ACER Monitor_KA272

LIFECYCLE EXTENSION GUIDE

Contents

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.

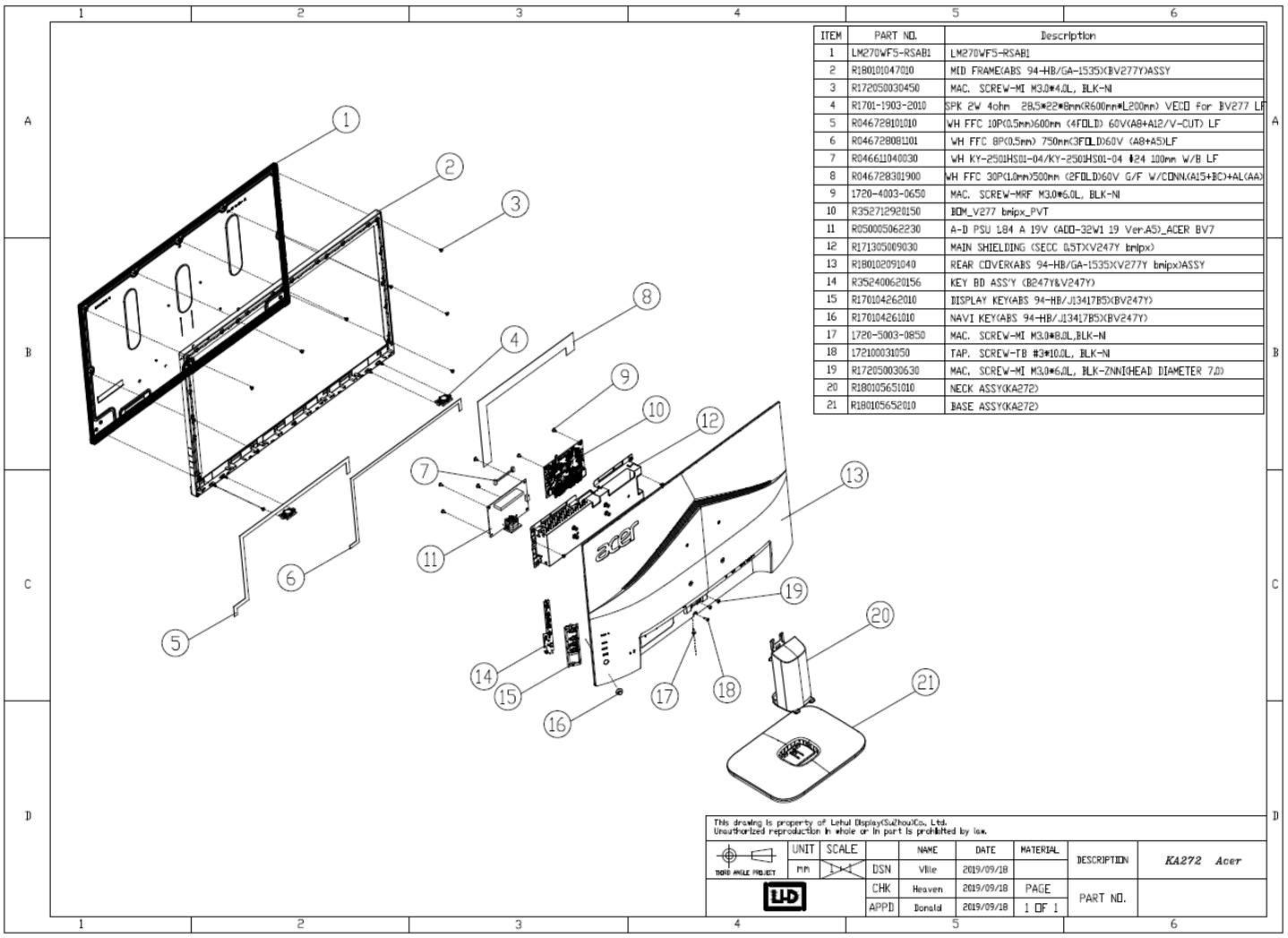
! To ensure following safety repairing behavior, put the replaced part on the components side of PWBA, not solder side.

! 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.

