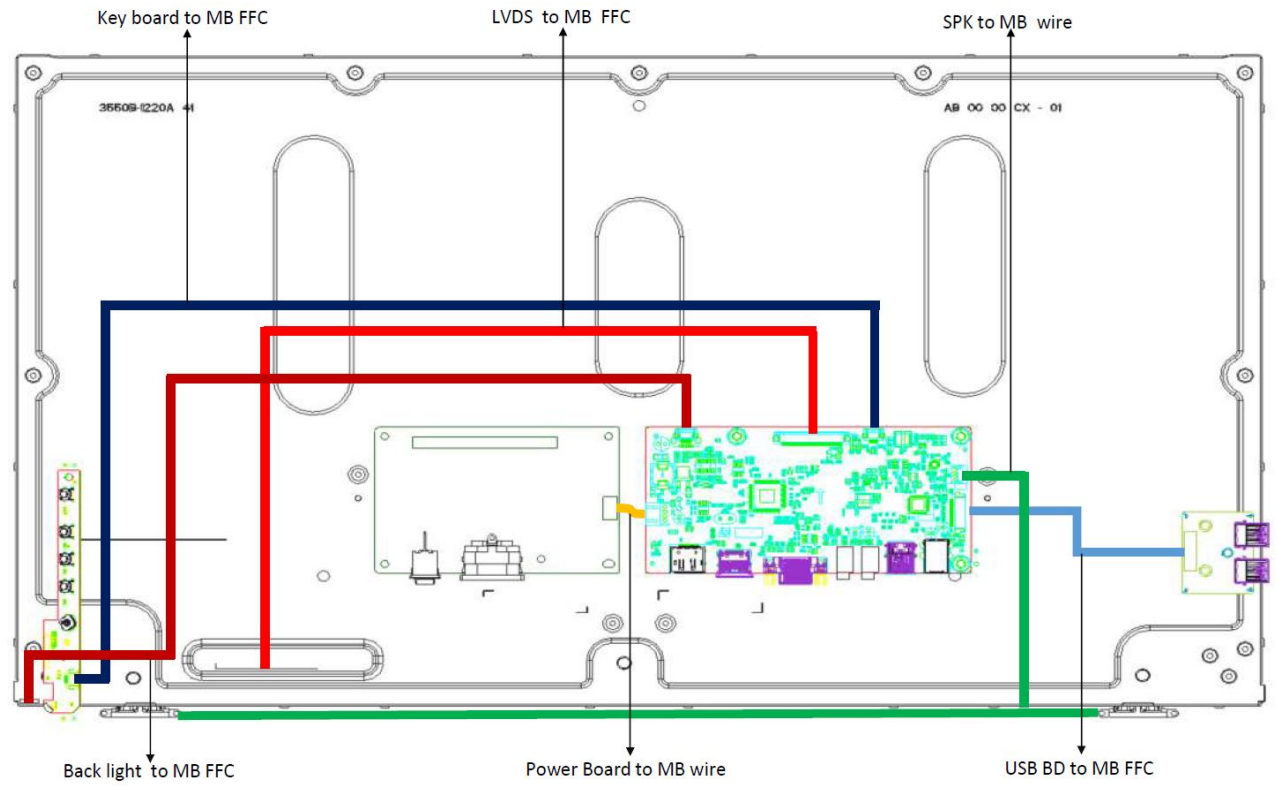
1. Exploded Diagram



ITEM	PART NO.	Description
1	LM270WF5-RSAB1	LM270WF5-RSAB1
2	R180101047010	MID FRAME(ABS 94-HB/GA-1535)(BV277Y)ASSY
3	R172050030450	MAC. SCREW-MI M3.0*4.0L, BLK-Ni
4	R1701-1903-2010	SPK 2W 4ohm 28.5*22*8mm(R600mm*L200mm) VECO for BV277 LF
5	R046728101010	WH FFC 10P(0.5mm)600mm (4FOLD) 60V(A8+A12/V-CUT) LF
6	R046728081101	WH FFC 8P(0.5mm) 750mm(3FOLD)60V (A8+A5)LF
7	R046611040030	WH KY-2501HS01-04/KY-2501HS01-04 #24 100mm W/B LF
8	R046728301900	WH FFC 30P(1.0mm)500mm (2FOLD)60V G/F W/CONN.(A15+BC)+AL(AA)
9	1720-4003-0650	MAC. SCREW-MRF M3.0*6.0L, BLK-Ni
10	R352710320150	MAIN BD ASS'Y B277 bmiprx (RTD 2525AR)ES7.0
11	R050005062220	A-D PSU 1.84 A 19V (ADD-35W1 19 Ver.A5)_ACER BV7
12	R171305009030	MAIN SHIELDING (SECC 0.5T)(V247Y bmiprx)
13	R180102091040	REAR COVER(ABS 94-HB/GA-1535)(V277Y bmiprx)ASSY
14	R352400620156	KEY BD ASS'Y (B247Y&V247Y)
15	R170104262010	DISPLAY KEY(ABS 94-HB/J13417B5)(BV247Y)
16	R170104261010	NAVI KEY(ABS 94-HB/J13417B5)(BV247Y)
17	1720-5003-0850	MAC. SCREW-MI M3.0*8.0L,BLK-Ni
18	172100031050	TAP. SCREW-TB H3*10.0L, BLK-Ni
19	R170105683010	STAND ASSY(B277Y)
20	R170105684010	BASE ASSY(B277Y)

	UNIT	SCALE		NAME	DATE	MATERIAL	DESCRIPTION	B277 Acer
THIRD ANGLE PROJECT	MM	1/4	DSN	Ville	2018/09/07			
LD			CHK	Heaven	2018/09/07	PAGE	PART NO.	
			APPD	Donald	2018/09/07	1 OF 1		

2. Wiring Connectivity diagram



If without USB hub sku, just ignore USB board and USB board to main board FFC.

