

LIFECYCLE EXTENSION GUIDE



acer

Contents

Table of Contents

Important Safety Notice-----	3
1. Exploded Diagram -----	4
2. Wiring connectivity diagram-----	5
3. Mechanical Instructure-----	6
4. Assembly and Disassembly Procedures-----	7
5. Troubleshooting-----	15
6. FRU List-----	19

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.

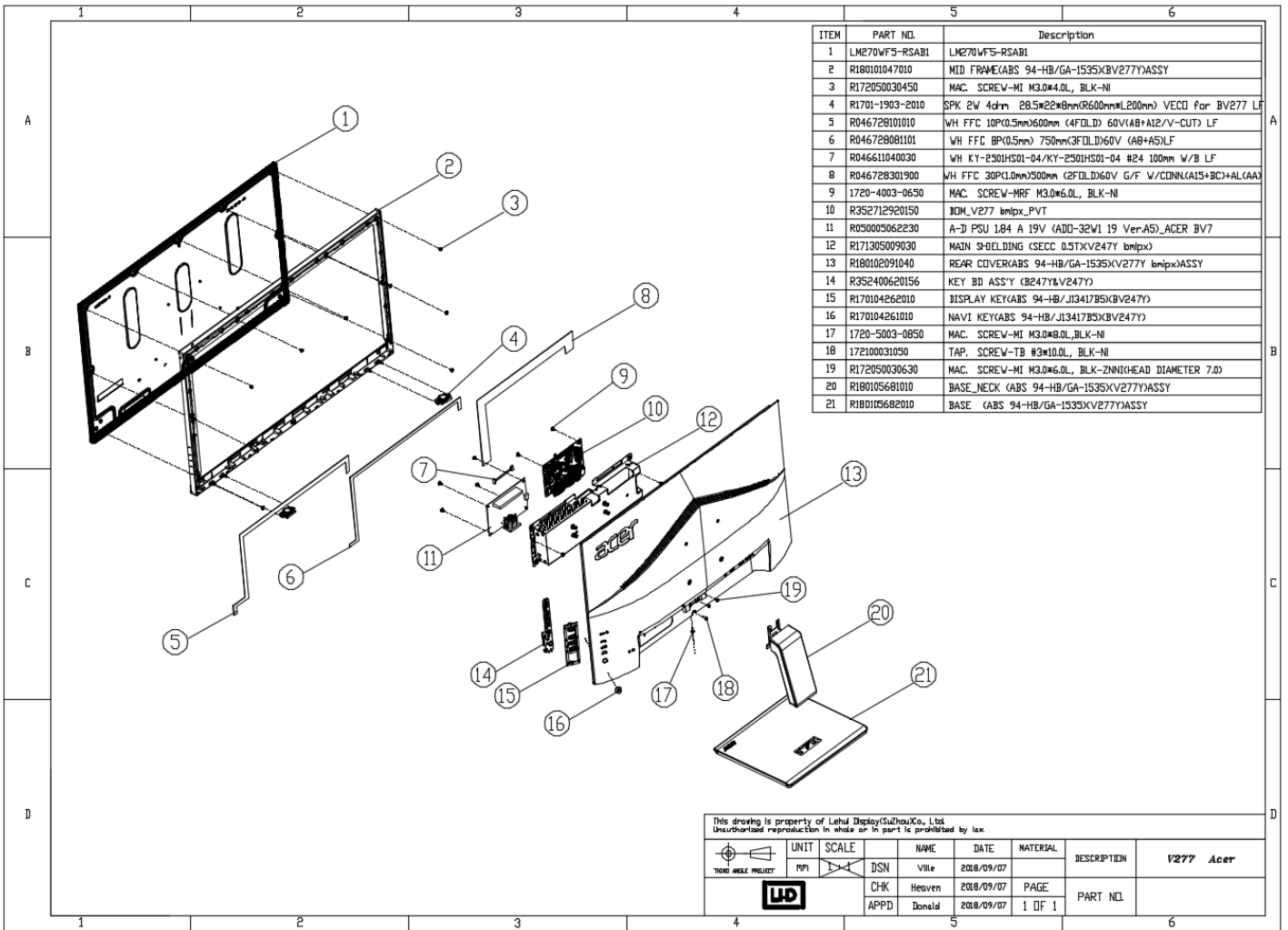
Qualified Repairability:

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 humidity 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