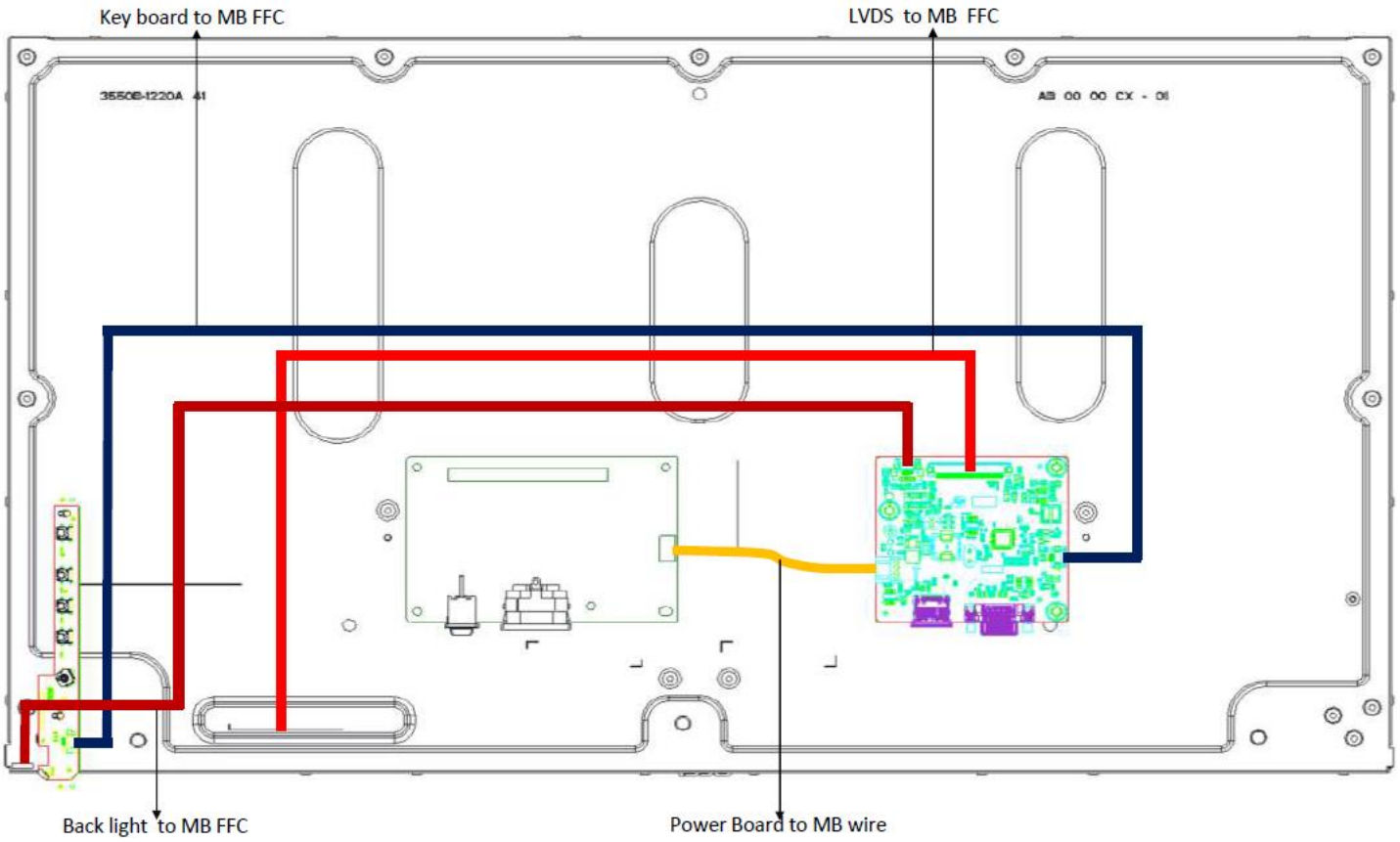
1. Exploded Diagram



ITEM	PART NO.	Description
1	LM270WF5-RSAB1	LM270WF5-RSAB1
2	R1B0101047010	MID FRAME(ABS 94-HB/GA-1535)(BV277Y)ASSY
3	R1720500304S0	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	R352712928150	BOM_V277 bmipx_PVT
11	R050005062230	A-D PSU 184 A 19V (ADD-32W1 19 Ver:A5)_ACER BV7
12	R171305009030	MAIN SHIELDING (SECC 0.5T)(V247Y bmipx)
13	R1B0102091040	REAR COVER(ABS 94-HB/GA-1535)(V277Y bmipx)ASSY
14	R352400628156	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 #3*10.0L, BLK-NI
19	R172050030630	MAC, SCREW-MI M3.0*6.0L, BLK-ZNNI(HEAD DIAMETER 7.0)
20	R1B0105651010	NECK ASSY(KA272)
21	R1B0105652010	BASE ASSY(KA272)

	UNIT	SCALE		NAME	DATE	MATERIAL	DESCRIPTION	KA272 Acer
THIRD ANGLE PROJECT	mm	1:1	DSN	Ville	2019/09/18			
			CHK	Heaven	2019/09/18	PAGE	PART NO.	
			APPD	Donald	2019/09/18	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

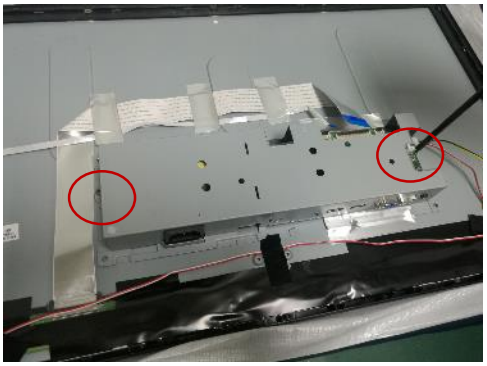
Step. 1 Pull the base & neck assembly out

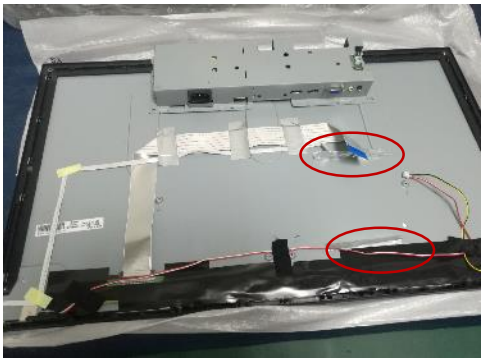
Step.2 Unscrew four screws

Step.3 Separate hooks between MID_FRAME and R/C

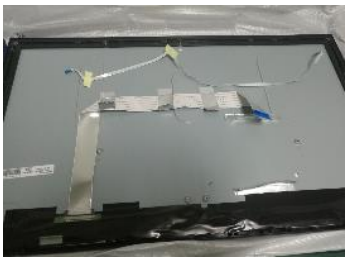
Step 4. Pull up the Rear Cover and pull out all connectors

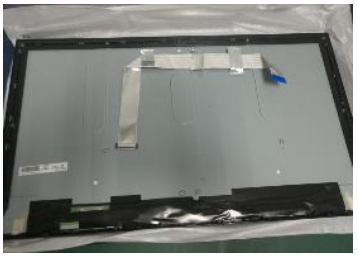
Step.5 Unscrew screws on main shielding and disassemble AL tape



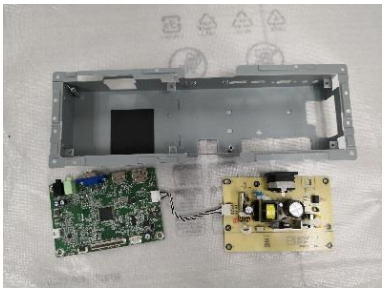


Step.6 separate SPK from MID_FRAME and LVDS & Backlight FFC from LCM

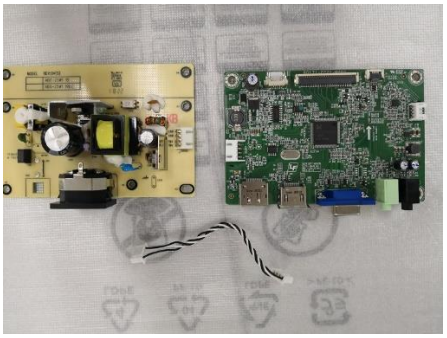
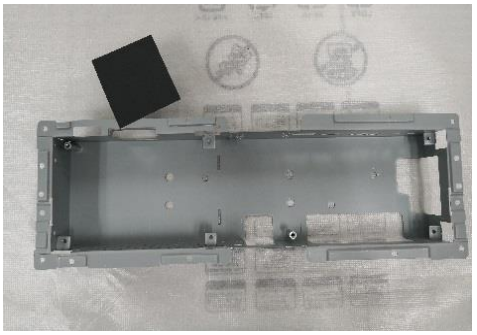




Step.7 Unscrew two hex nuts and seven screws and remove main board PCBA from main shielding.