3. Mechanical Instruction

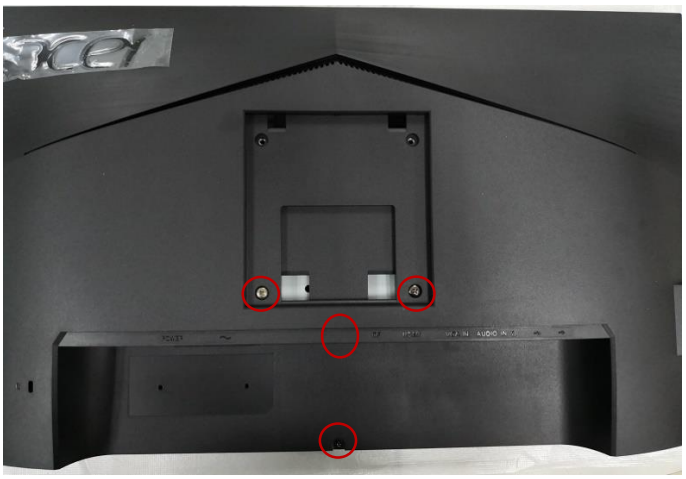
Tools Required
List the type and size of the tools that would typically can be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.
Tool Description:
- working table
- Screw-driver
- Knife
- glove
- cleaning cloth
- ESD protection

4. Assembly and Disassembly Procedures

➢ Disassembly Procedure

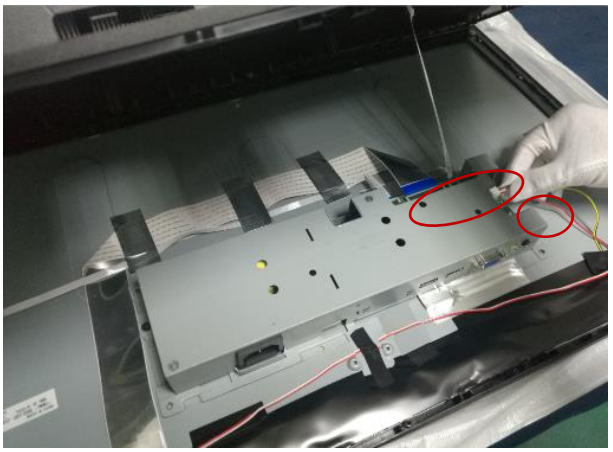
Step. 1 Pull the base & stand assembly out

Step.2 Unscrew four screws

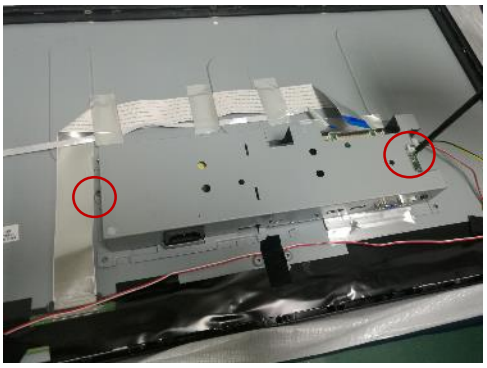


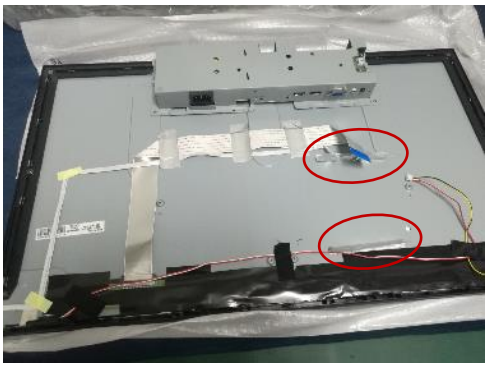
Step.3 Separate hooks between MID_FRAME and R/C

Step 4. Pull up the Rear Cover and pull out all connectors

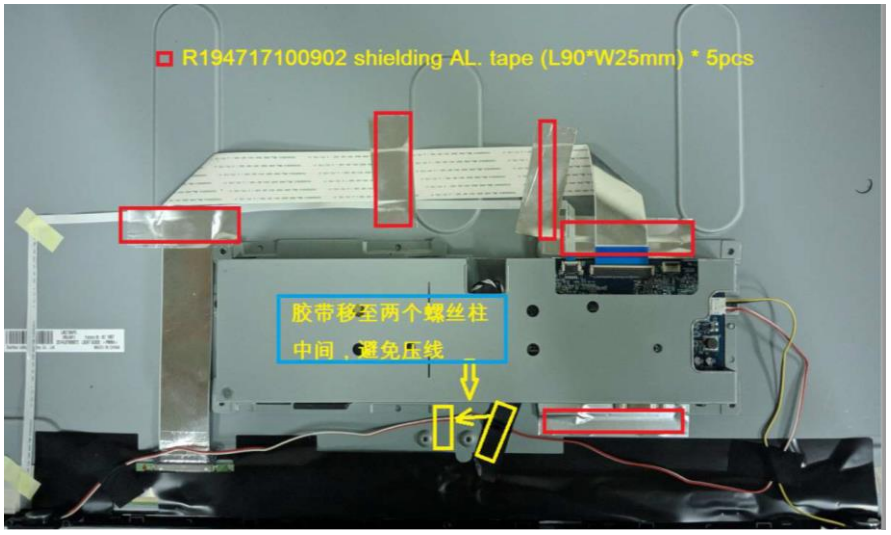


Step.5 Unscrew screws on main shielding and disassemble AL tape

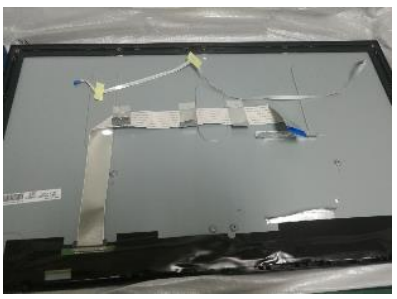




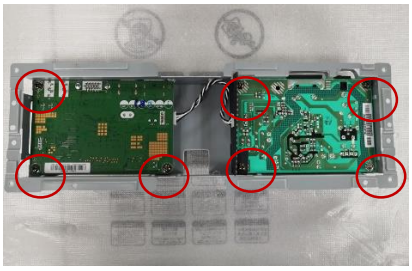
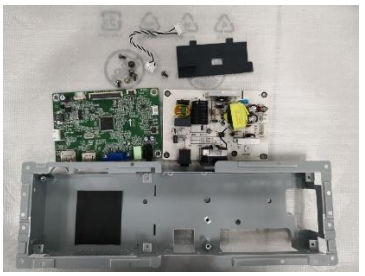
Detail AL. tape location as below:



