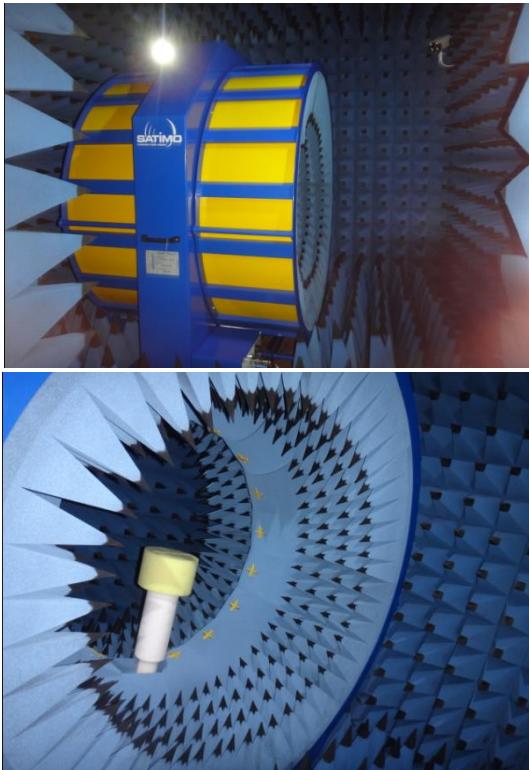


Test Report



Customer Name	Small cool	Project Name	K04Q US Edition
Commissioning frequency band	G4P,W1/2/4/5/8,LTE:1/2/3/4/5/7/8/12/13/17/25/26/28A / B /66	Structure mode	FPC
RF Engineer	Tse Chi-hung	Structural Engineer	Du Qiang
Antenna Type	LOOP	Date	2024-3-12



The original imported French SATIMO StarLab 3D laboratory can accurately and quickly test the TRP, TIS, efficiency, gain, Apple diagram, directional diagram and other parameter data of communication terminal products such as mobile

- ❖ Report Version Summary
- ❖ Each antenna matching circuit and passive parameters
- ❖ conduction data
- ❖ Main Antenna OTA Test Data
- ❖ GPS measured effect
- ❖ Environmental treatment of the whole machine
- ❖ Risk warning during debugging
- ❖ Summary