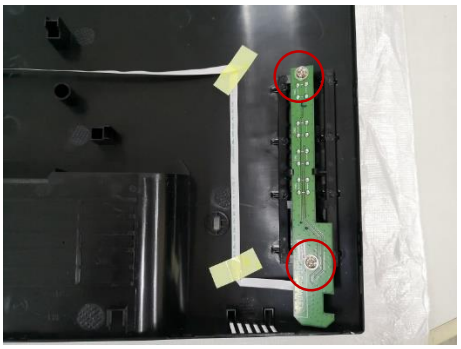
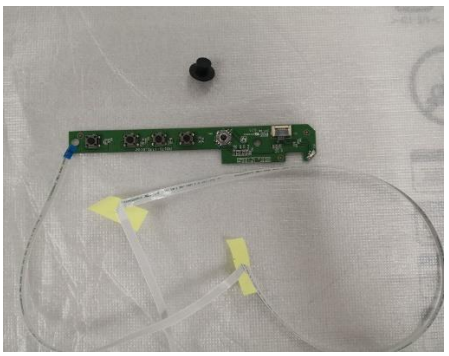
Step.8 Remove connecter cable and separate main board and power board, separate mylar and shielding

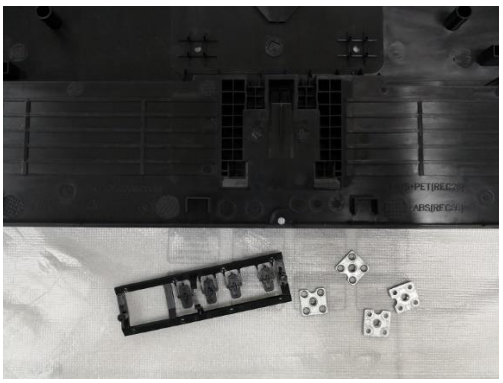

Step.9 Unscrew eleven screws and separate MID FRAME and LCM


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



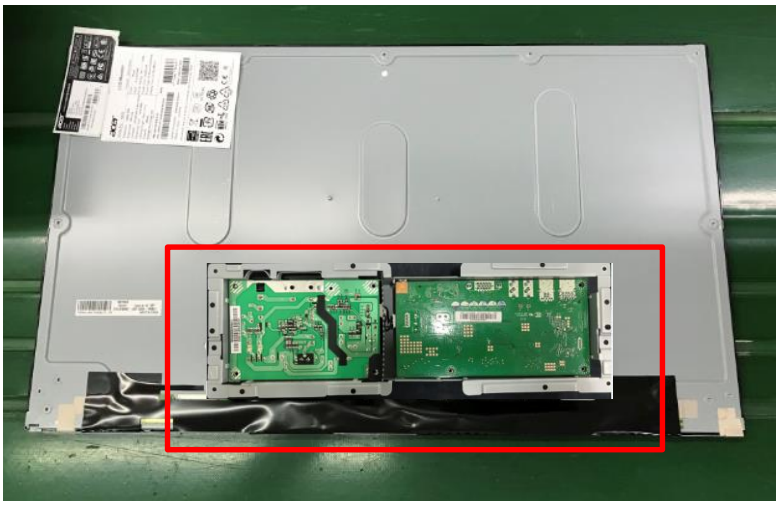
Step.13 Unscrew the screw and separate base & neck assembly

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

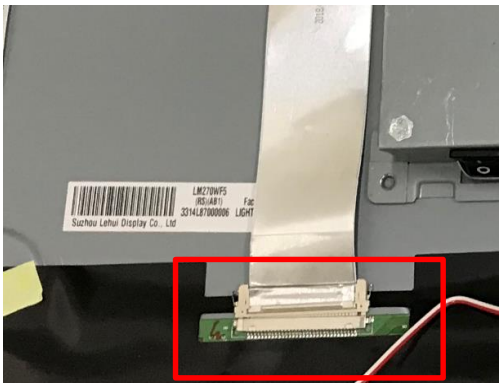
Step 15. Separate back cover from neck, unscrew five screws and separate front cover from hinge assy.

➢ Assembly Procedure

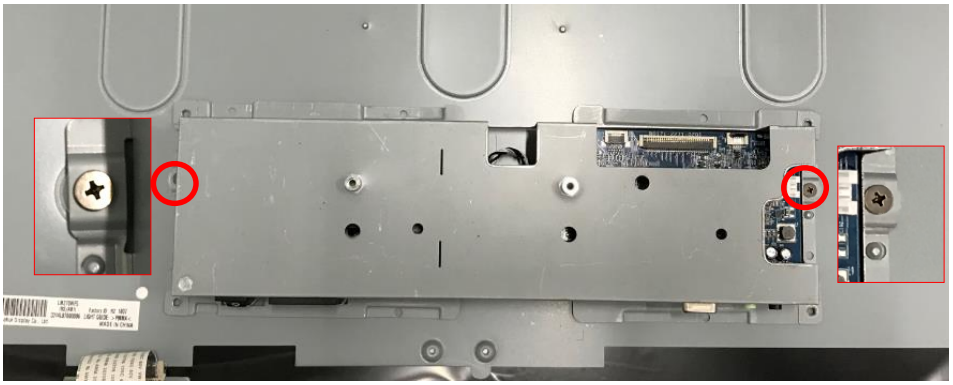
Step1. Assembly main board into shielding, use screw to fix. Assembly main board on LCM.