Step.6 separate speaker from MID_FRAME and LVDS & Backlight FFC from LCM



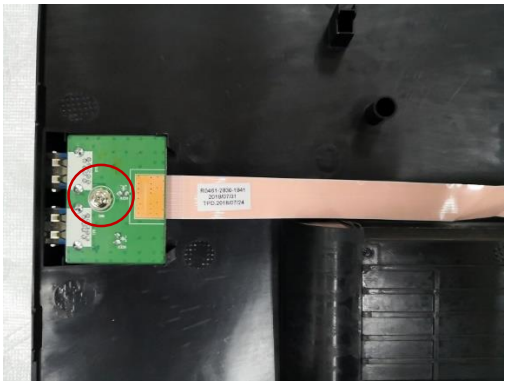
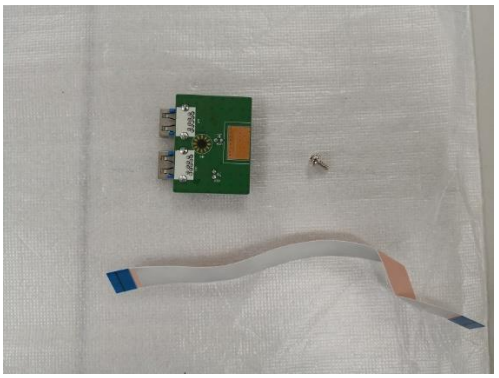
Step.7 Unscrew two hex nuts and seven screws and remove main board PCBA from main shielding.

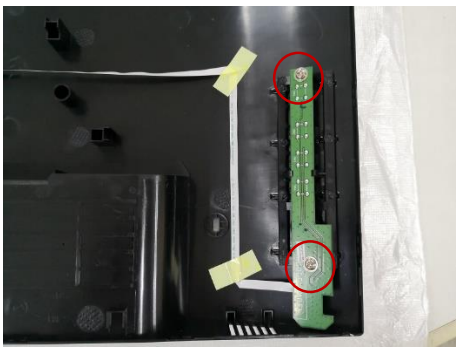
Step.8 Unscrew eleven screws and separate MID FRAME and LCM

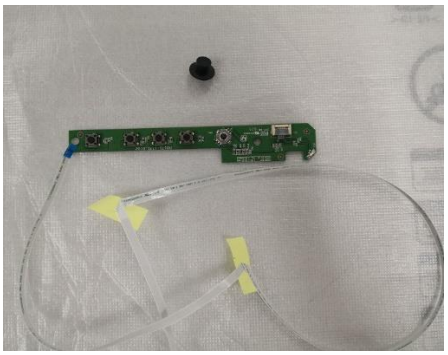

Step.9 Separate lens from MID frame


Step.10 Unscrew one screw and disassemble USB board from rear cover and separate USB & cable

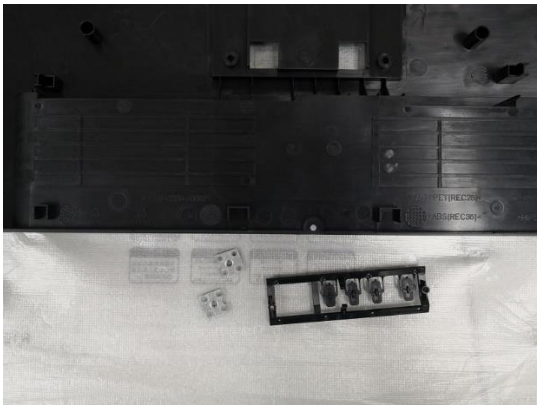



Step.11 Unscrew two screws and disassemble key board from rear cover and separate navi key& cable





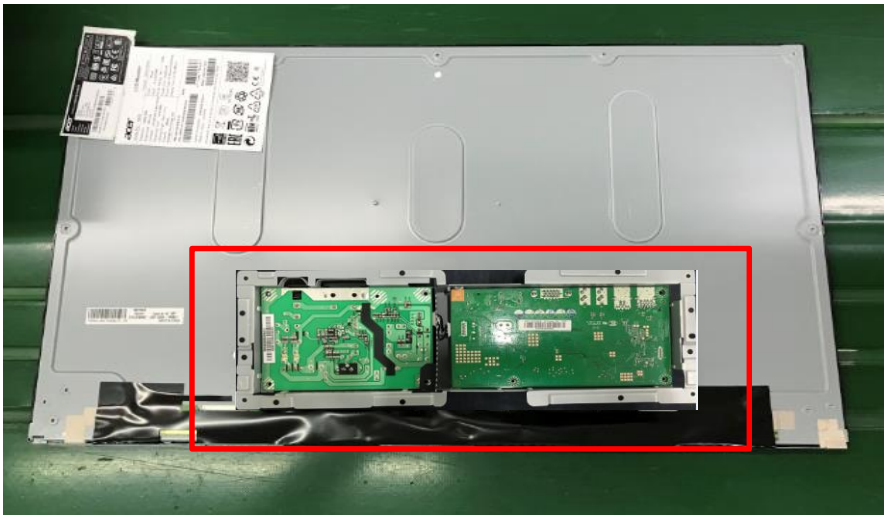
Step.12 Separate wall-mount BKT and display key from rear cover