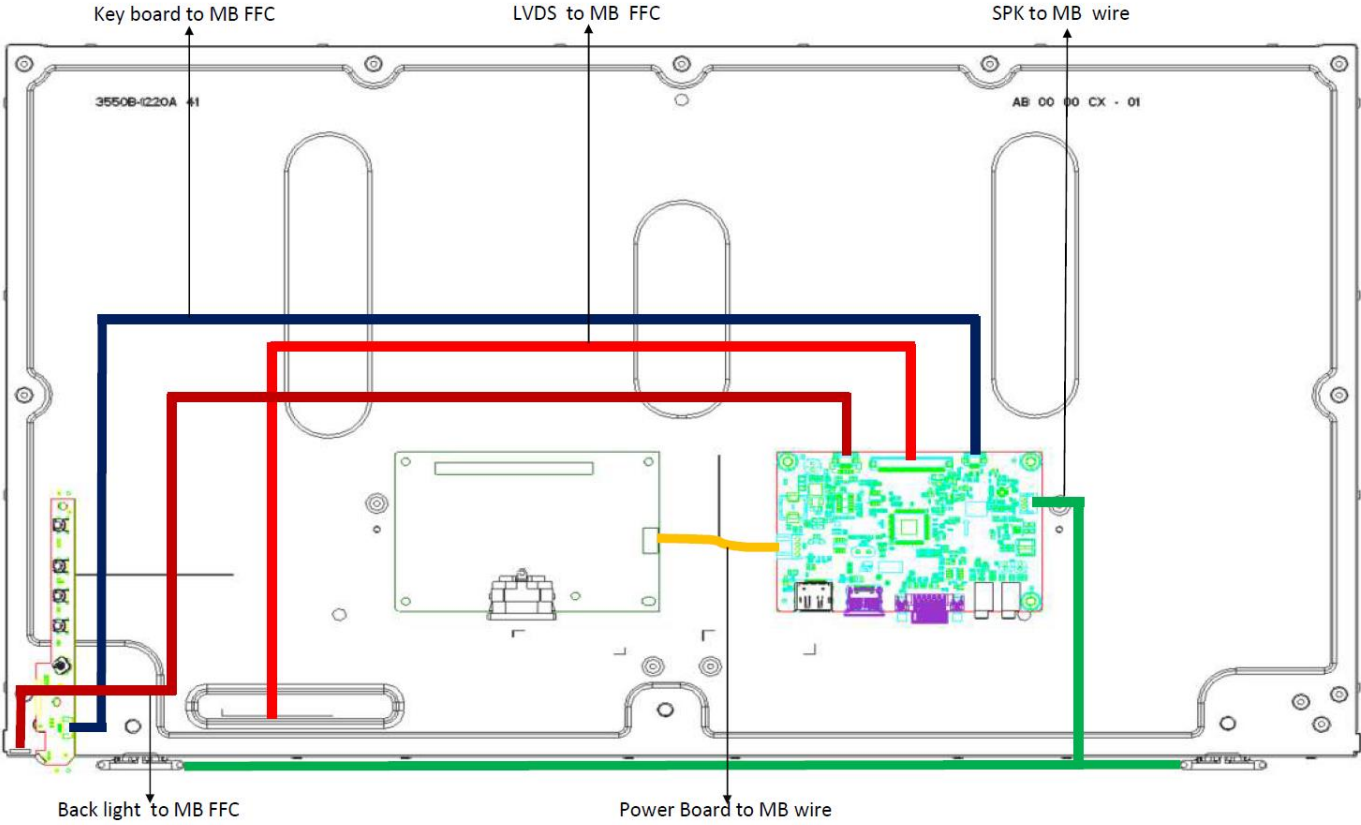


ITEM	PART NO.	Description
1	LM270wF5-RSAB1	LM270wF5-RSAB1
2	R180101047010	MID FRAME(ABS 94-HB/GA-1535XBV277Y)ASSY
3	R172050030450	MAC. SCREW-MI M3.0*4.0L, BLK-NI
4	R1701-1903-2010	SPK 2V 4ohm 28.5*22*8mm(R600mmL200mm) VECD for BV277 LF
5	R046728101010	WH FFC 10P(0.5mm)600mm (4FOLD) 60V(AB+A12/V-CUT) LF
6	R046728081101	WH FFC BP(0.5mm) 750mm(3FOLD)60V (AB+A5)LF
7	R046611040030	WH KY-250HS01-04/KY-250HS01-04 #24 100mm W/B LF
8	R046728301900	WH FFC 30P(1.0mm)500mm (2FOLD)60V G/F W/CDNN(A15+BC)+AL(GAA)
9	1720-4003-0650	MAC. SCREW-MRF M3.0*6.0L, BLK-NI
10	R352712920150	BDM_V277 kmpkx_PVT
11	R050005062230	A-D PSU 1.84 A 19V (ADD-32W1 19 Ver.A5)_ACER BV7
12	R171305009030	MAIN SHIELDING (SECC 0.5T)KV247Y kmpkx
13	R180102091040	REAR COVER(ABS 94-HB/GA-1535XV277Y kmpkx)ASSY
14	R352400620156	KEY BD ASS'Y (B247Y&V247Y)
15	R170104262010	DISPLAY KEY(ABS 94-HB/J13417B5KBV247Y)
16	R170104261010	NAVI KEY(ABS 94-HB/J13417B5KBV247Y)
17	1720-5003-0850	MAC. SCREW-MI M3.0*8.0L, BLK-NI
18	172100031050	TAP. SCREW-TB #3*10.0L, BLK-NI
19	R172050030630	MAC. SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)
20	R180105681010	BASE_NECK (ABS 94-HB/GA-1535XV277Y)ASSY
21	R180105682010	BASE (ABS 94-HB/GA-1535XV277Y)ASSY

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UNIT	SCALE	NAME	DATE	MATERIAL	DESCRIP1 IEN	V2777 Acer
THIRD ANGLE PROJECT	1:1	DSN	2008/09/07			
		CHK	2008/09/07	PAGE	PART NO.	
		APPD	2008/09/07	1 OF 1		

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 & neck assembly out



Step.2 Unscrew four screws



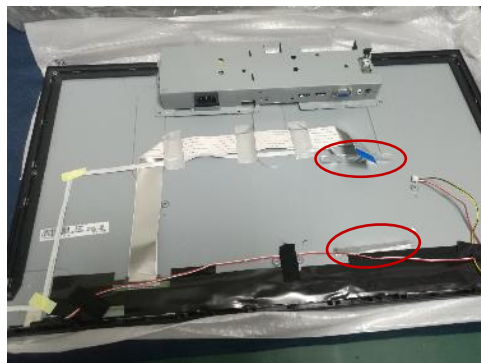
Step.3 Separate hooks between MID_FRAME and Rear cover



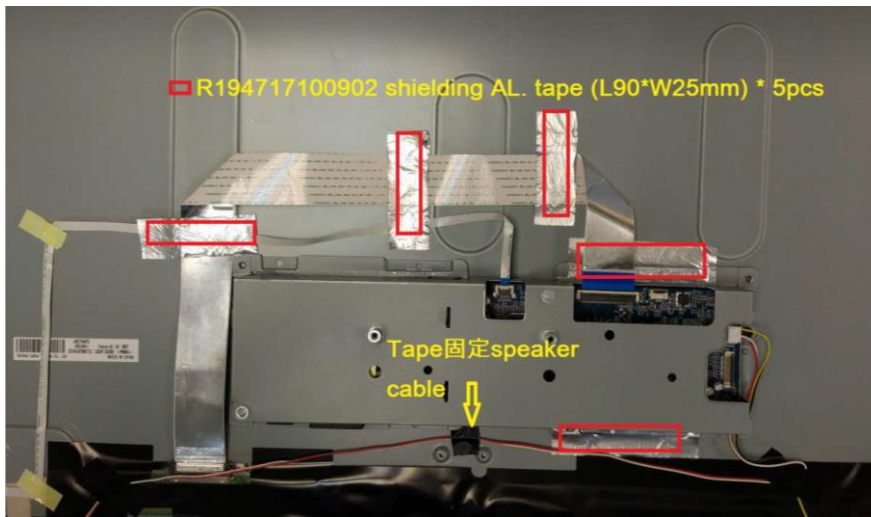
Step 4. Pull up the Rear Cover and pull out all connectors



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



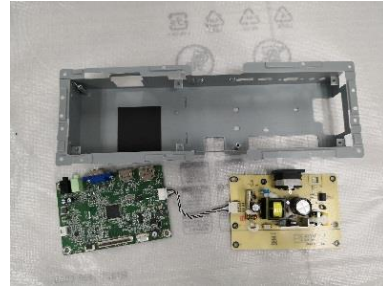
Detail AL tape location as below:



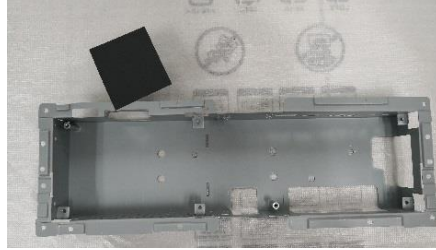
Step.6 Separate speaker from MID_FRAME and LVDS & Backlight FFC from LCM



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



Step.8 Remove connector cable and separate main board and power board, separate mylar and shielding



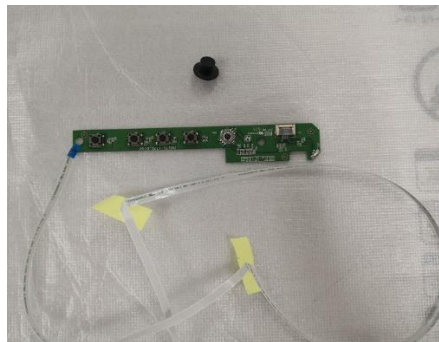
Step.9 Unscrew eleven screws and separate MID FRAME and panel



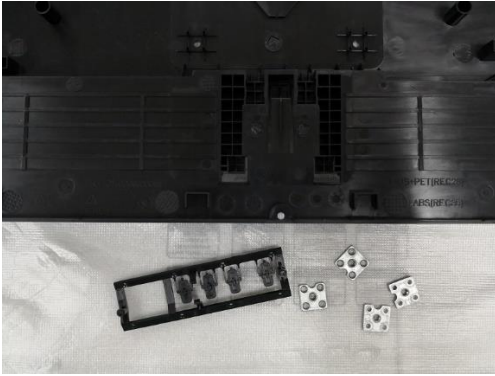
Step.10 Separate lens from MID frame



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



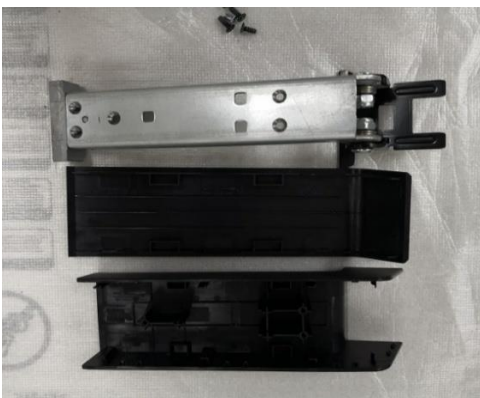
Step.13 Unscrew the screw and separate base & neck assembly



Step.14 Remove six silicon rubbers and unscrew seven screws to separate metal and plastic cover

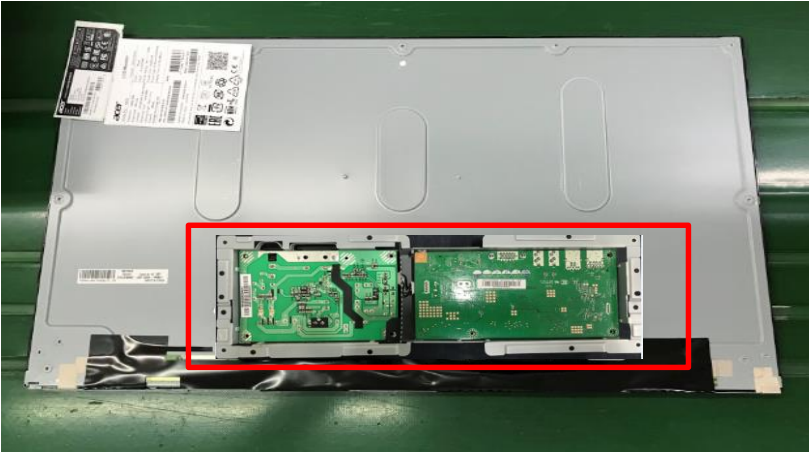


Step 15. Separate back cover from neck, unscrew five screws and separate front cover from hinge assy.

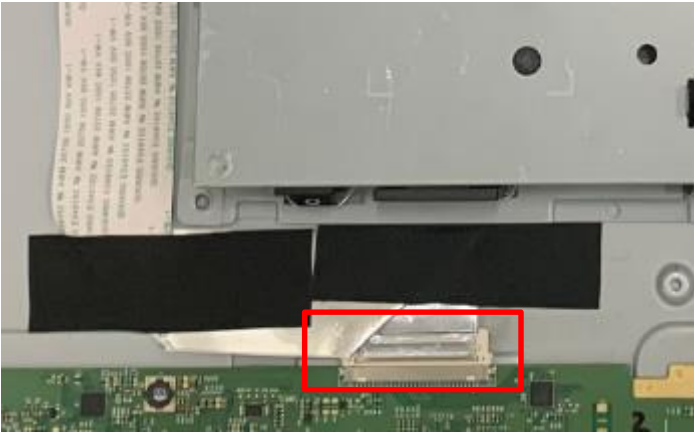


➤ Assembly Procedure

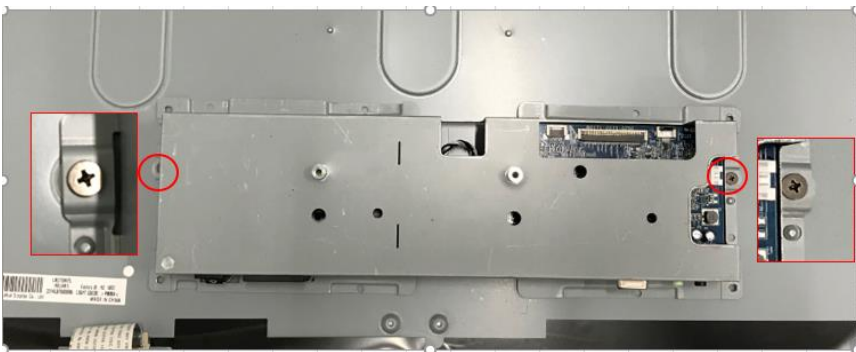
Step1. Assembly main board into shielding, use screw to fix. Assembly main board on LCM.