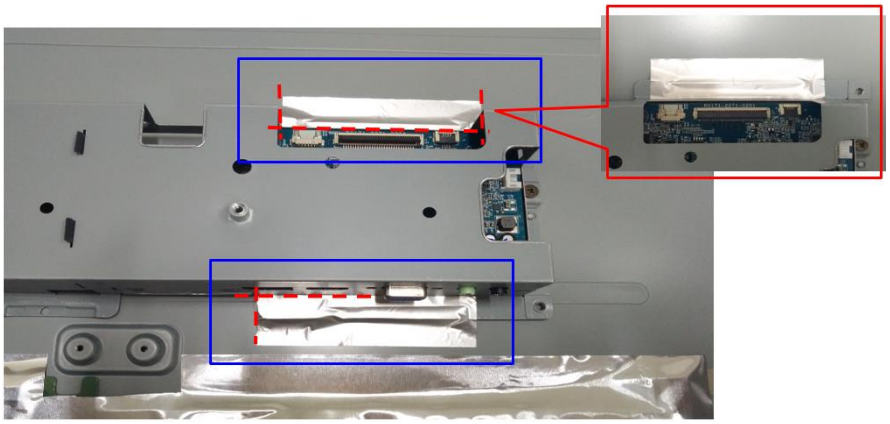
Step2. Insert 30 pin LVDS FFC to LCM,



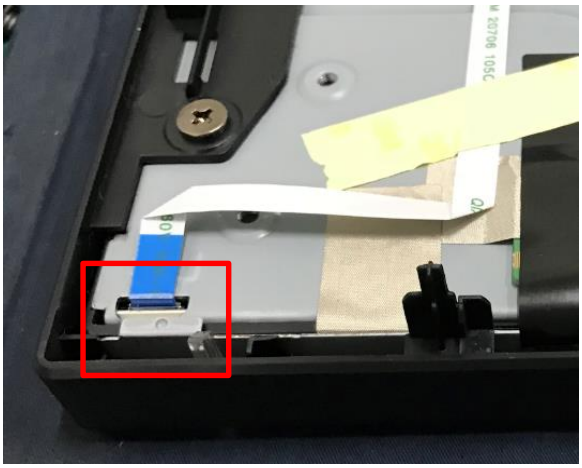
Step3. Lock the shielding on panel with screw. (in red circle)

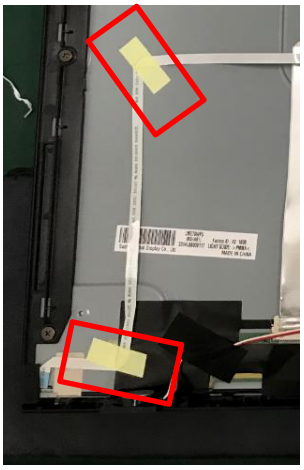


Step4. Use Al tape to fix shielding (tape in blue circle).

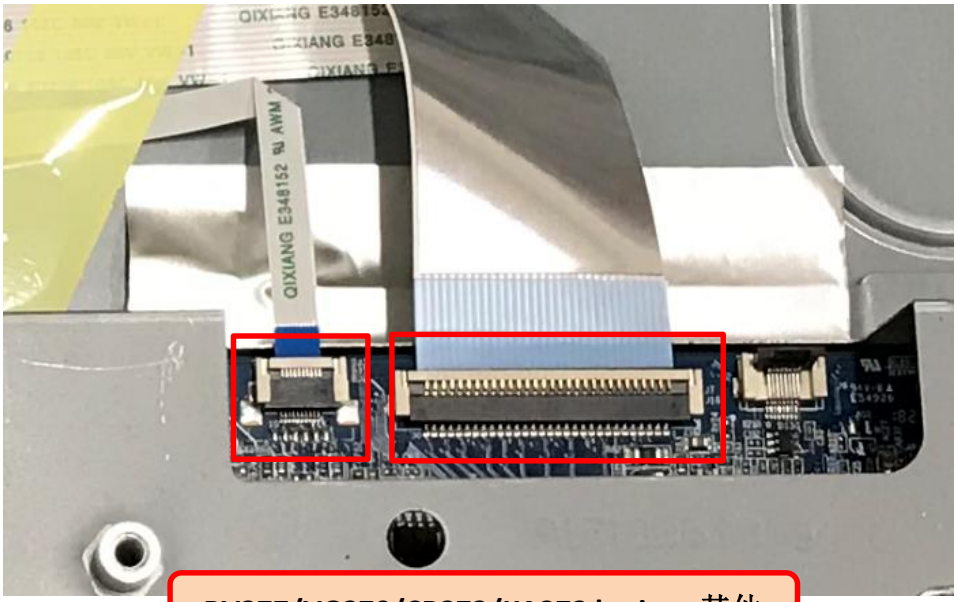


Step5. Insert 10 pin back light FFC to panel and main board, use yellow tape to fix. (Tape in red circle).



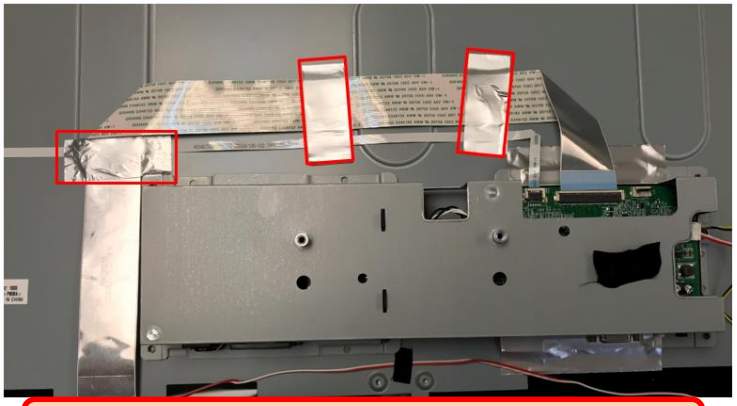


Step6. Insert 10 pin back light FFC and 30 pin LVDS FFC to main board. Use yellow tape to fix.