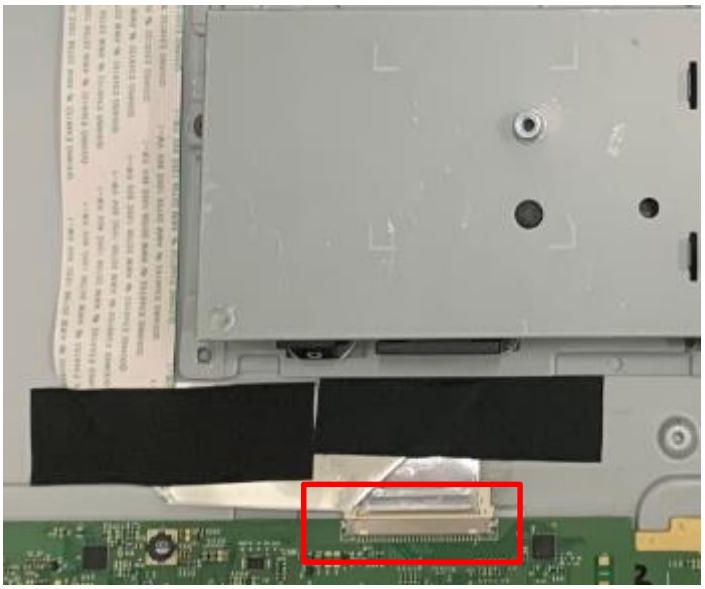
Step.13 Unscrew two screws and separate base & stand assembly

➢ Assembly Procedure

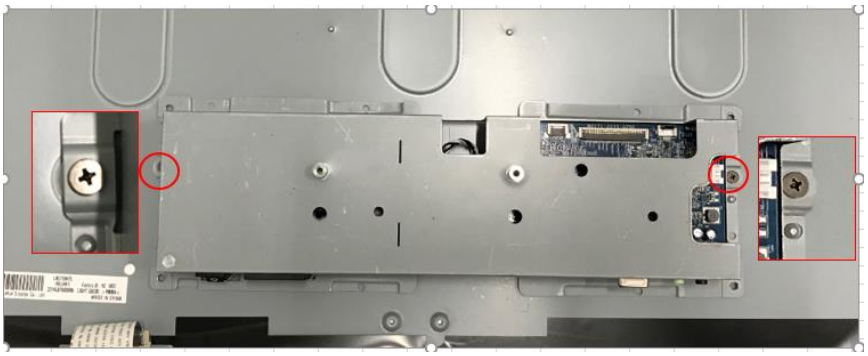
Step1. Assembly main board into shielding, use screw to fix. Assembly main board on LCM.



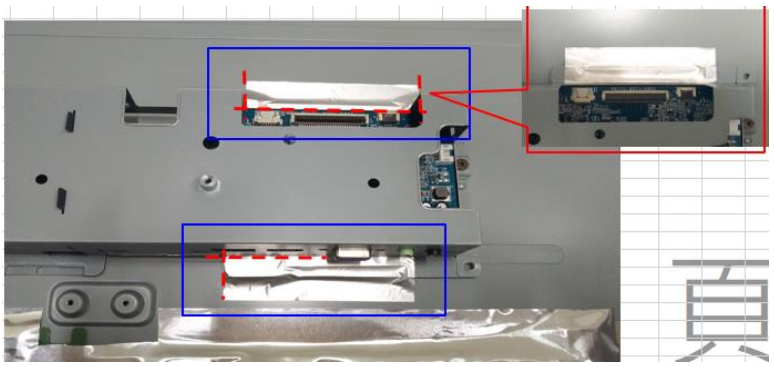
Step2. Insert 30 pin LVDS FFC to LCM, then use acetate cloth tape to tape FFC.



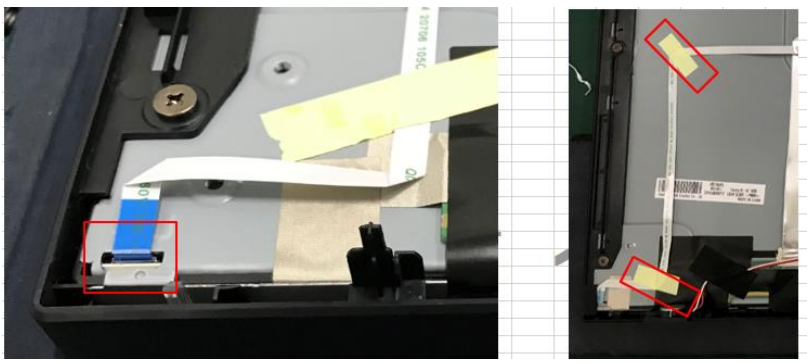
Step3. Lock the shielding on panel with screw. (in red circle)



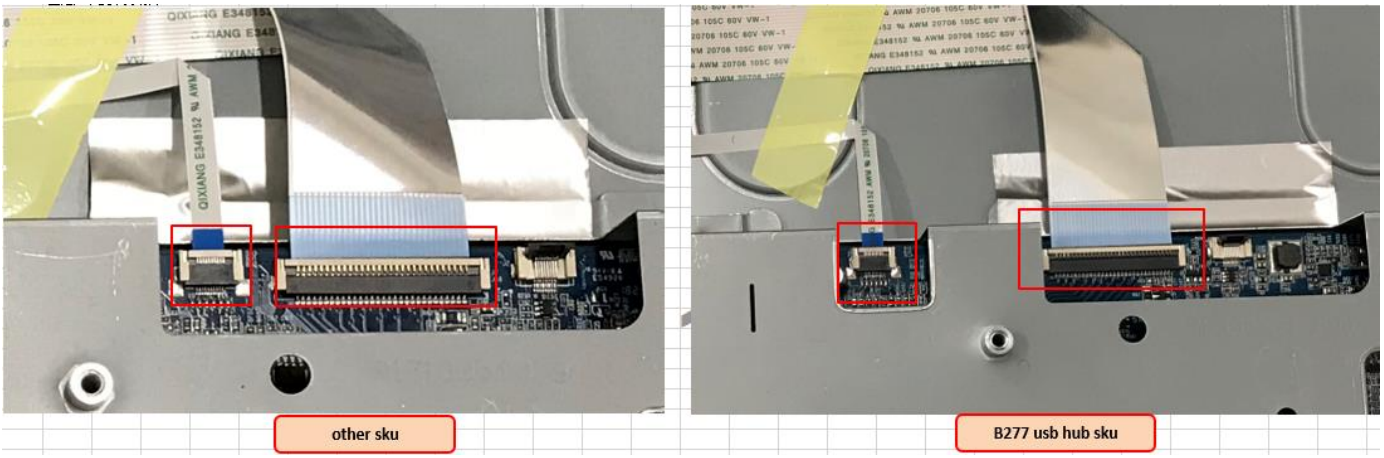
Step4. Use Al tape to fix shielding (tape in blue circle).