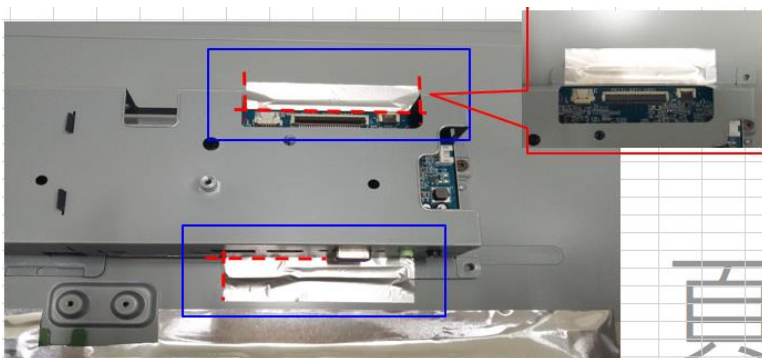
Step2. Insert 30 pin LVDS FFC to LCM, then use acetate cloth tape to tape FFC.



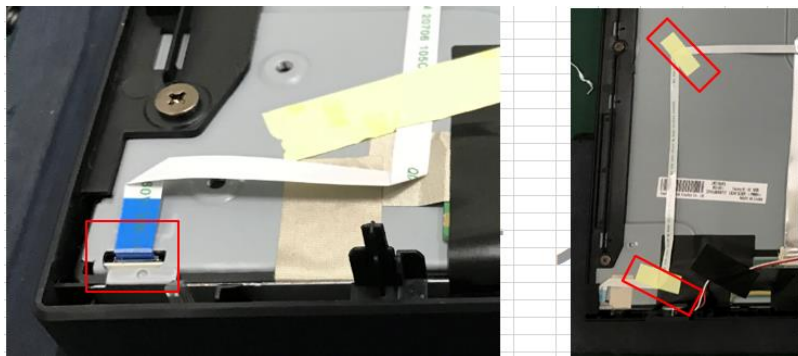
Step3. Lock the shielding on panel with screw. (in red circle)



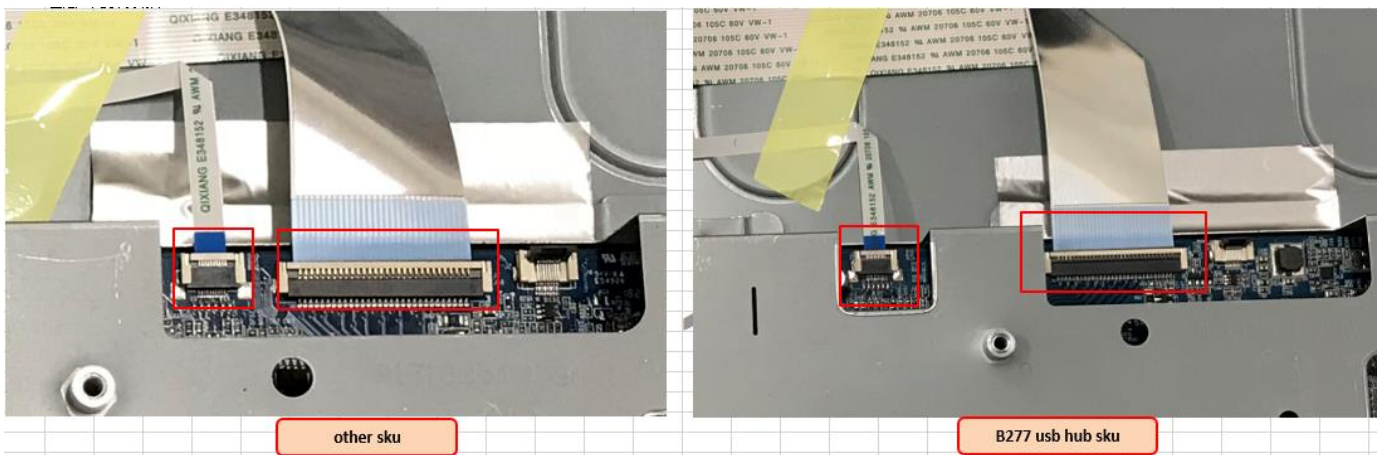
Step4. Use AI tape to fix shielding (tape in blue circle).



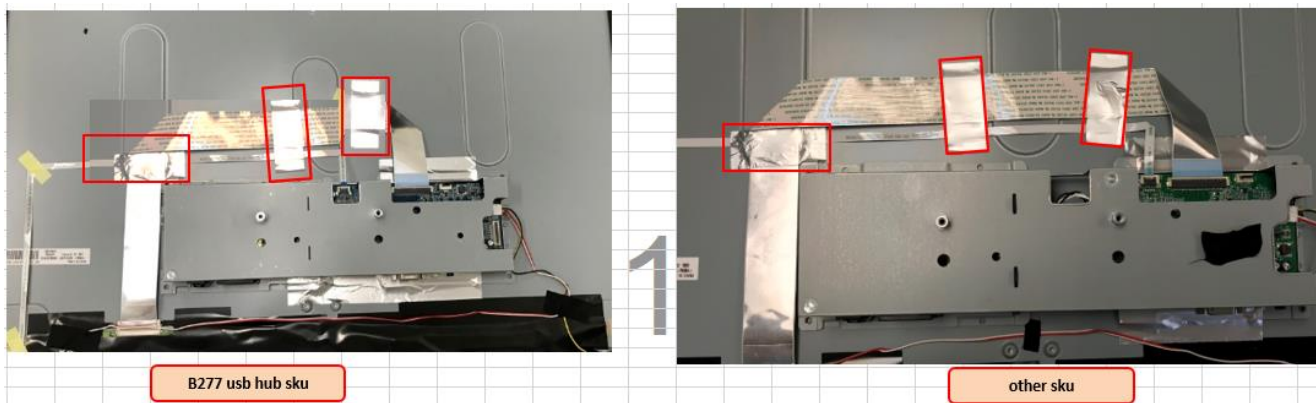
Step5. Insert 10 pin back light FFC to panel and main board, use yellow tape to fix. (Tape in red circle).