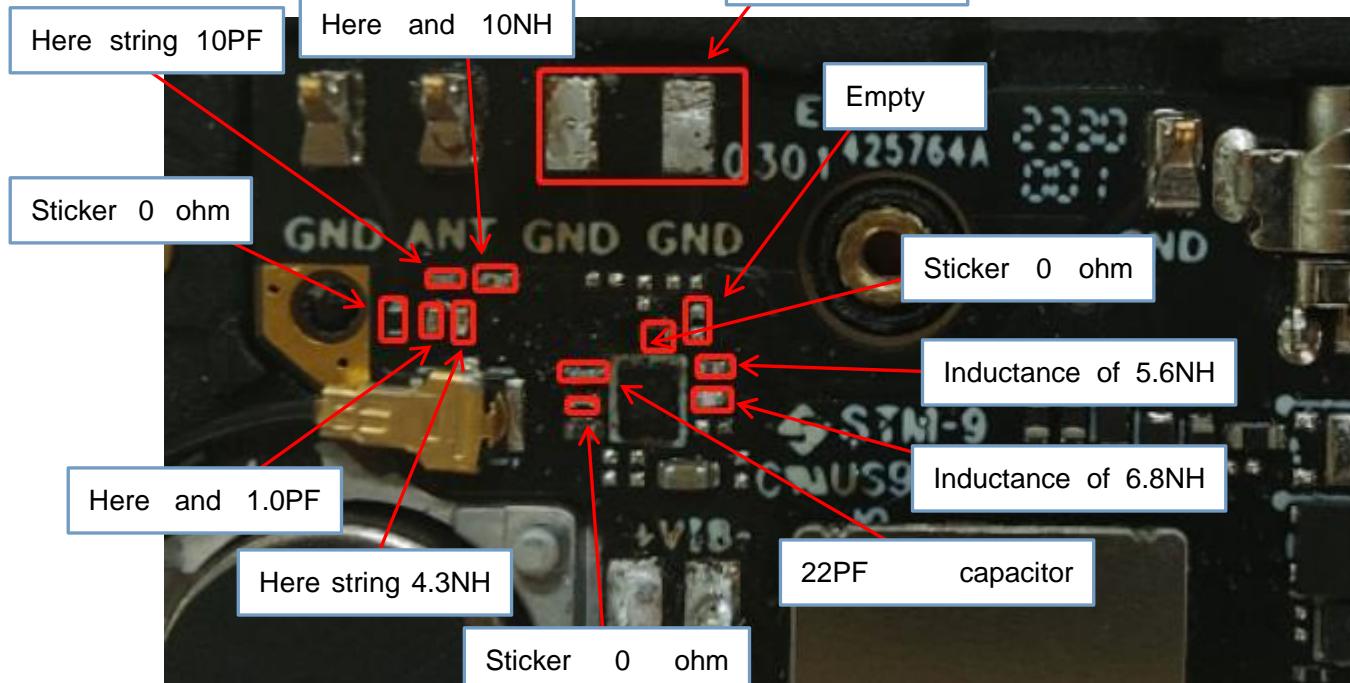
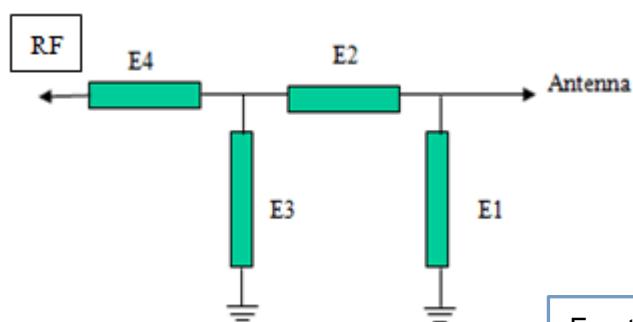
Report version feed

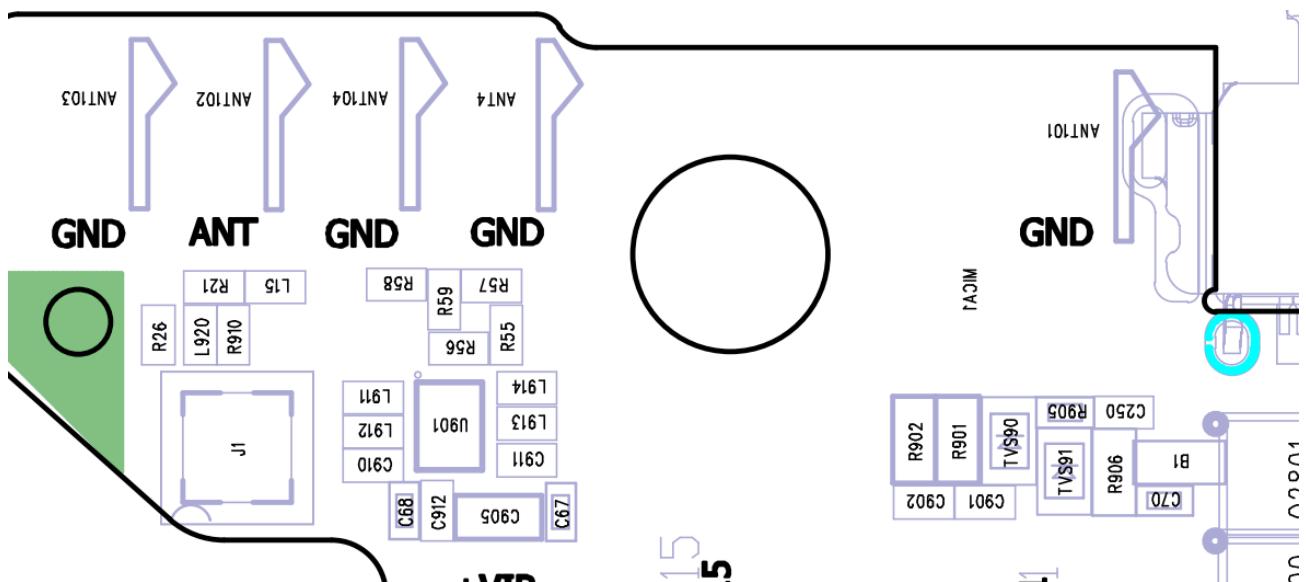
Version	Date	Content Overview
V1	2024-3-12	Antenna sharing K04Q
V2		
V3		
V4		
V5		
V6		
V7		