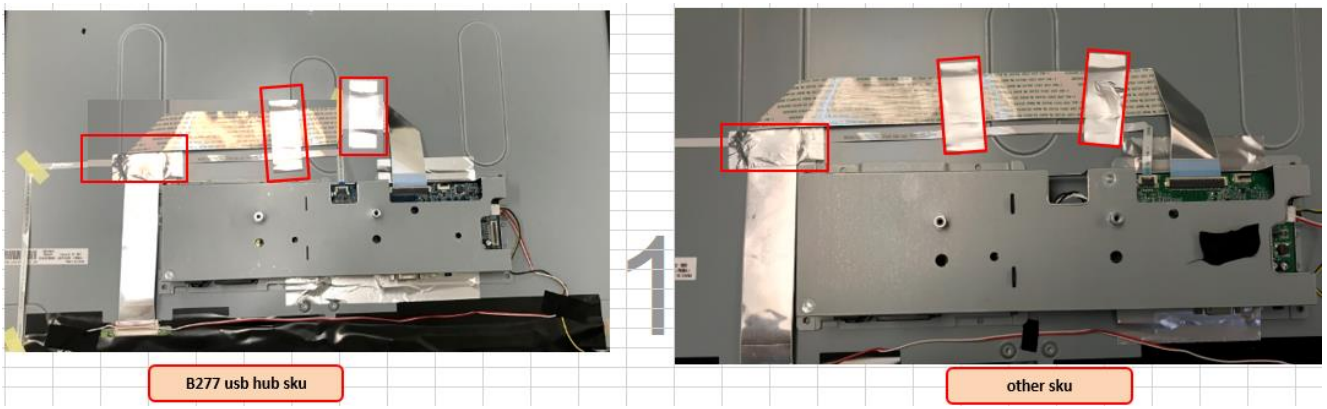
Step5. Insert 10 pin back light FFC to panel and main board, use yellow tape to fix. (Tape in red circle).



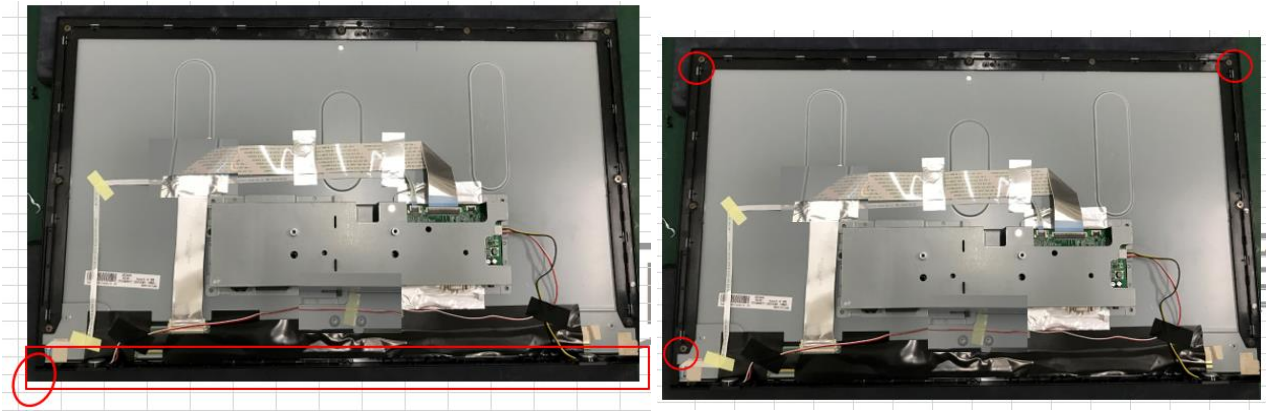
Step6. Insert 10 pin back light FFC and 30 pin LVDS FFC to main board. Use yellow tape to fix.



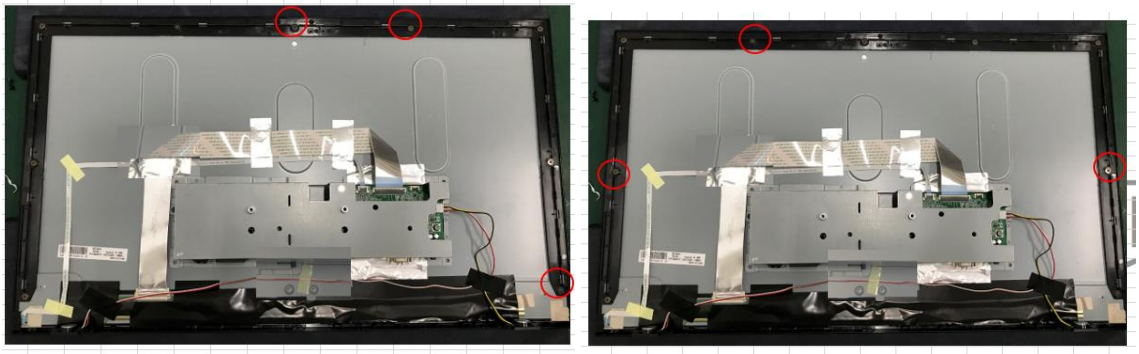
Step7. Tape AL tape to fix FFC. (Tape in red circle).