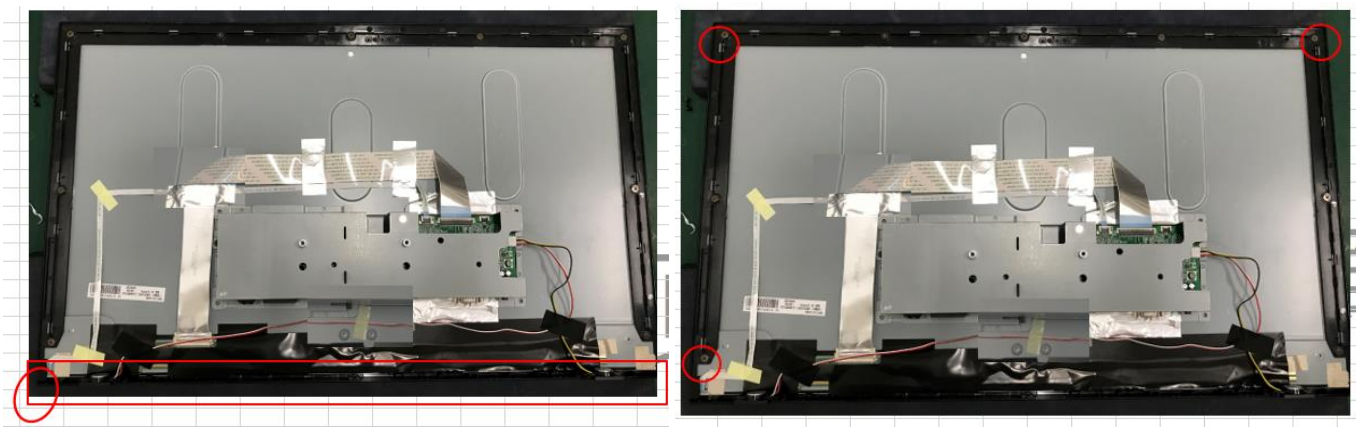


BV277/VG270/CB272/KA272 bmiprx-其他

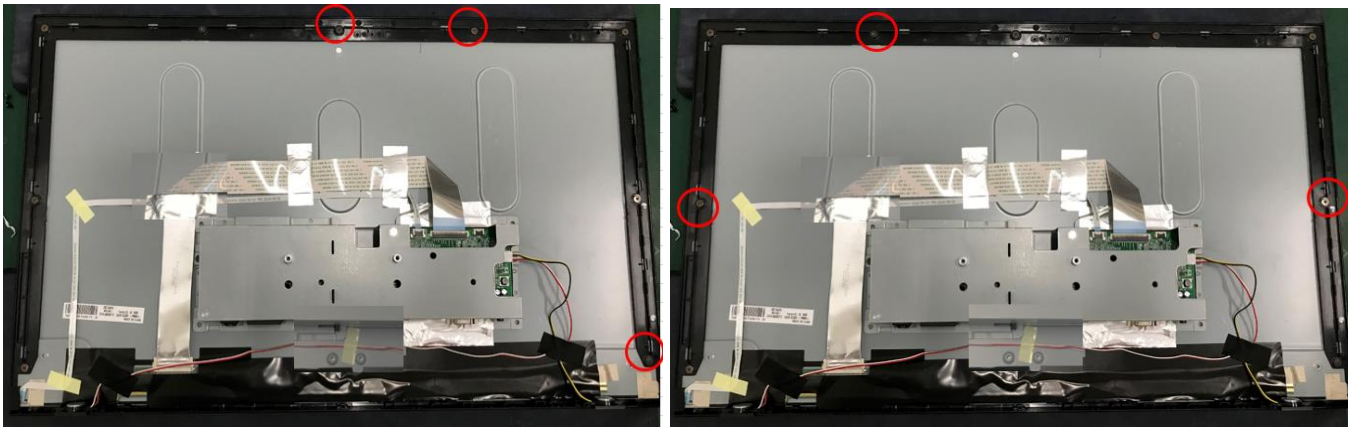
Step7. Tape AL tape to fix FFC. (Tape in red circle).



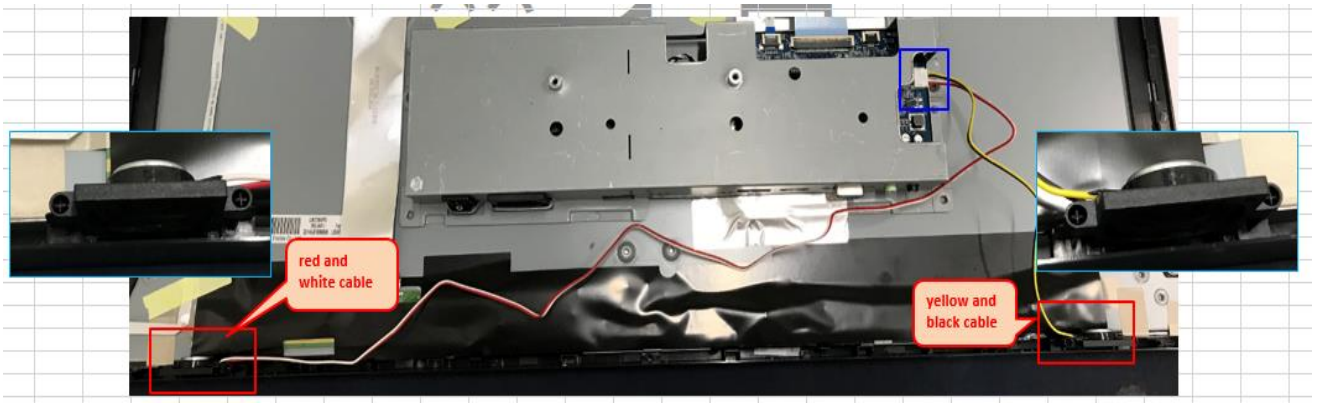
Step8. Assembly middle frame with LCM and fix screw (in red circle)



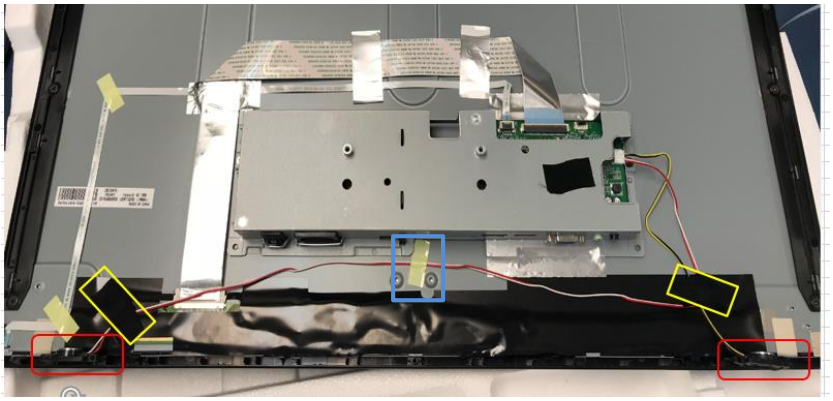
Step9. Lock middle frame screw (in red circle)