main antenna matching circuit

Element	E1	E2	E3	
Value				

Division I made changes to the main antenna matching circuit!



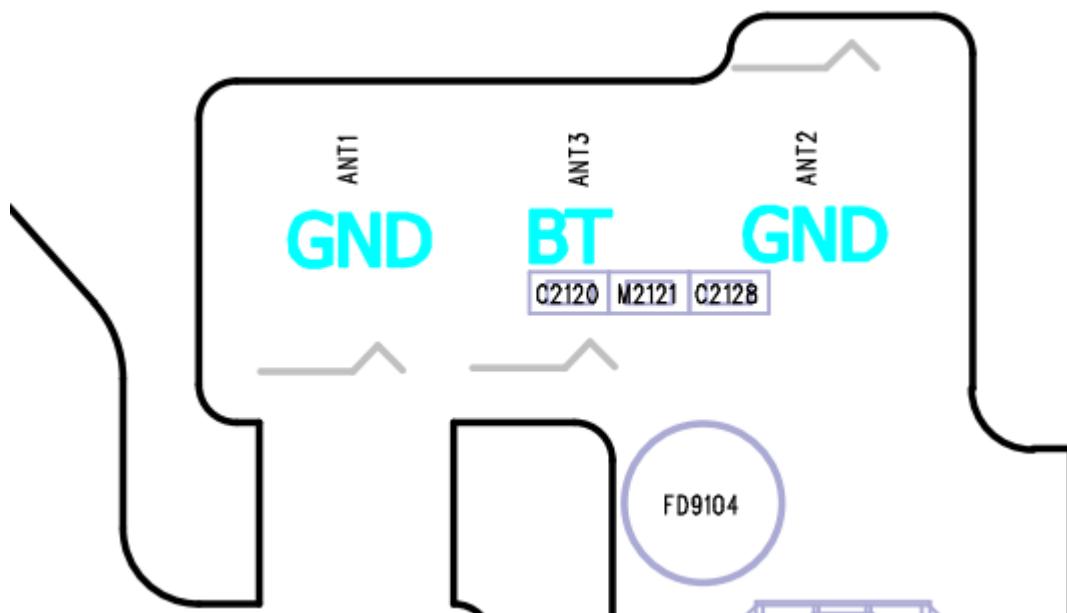
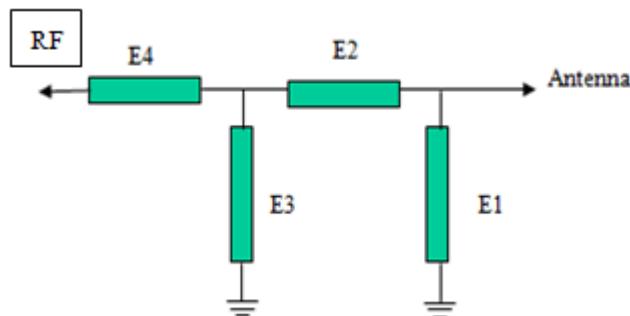


ANT104	Empty Post	ANT4	Empty Post
L15	10NH	R21	10PF
L920	1.0PF	R910	4.3NH
R26	0 euro	R55	Empty Post
R56	0 euro	L911(RF1)	22PF
L912(RF2)	0 euro	L914(RF3)	5.6NH
L913(RF4)	6.8NH		

three-in-one antenna matching circuit

Element	E1	E2	E3	
Value	NC	0 euro	NC	

Our company has not changed the three-in-one antenna matching circuit!