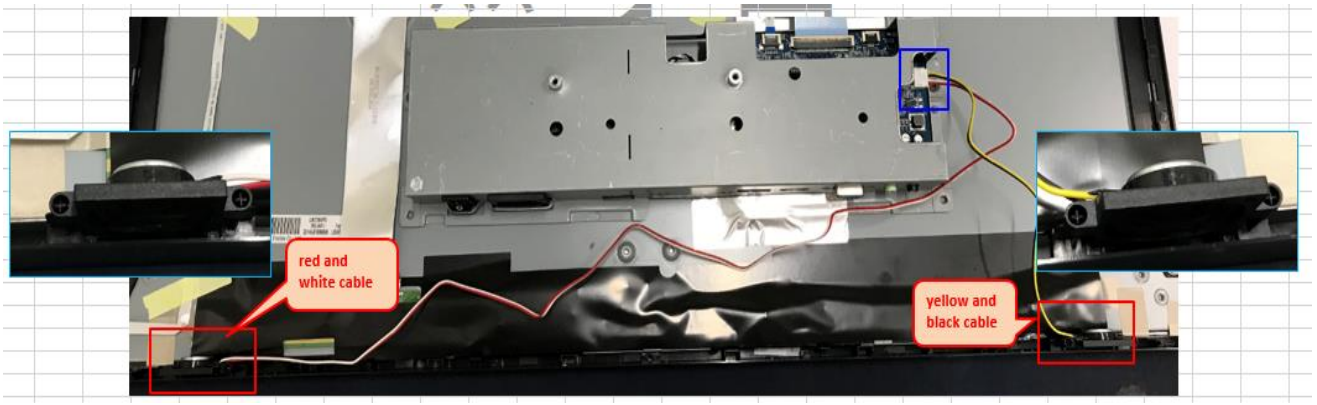
Step8. Assembly middle frame with LCM and fix screw (in red circle)



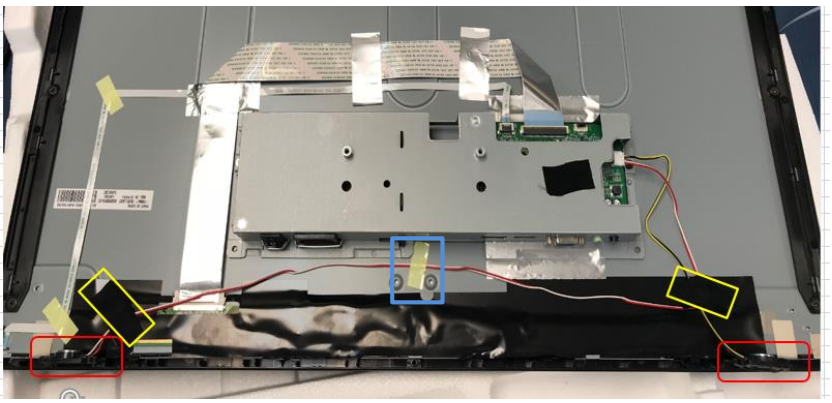
Step9. Lock middle frame screw (in red circle)



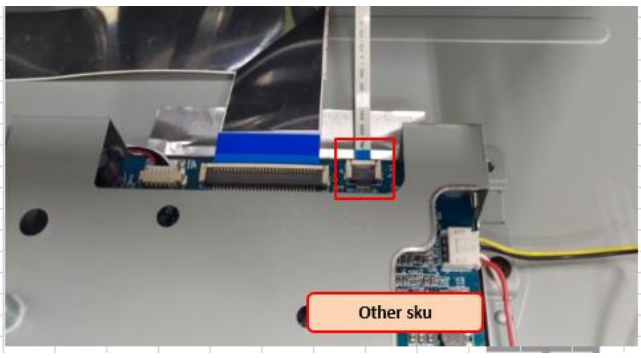
Step10. If with speaker model, assembly speaker on middle frame, and assembly speaker cable on main board. (red and white cable is on left side, yellow and black is on right side.)

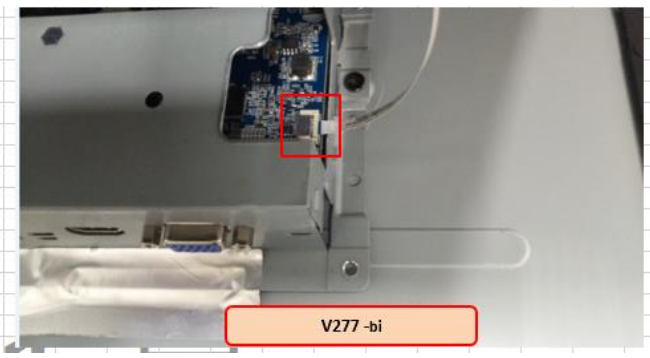


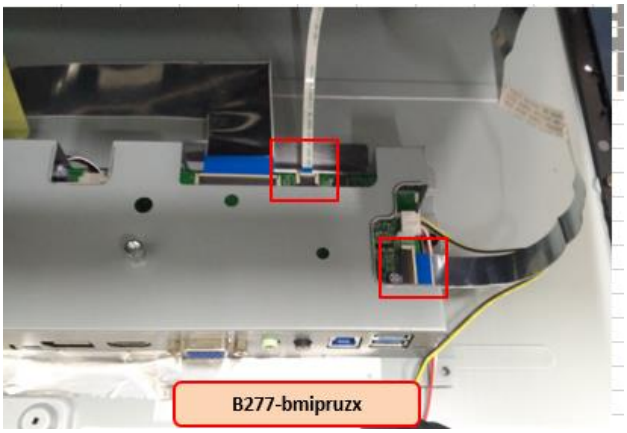
Step11. Tape speaker cable with acetate cloth tape (in yellow circle) and yellow tape (in blue circle).



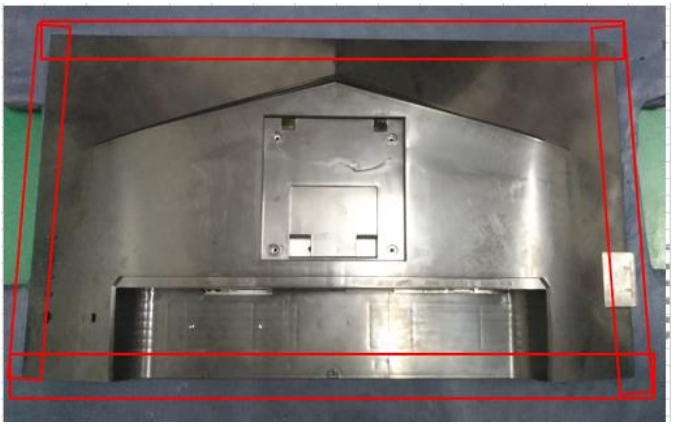
Step12. Insert key board FFC on main board, B277 with hub model also need to insert USB FFC on main board.