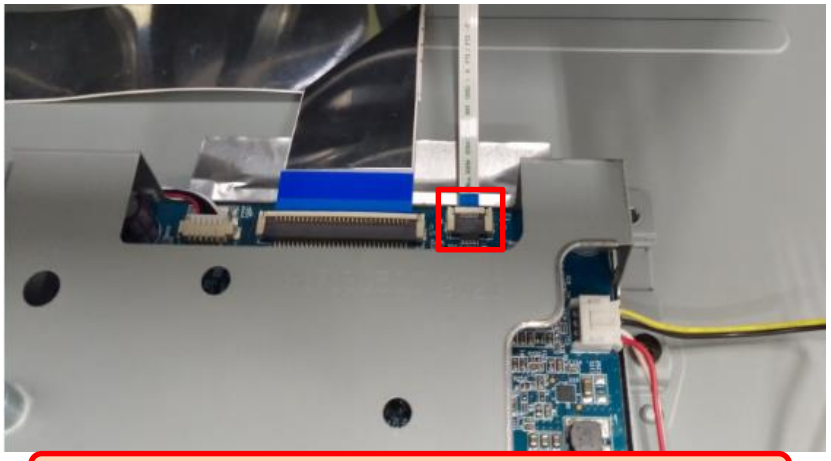
Step10. If with speaker model, assembly speaker on middle frame, and assembly speaker cable on main board. (red and white cable is on left side, yellow and black is on right side.)



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

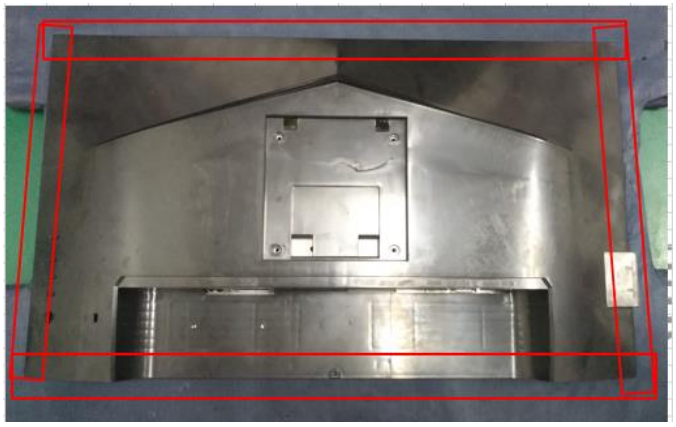


Step12. Insert key board FFC on main board

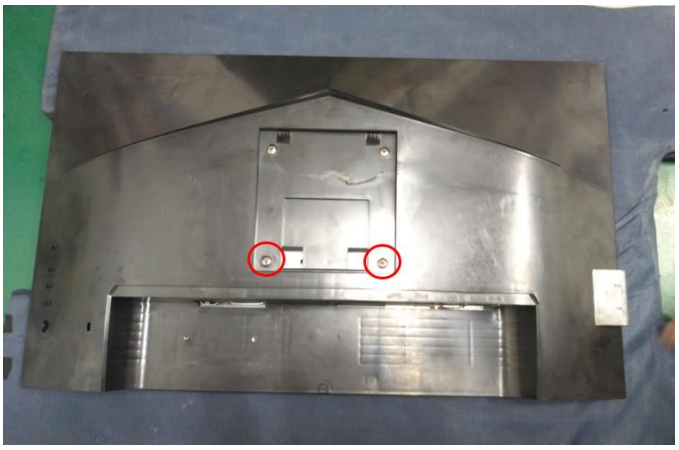


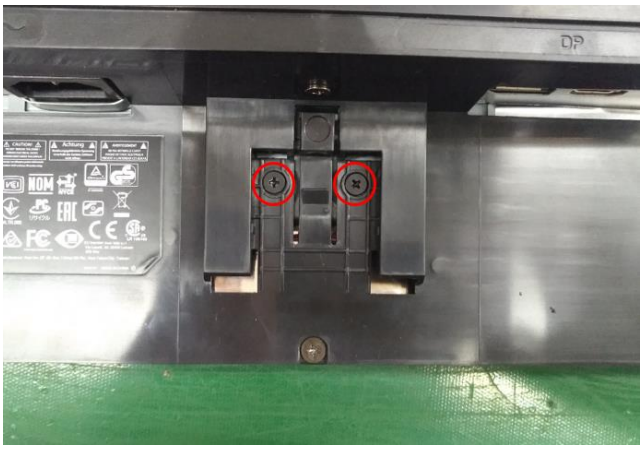
B277/V277/VG270/CB272/KA272 bmiprx-其他接口

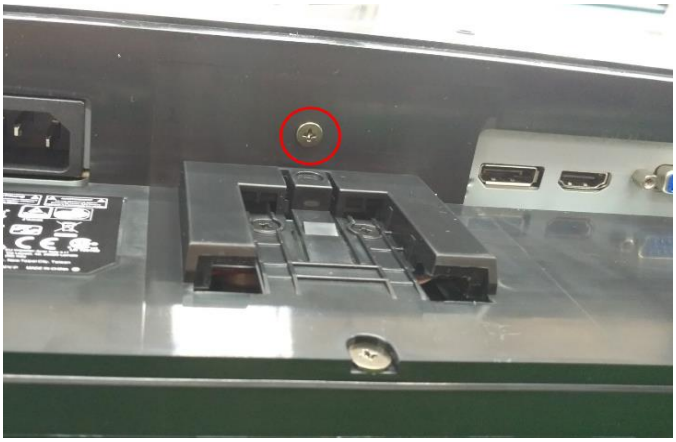
Step13.Assembly rear cover, and push around the surrounding to assembly well.