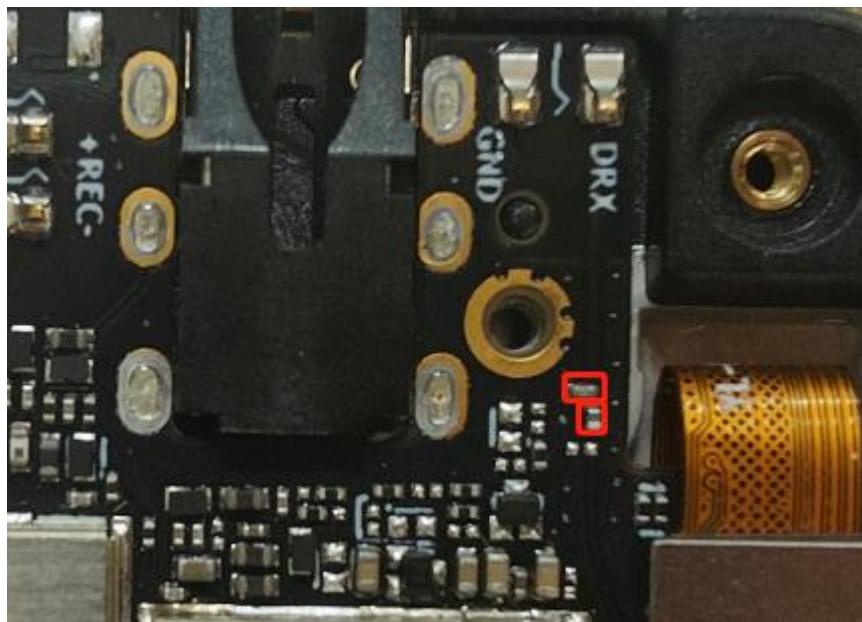
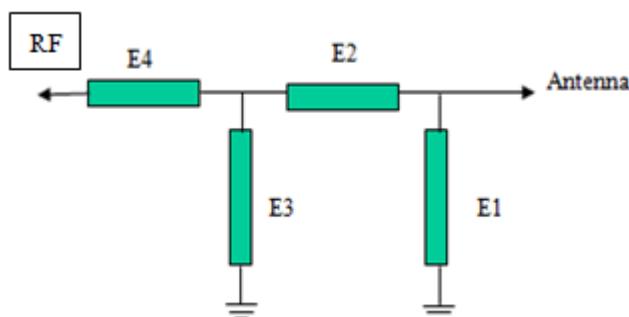