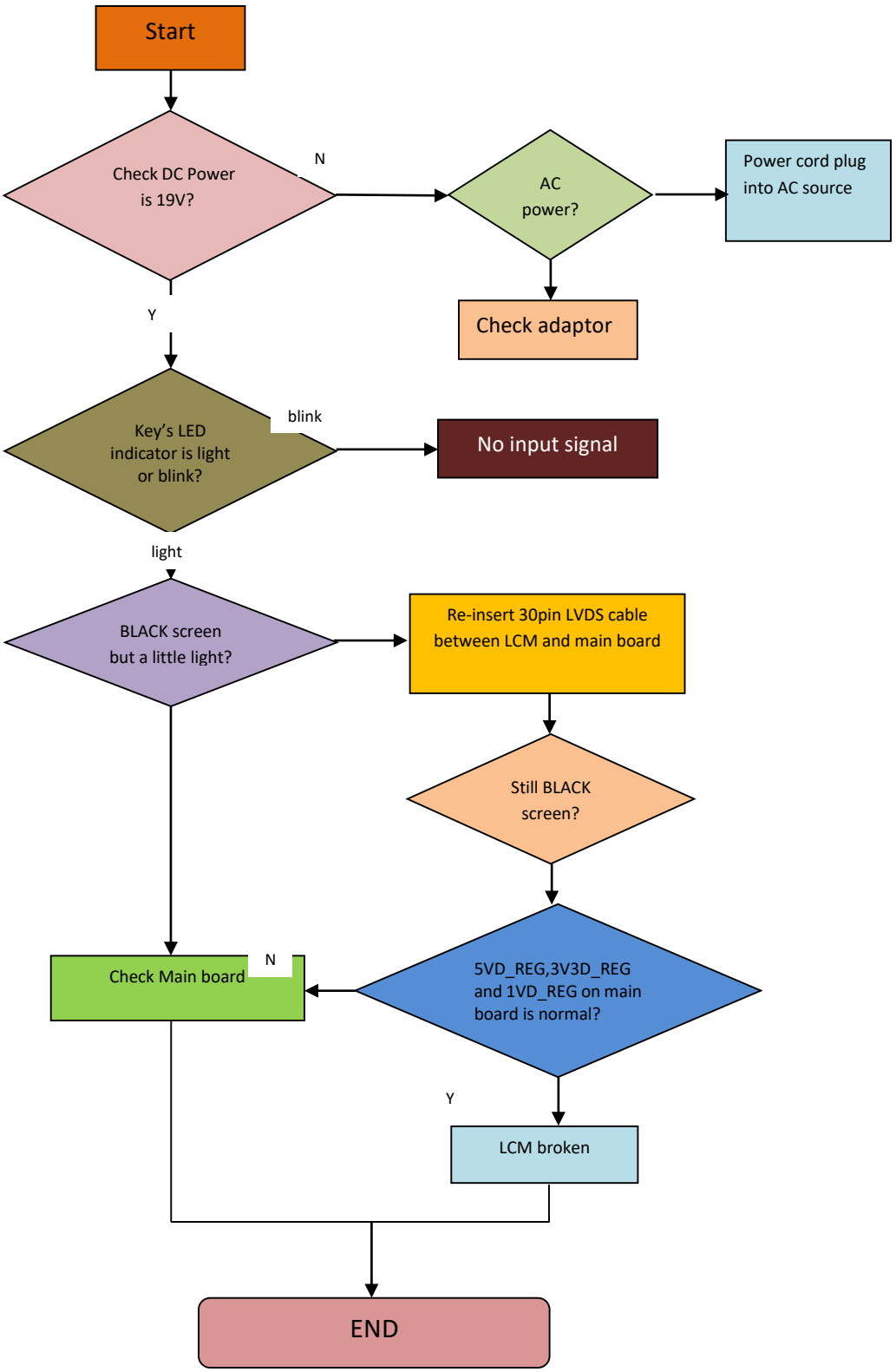
Step13.Assembly rear cover, and push around the surrounding to assembly well.



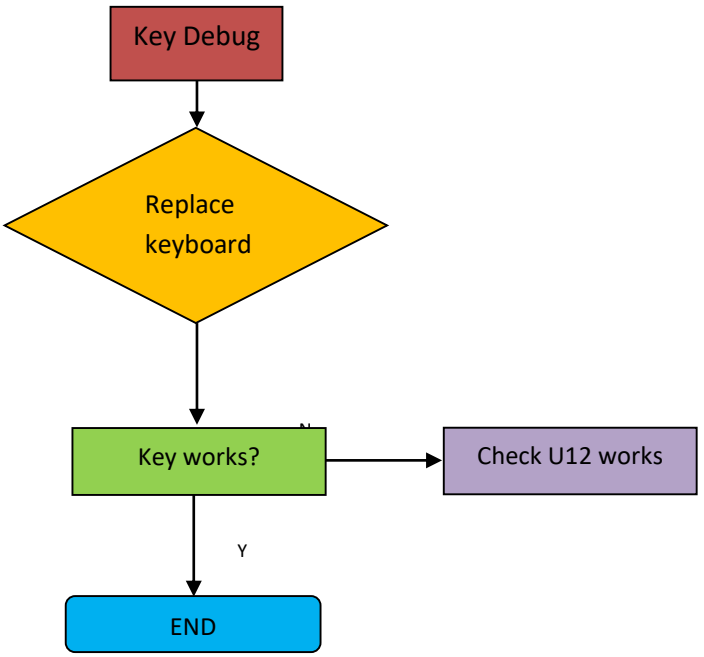
Step14. Lock the screw on rear cover (in red circle).