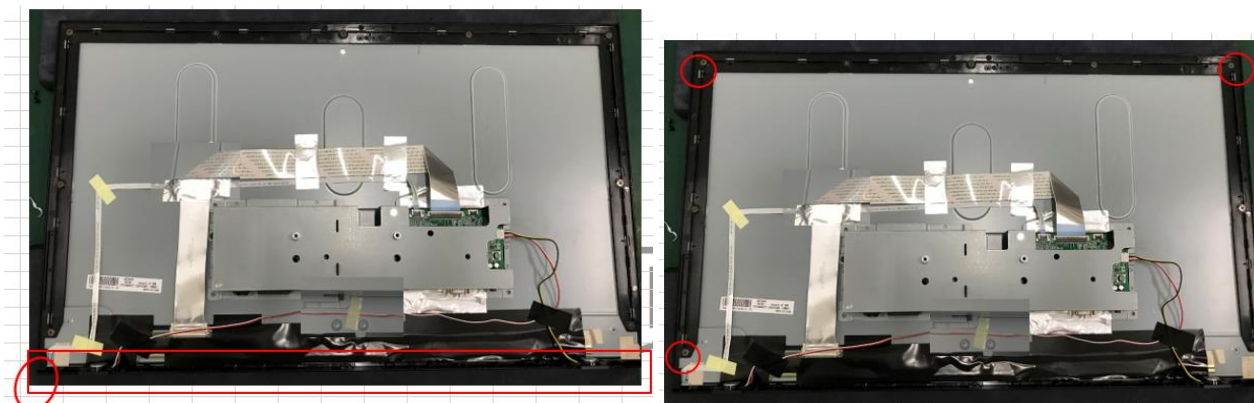
Step6. Insert 10 pin back light FFC and 30 pin LVDS FFC to main board. Use yellow tape to fix.



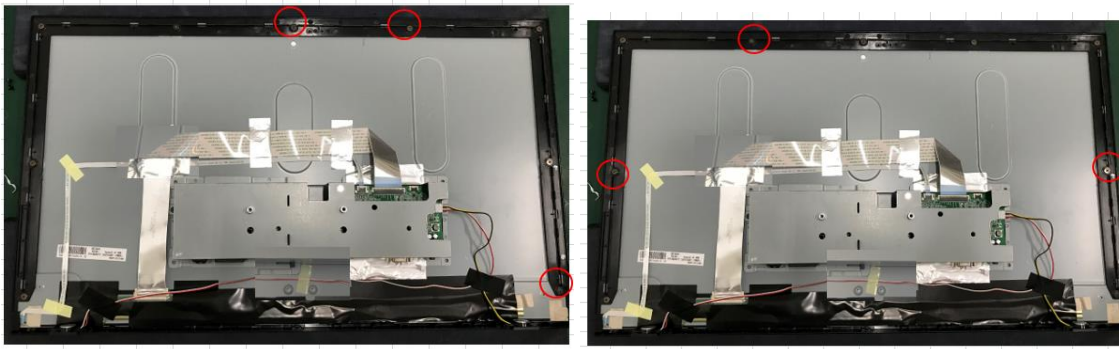
Step7. Tape AL tape to fix FFC. (Tape in red circle).



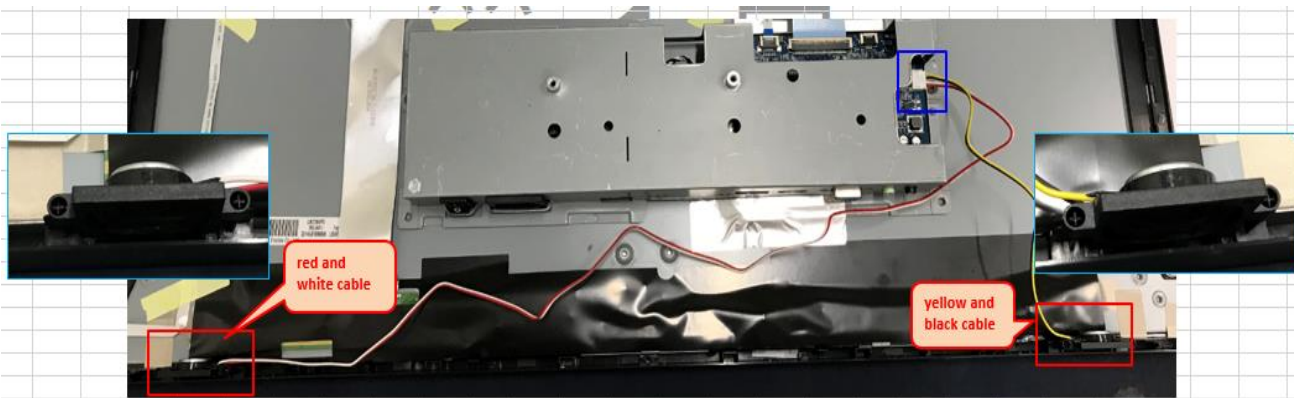
Step8. Assembly middle frame with LCM and fix screw (in red circle)



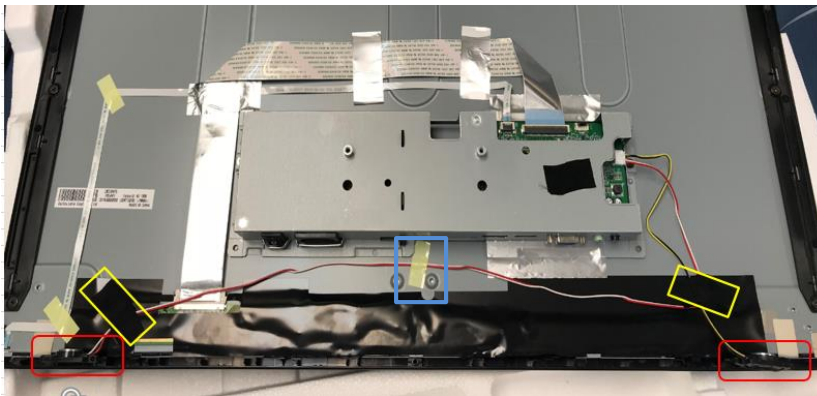
Step9. Lock middle frame screw (in red circle)



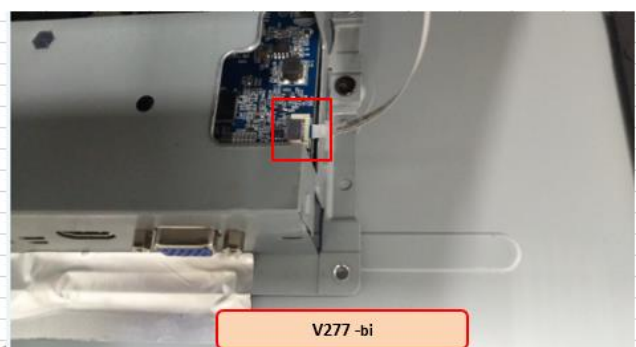
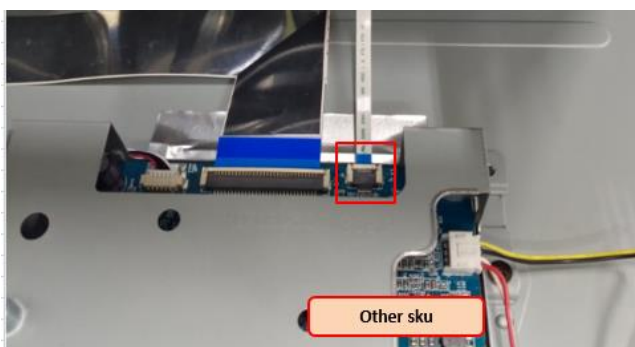
Step10. If with speaker model, assembly speaker on middle frame, and assembly speaker cable on main board. (red and white cable is on left side, yellow and black is on right side.)