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

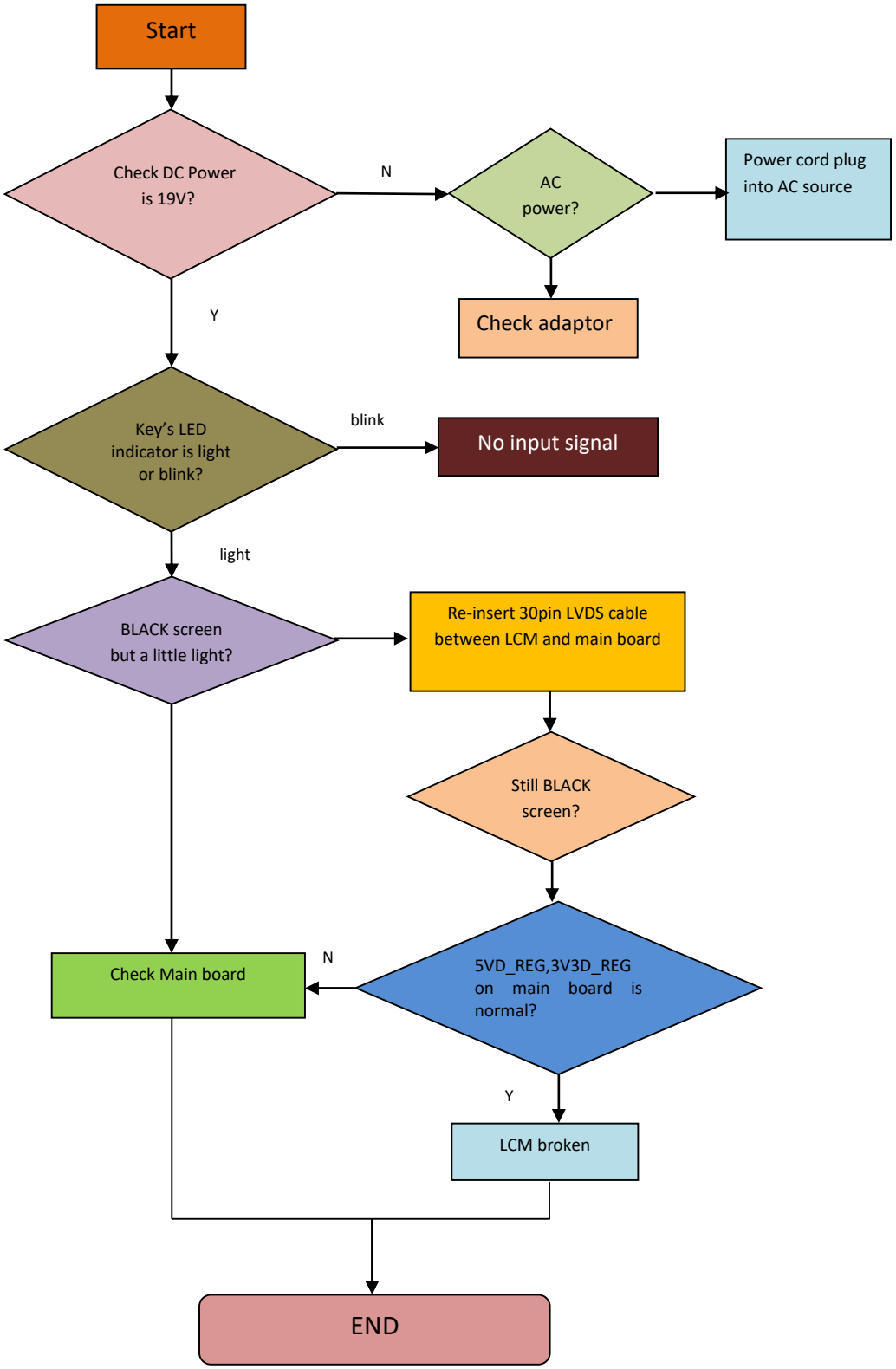




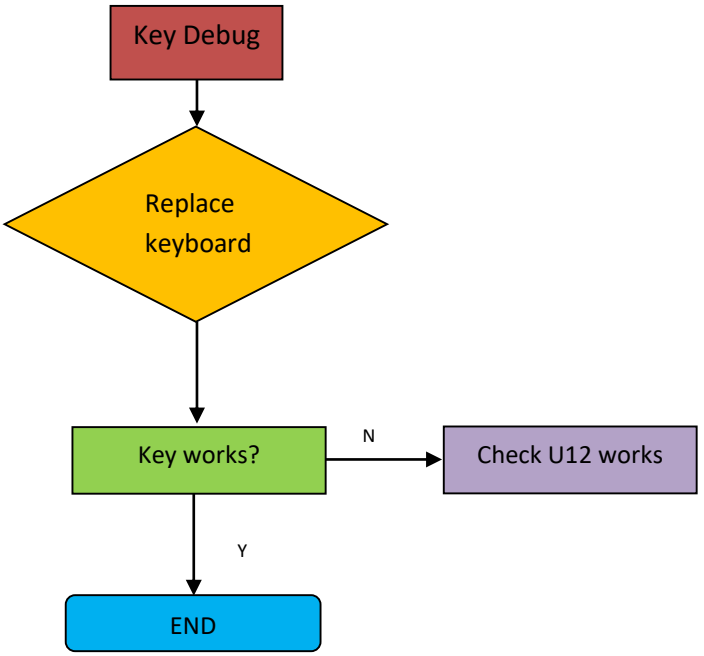


5. Troubleshooting

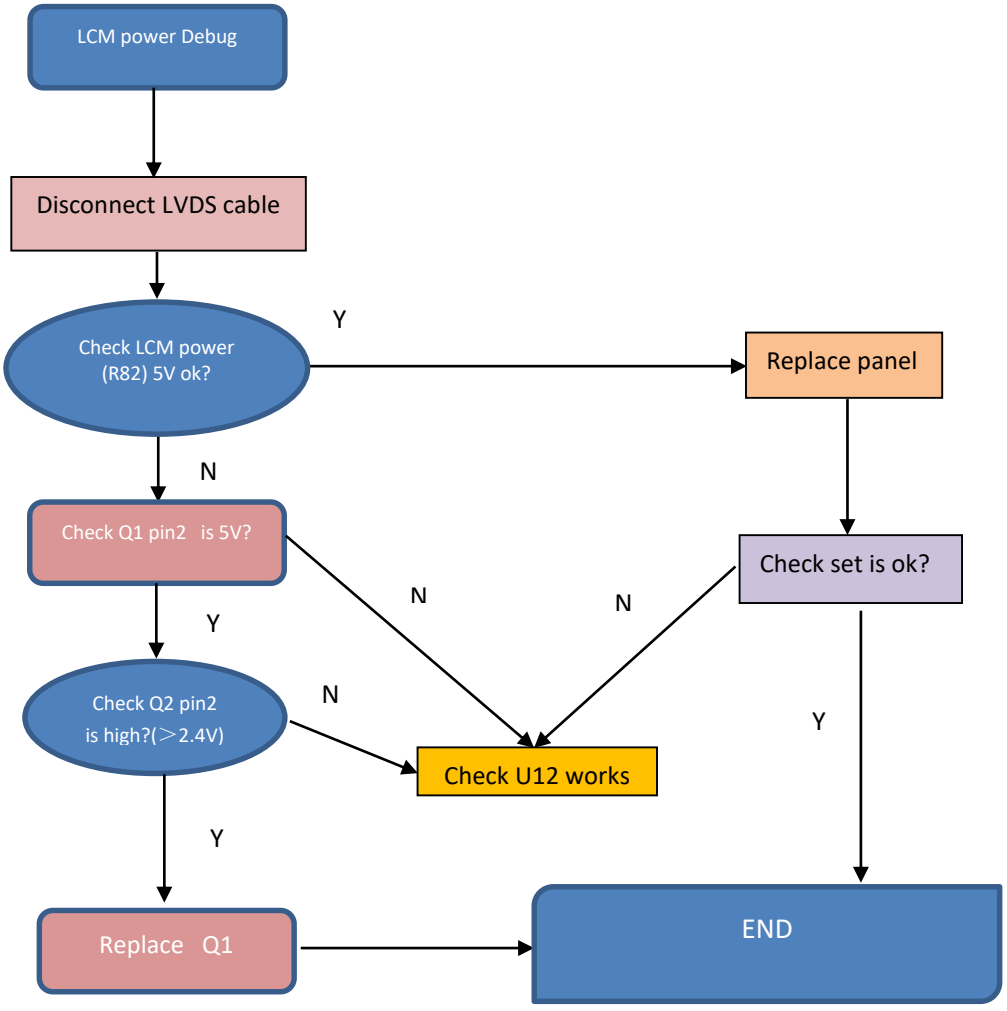
5.1 Test flow for abnormal machine:



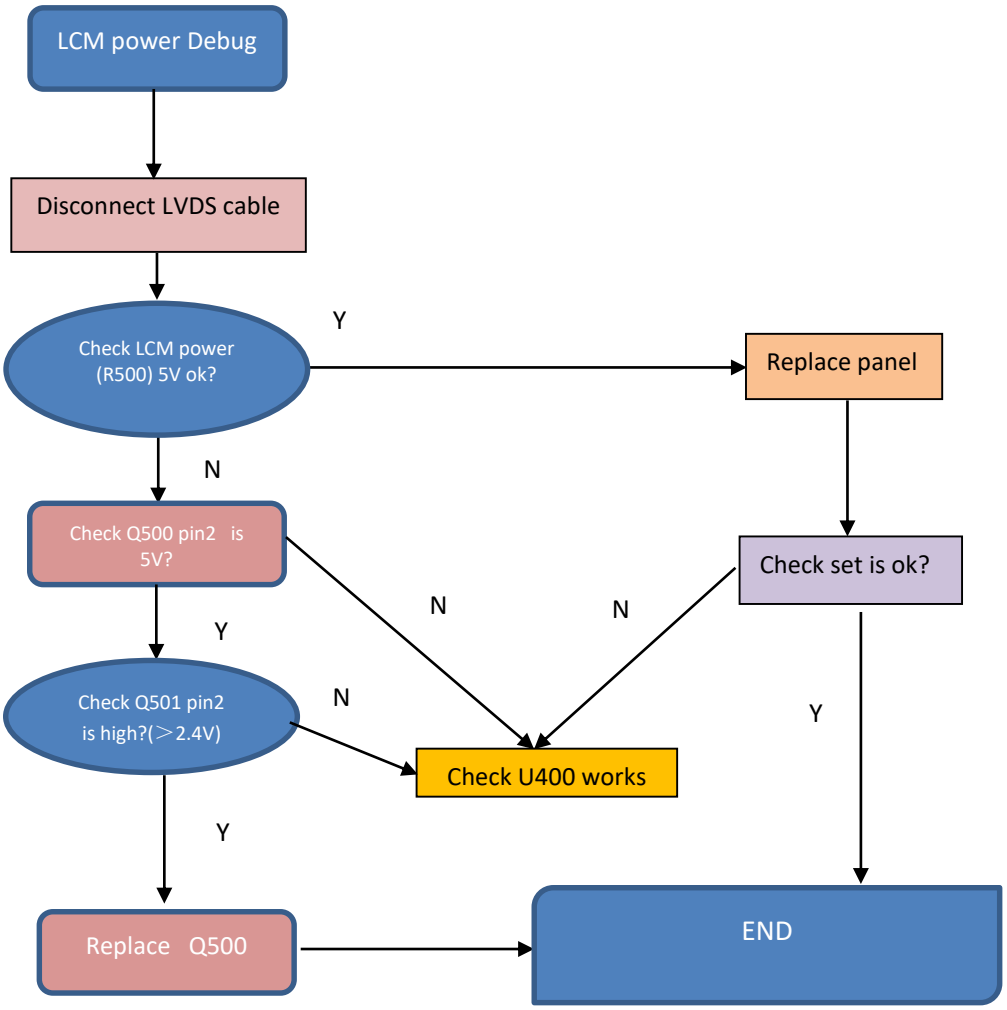
5.2 key debug flow:



5.3 Panel debug flow (bmiix&bii):



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.T0WM5.046	R050005062180	A-D PSU 1.3 A 19V ADO-25W1 19(x) _ ACER V226HQL
	BOARD	55.TJ3M5.003	R352723220150	MAIN BD ASS'Y KA272 bi (RTD 2313AR)ES8.0BA+ES7.0BLU no ES Logo
	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.TFQM5.003	R046728081091	WH FFC 8P(0.5mm) 670mm(3FOLD)60V (A8+A5)LF
	CABLE	50.TFQM5.006	R046728101000	WH FFC 10P(0.5mm)600mm (4FOLD) 60V(A8+A12/V-CUT) LF
	CABLE	50.TFQM5.010	R046128301980	WH FFC 30P(1.0mm)660mm (4FOLD PRO*2 ACETATE)90V G/F W/CONN.(A15 BC) AL(AA) LF -OP
	LCD	KL.27002.019	R352702120395	LCM ASS'Y ACER K273 (LM270WF5-RSAB7)