5. Troubleshooting

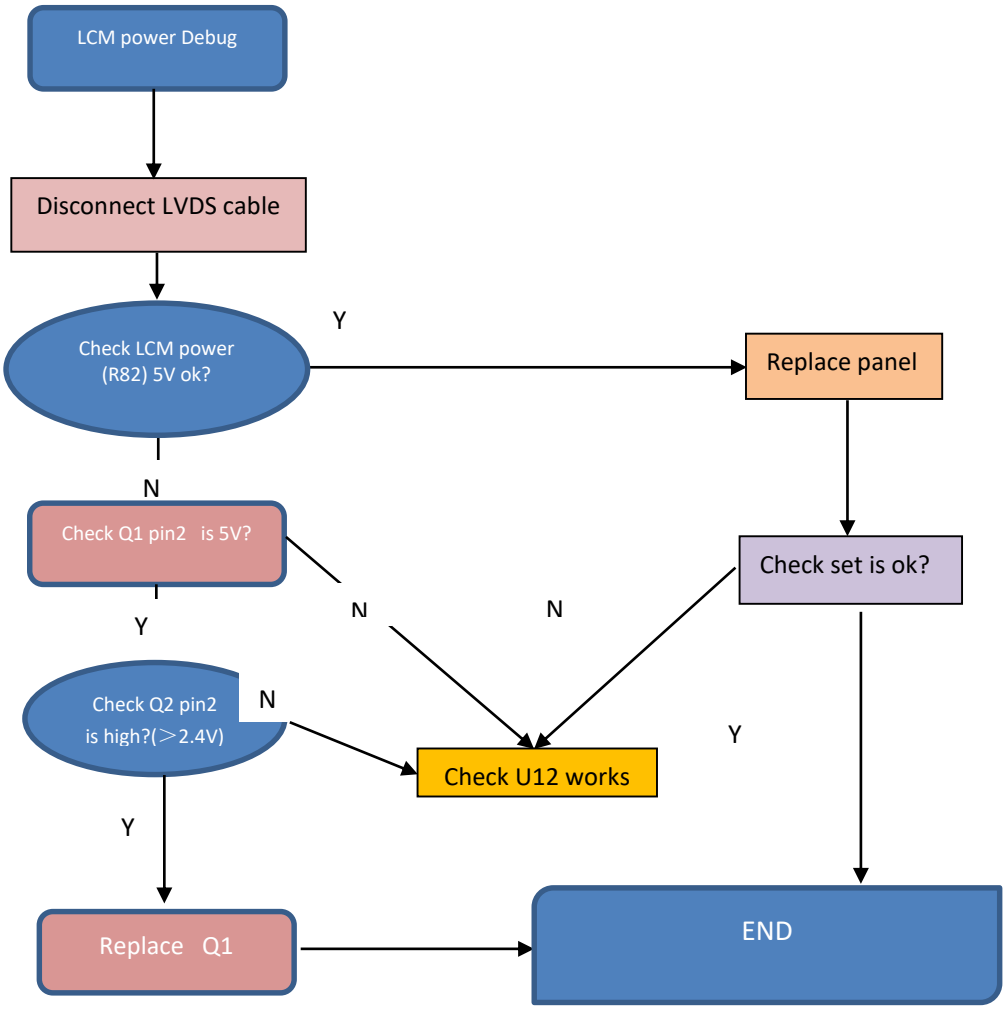
5.1 Test flow for abnormal machine:



5.2 key debug flow:

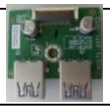


5.3 Panel debug flow:



5.4 LED backlight debug flow：

6. FRU (Field Replaceable Unit) List

Parts Photo	SPL_Category	Acer PN	Raken PN	ODM Description
	INVERTER / Power BD	55.TFPM5.001	R050005062200	A-D PSU 2.63 A 19V (ADO-50W1-S 19)_ACER BV7
	INVERTER / Power BD	55.TFPM5.002	R050005062220	A-D PSU 1.84 A 19V (ADO-35W1 19 Ver.A5)_ACER BV7
	BOARD	55.TFPM5.003	R352710420150	MAIN BD ASS'Y B277 bmipzx (RTD2525AR)ES7.0
	BOARD	55.TFPM5.004	R352710320150	MAIN BD ASS'Y B277 bmipx (RTD 2525AR)ES7.0
	BOARD	55.TFPM5.005	R352712820150	MAIN BD ASS'Y BOM_B277 bmix_PVT
	BOARD	55.TFKM5.004	R352400620156	KEY BD ASS'Y (B247Y&V247Y)
	BOARD	55.TFJM5.005	R352400220138	USB BD ASS'Y(Acer BV247Y)
	CABLE	50.TFJM5.001	R046611040041	WH KY-2501HS01-04/KY-2501HS01-04 #24 50mm W/B LF
	CABLE	50.TFQM5.002	R046728081101	WH FFC 8P(0.5mm) 750mm(3FOLD)60V (A8+A5)LF
	CABLE	50.TFPM5.001	R046128101020	WH FFC 10P(0.5mm)550mm (4FOLD) 90V(A8+A12/V-CUT) LF
	CABLE	50.TFQM5.004	R046128101010	WH FFC 10P(0.5mm)600mm (4FOLD) 90V(A8+A12/V-CUT) LF
	CABLE	50.TFPM5.002	R046128301910	WH FFC 30P(1.0mm)500mm (2FOLD)90V G/F W/CONN.(A15+BC)+AL(AA) LF -OP
	CABLE	50.TFPM5.003	R046728301842	WH FFC 30P(0.5mm)180mm 60V(A10+A10)+AL LF
	CABLE	50.TFQM5.005	R046728301900	WH FFC 30P(1.0mm)500mm (2FOLD)60V G/F W/CONN.(A15 BC) AL(AA) LF -OP
	FAN SINK/SPEAK/EARPHONE/RTC	23.TFQM5.001	R033502041130	SPK 2W 4ohm 28.5*22*8mm(R600mm*L200mm) VECO for BV277 LF
	LCD	KL.27002.014	R352700920395	LM270WF5-RSAB1 Acer B277