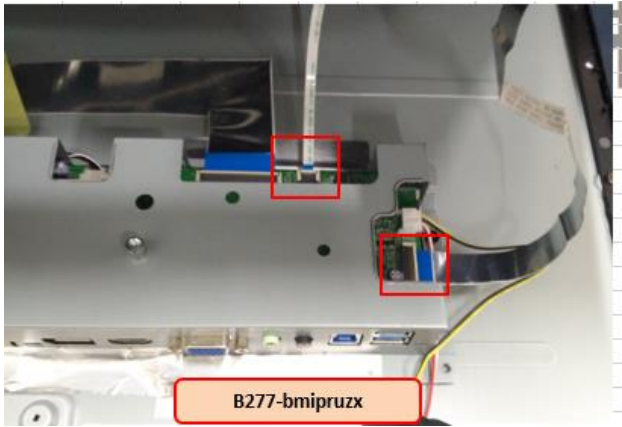


Step11. Tape speaker cable with acetate cloth tape (in yellow circle) and yellow tape (in blue circle)



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





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

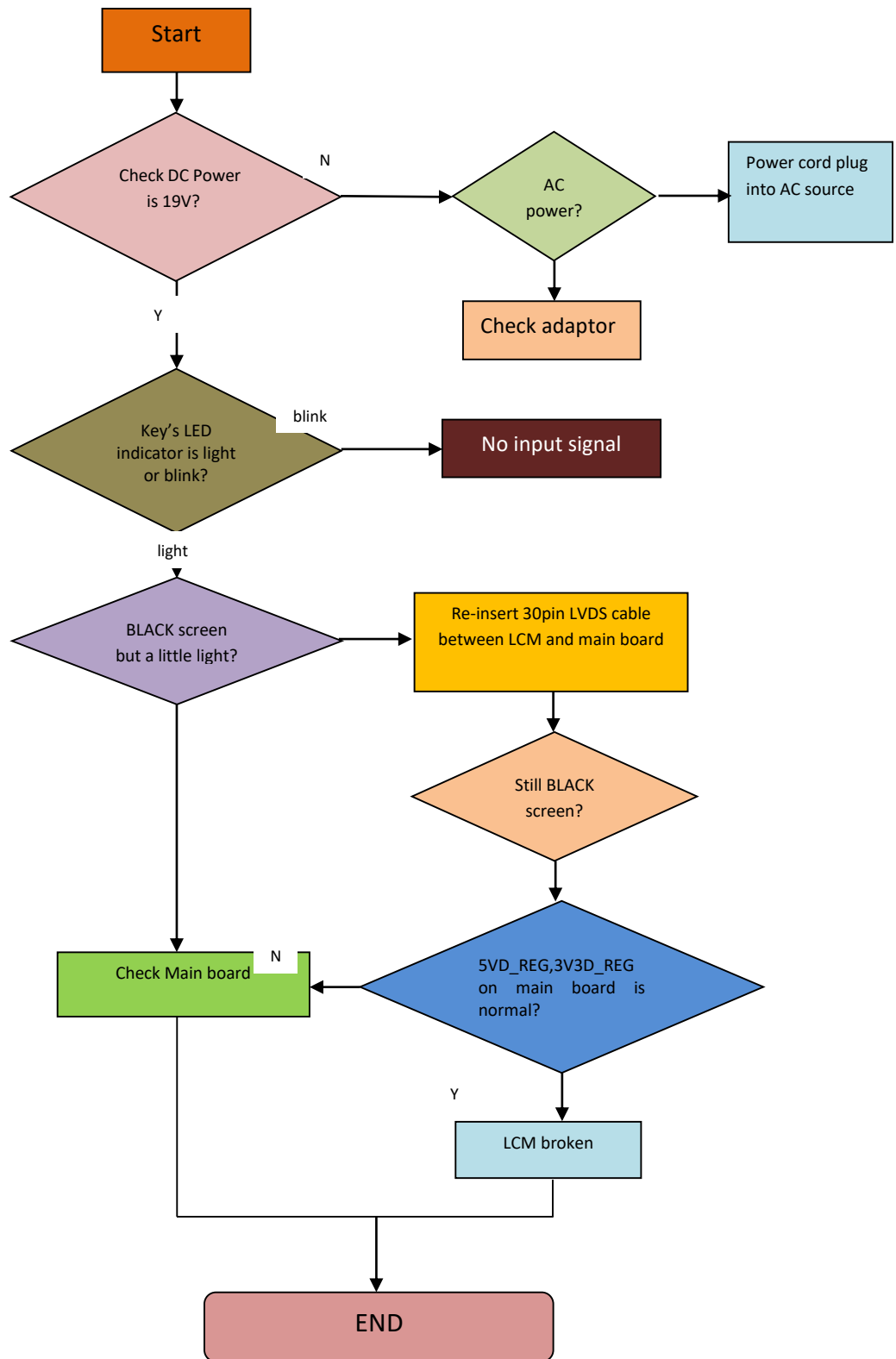


Step14. Lock the screw on rear cover (in red circle).