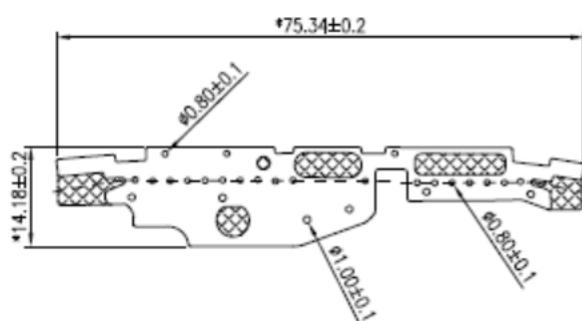
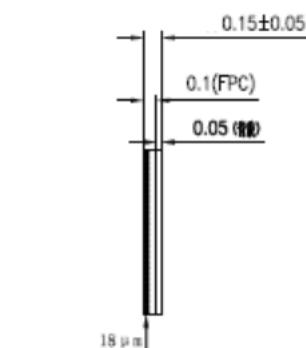
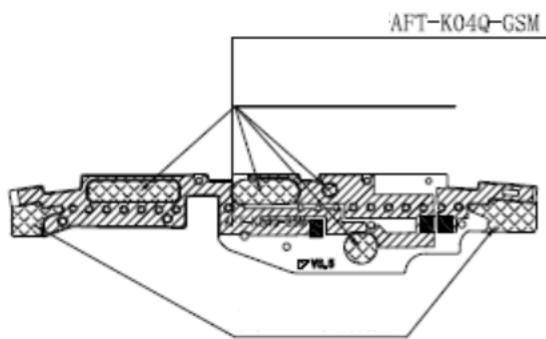
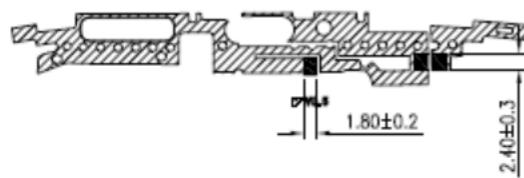
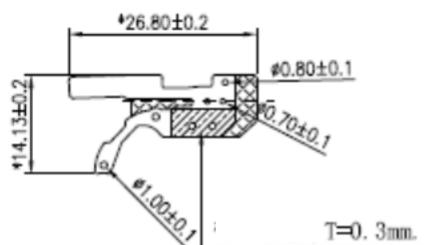
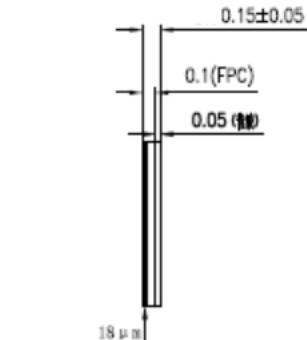
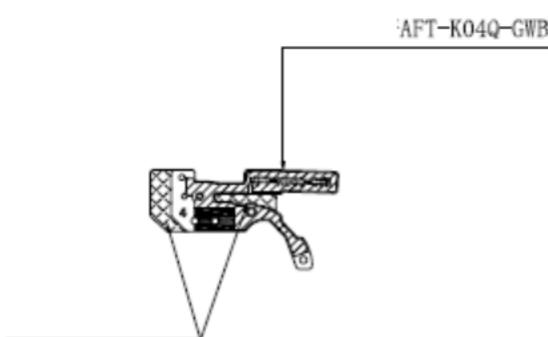
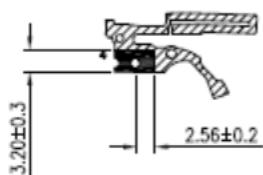
C2120	Empty Post	M2121	0 euro
C2128	Empty		

diversity antenna matching circuit

Element	E1	E2	E3	
Value				

Division I did not change the diversity antenna matching circuit!



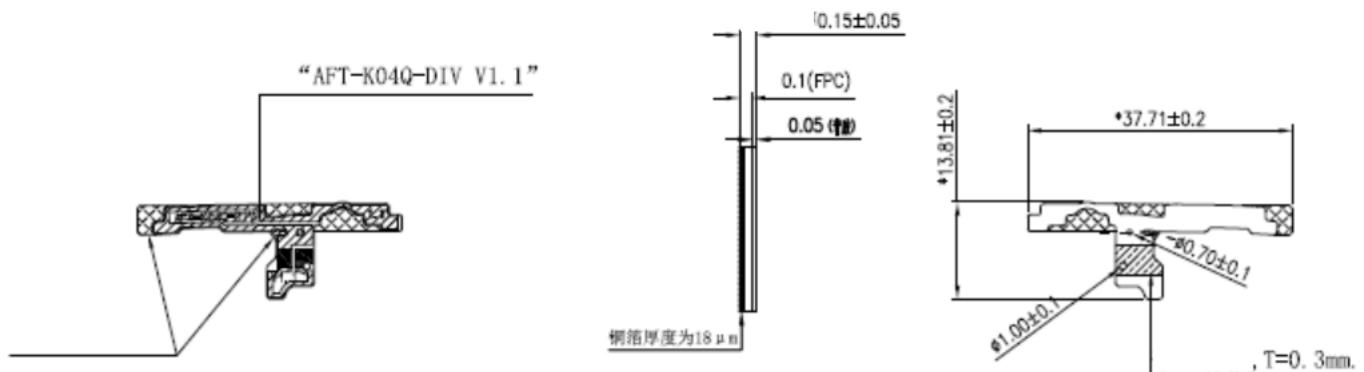
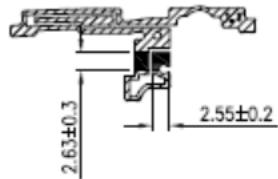

BT WIFI ANT




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diversity ANT





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(5 roof test, GPS star search and positioning time as shown above.).

Antenna gain (Antenna Gain)

Standard	Band	Frequency(MHZ)	Gain(dbi)
LTE	FDD-B2	1880	-0.6
LTE	FDD-B3	1880	-0.6
LTE	FDD-B4	1740	-1.6
LTE	FDD-B5	834	-5.6
LTE	FDD-B7	2520	-1.9
LTE	FDD-B8	890	-4.9
LTE	FDD-B12	710	-6.1
LTE	FDD-B13	750	-6.6
LTE	FDD-B17	710	-6.1
LTE	FDD-B25	1900	-0.6
LTE	FDD-B26	834	-5.6
LTE	FDD-B28	720	-5.9
LTE	FDD-B66	2020	-0.3
WCDMA	WCDMA-B1	1920	-0.8
WCDMA	WCDMA-B2	1880	-0.6
WCDMA	WCDMA-B4	1740	-1.6
WCDMA	WCDMA-B5	834	-5.6
WCDMA	WCDMA-B8	890	-4.9
GSM	GSM 850	834	-5.6
GSM	GSM 900	890	-4.9
GSM	DCS 1800	1880	-0.6
GSM	PCS 1900	1880	-0.6

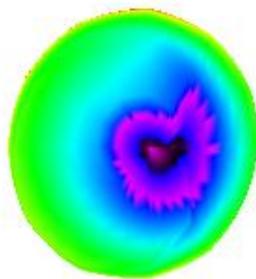


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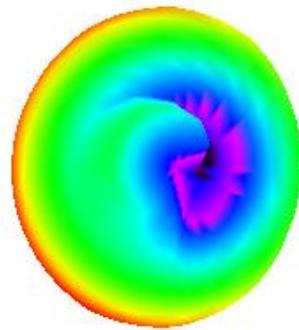
GPS		1575	-1.2
2.4G WiFi/BT		2480	-1.5
5G WiFi		5350	1.2

Apple Chart

GSM900/W900/LTE-B8



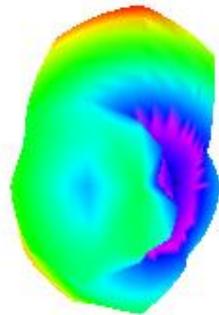
GSM850/W850/LTE-B5/26



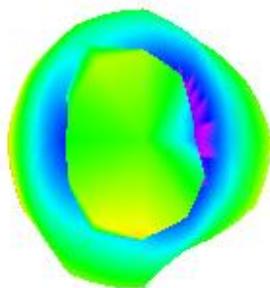
DCS1800/PCS1900/W1700/W1900/LTE-B2/3/4/25/66



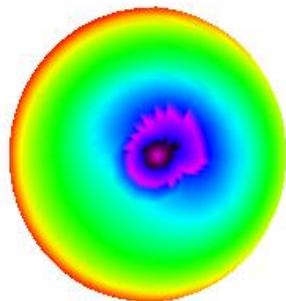
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W2100



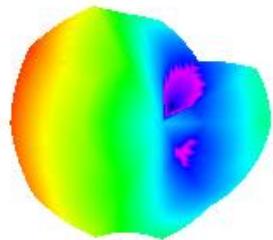
LTE-B28/12/13/17



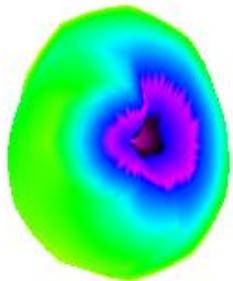
LTE-B7



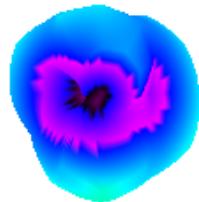
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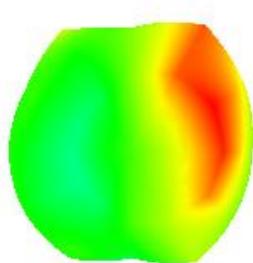
GPS



2.4G WIFI/BT



5G WIFI



Environmental treatment of the whole machine

Please carefully check whether the following environmental treatment is feasible. If you have any questions, please put forward the feasible plan for communication and negotiation at the first time!