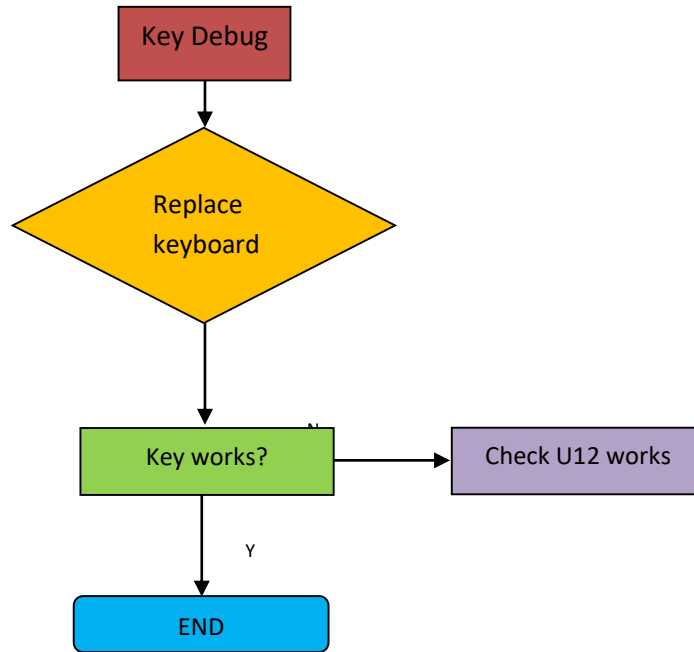


5. Troubleshooting

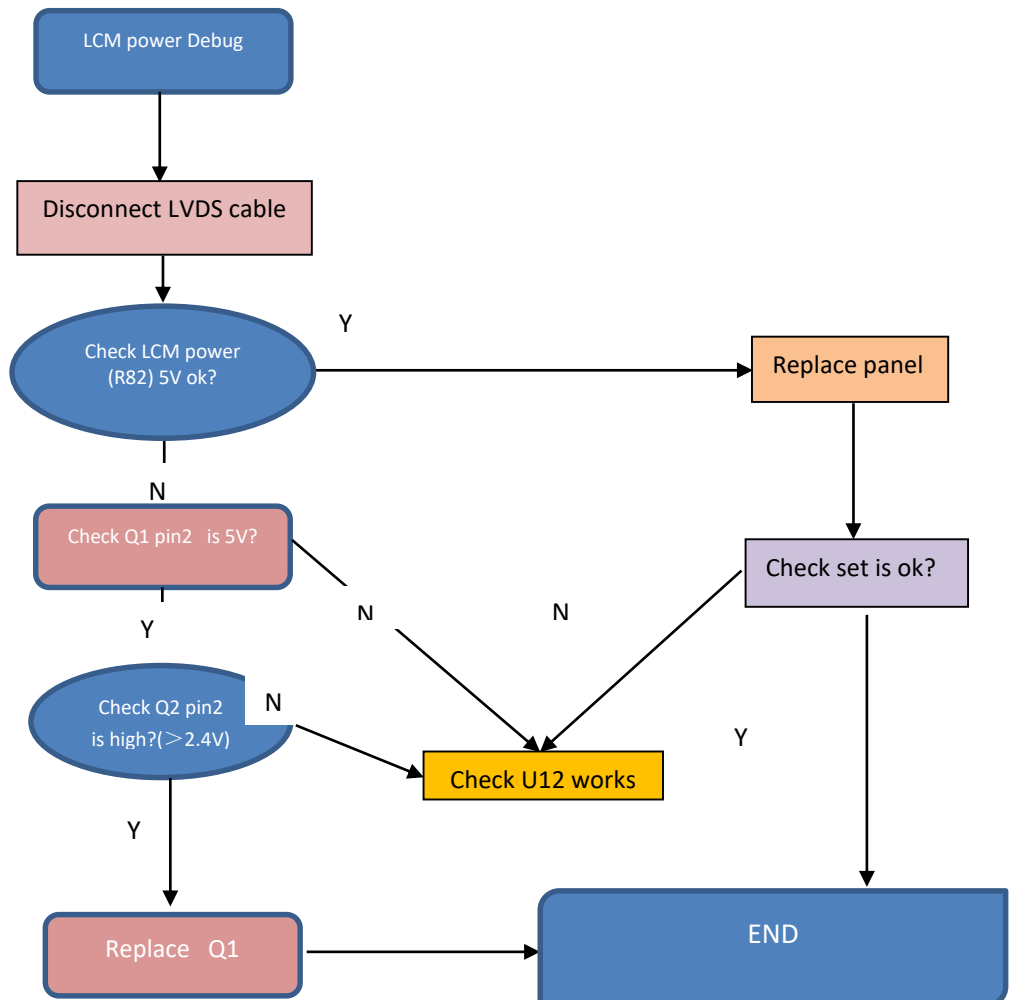
5.1 Test flow for abnormal machine:



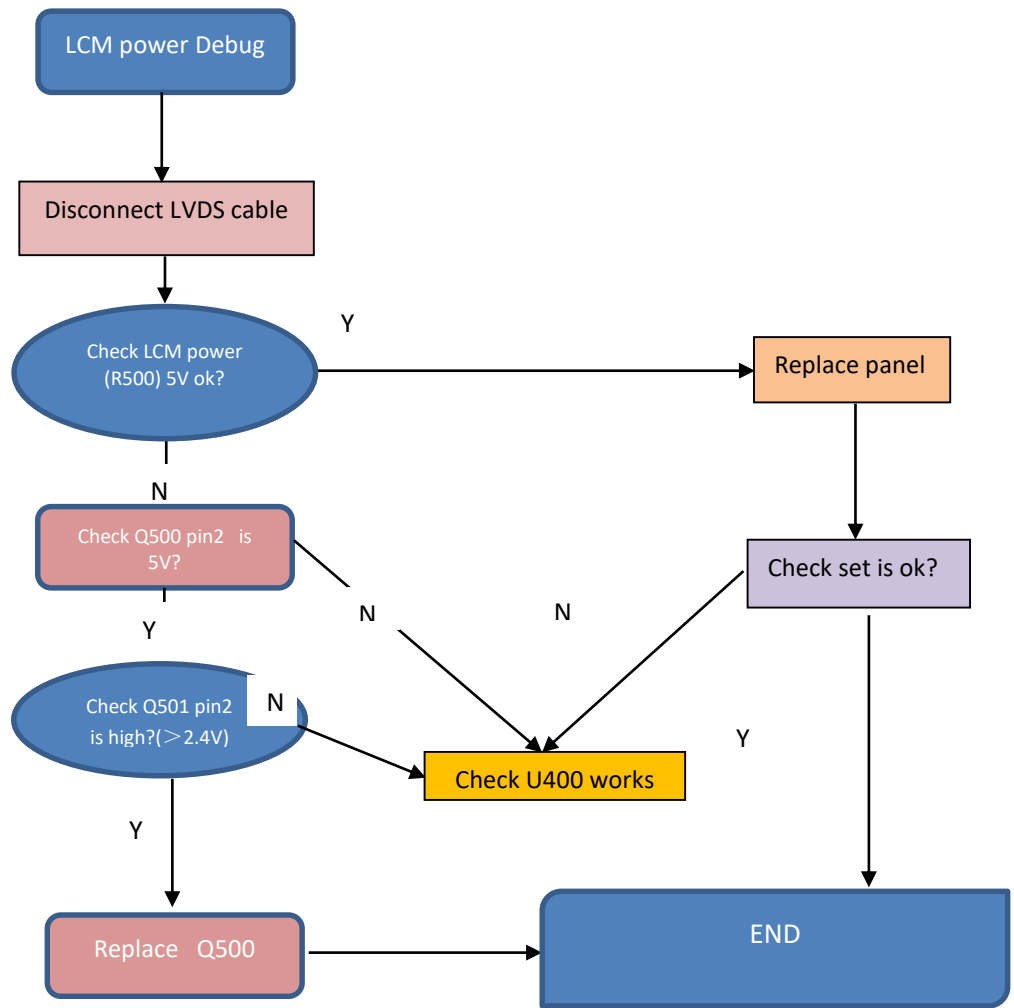
5.2 key debug flow:



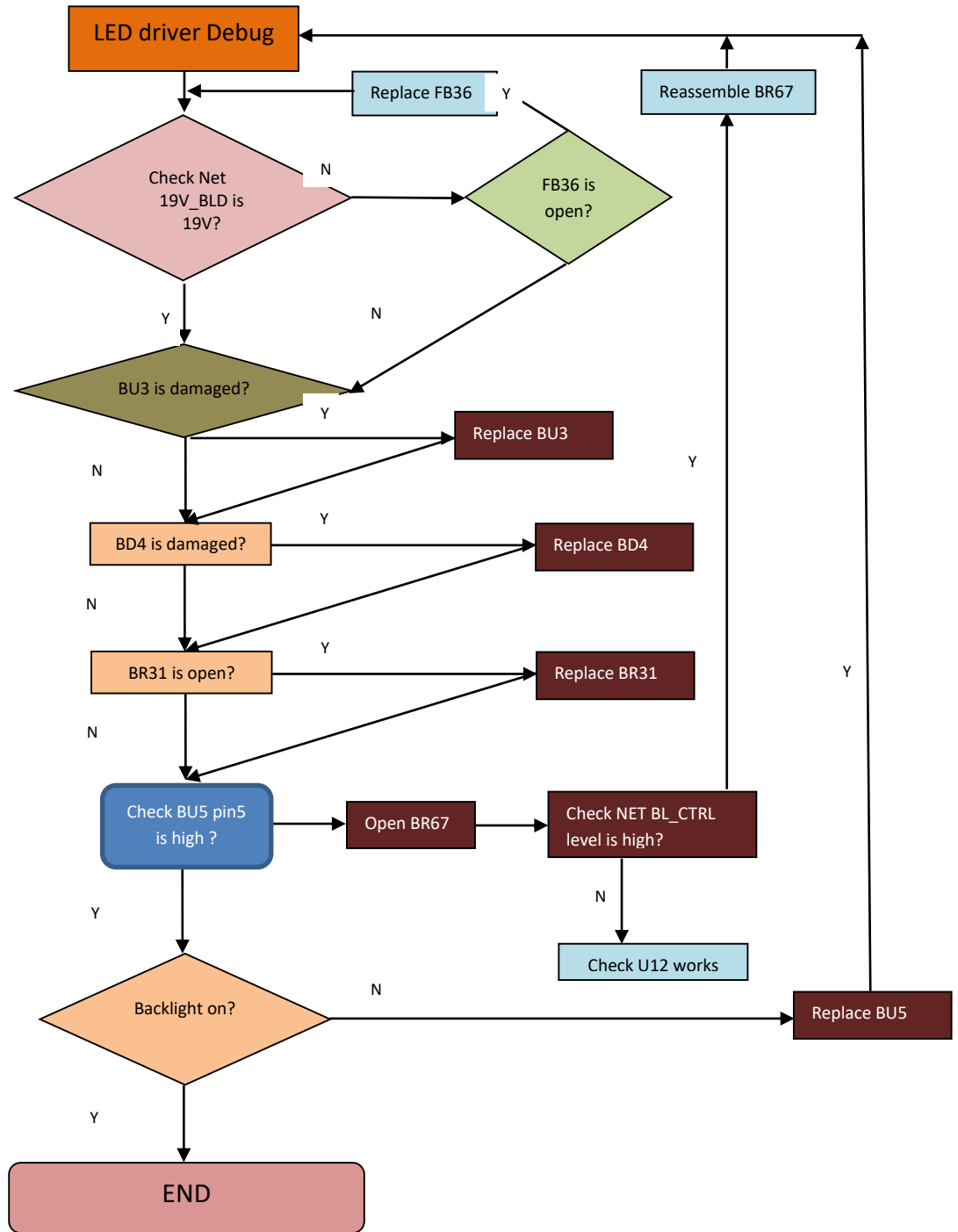
5.3 Panel debug flow (bmipx&bmix&bip):


















Panel debug flow (bi):



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.TFQM5.001	R050005062230	A-D PSU 1.68 A 19V (ADO-32W1 19 Ver.A7)_ACER BV7
	INVERTER / Power BD	55.T0WM5.046	R050005062180	A-D PSU 1.3 A 19V ADO-25W1 19(x) _ ACER V226HQL
	BOARD	55.TFQM5.002	R352712920150	MAIN BD ASS'Y BOM_V277 bmipx_PVT
	BOARD	55.TFQM5.003	R352710920150	MAIN BD ASS'Y V277 bmix (RTD2513AR)ES7.0
	BOARD	55.TFQM5.004	R352711120150	MAIN BD ASS'Y V277 bi (RTD2313AR)ES7.0
	BOARD	55.TFKM5.004	R352400620156	KEY BD ASS'Y (B247Y&V247Y)
	CABLE	50.TFKM5.001	R046611040030	WH KY-2501HS01-04/KY-2501HS01-04 #24 100mm W/B LF
	CABLE	50.TFQM5.002	R046728081101	WH FFC 8P(0.5mm) 750mm(3FOLD)60V (A8+A5)LF
	CABLE	50.TFQM5.003	R046728081091	WH FFC 8P(0.5mm) 670mm(3FOLD)60V (A8+A5)LF
	CABLE	50.TFQM5.004	R046128101010	WH FFC 10P(0.5mm)600mm (4FOLD) 90V(A8+A12/V-CUT) LF
	CABLE	50.TFQM5.006	R046128101000	WH FFC 10P(0.5mm)600mm (4FOLD) 90V(A8+A12/V-CUT) LF
	CABLE	50.TFQM5.005	R046128301900	WH FFC 30P(1.0mm)500mm (2FOLD)90V G/F W/CONN.(A15+BC)+AL(AA) LF -OP
	CABLE	50.TFQM5.007	R046128301890	WH FFC 30P(1.0mm)500mm (2FOLD)90V G/F W/CONN.(A15+BC)+AL(AA) LF -OP
	FAN SINK/SPEAK/EARPHON E/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