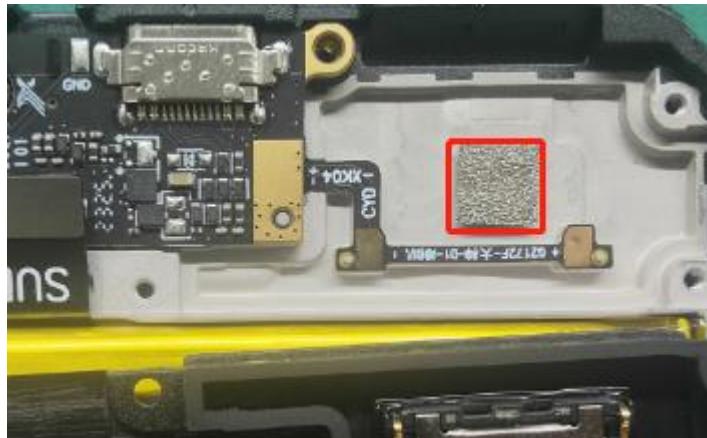
The copper exposed area of the small plate is pasted with double-



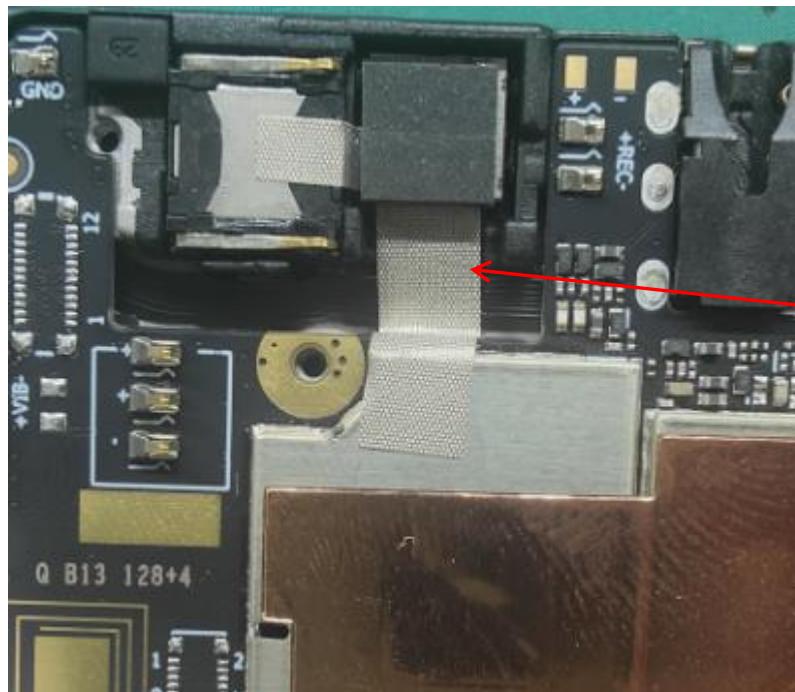
AFTtEch

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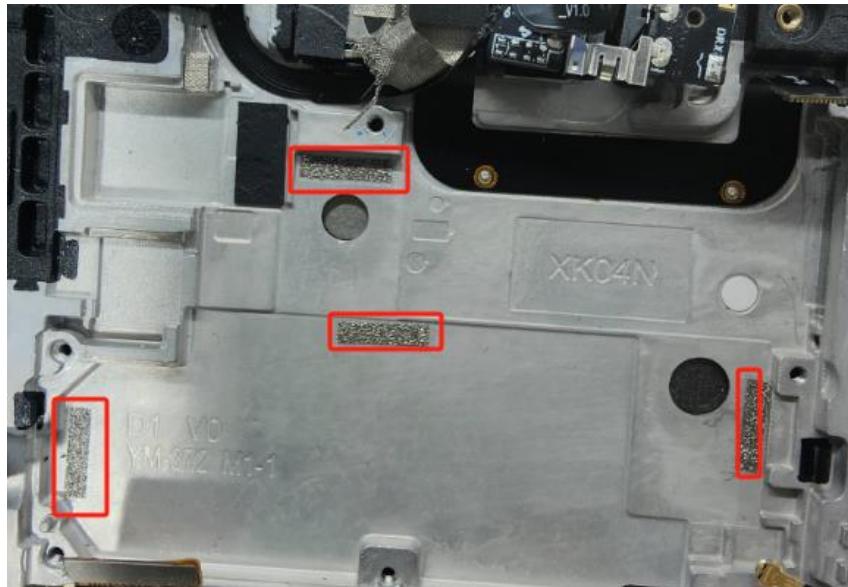
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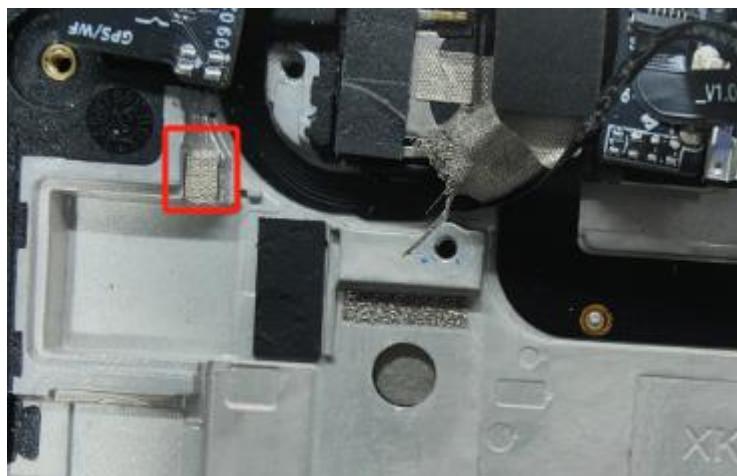
Here paste conductive sponge, horn
for grounding treatment, as shown in
the figure.



Stick conductive cloth here, and do
grounding treatment for front camera



The red box in the figure is pasted with conductive sponge, and the main board is fully connected with the



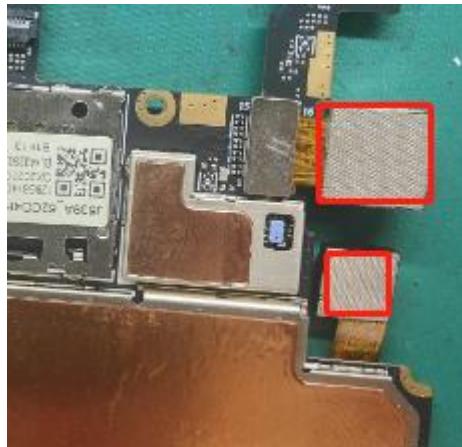
The conductive foam pasted here is connected with the exposed copper area of the main board to improve the performance of the three-in-one



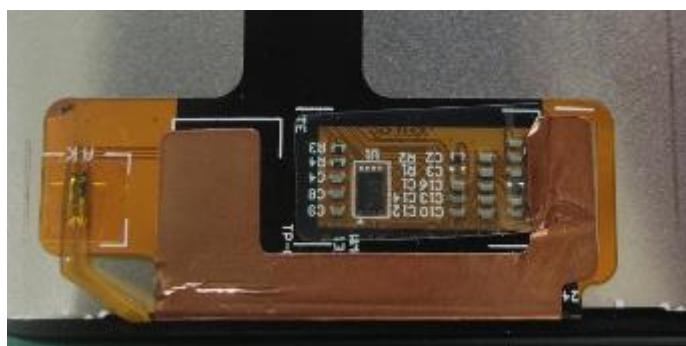
AFTtEch

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Post conductive cloth at the rear camera and do grounding treatment,



The screen cable is pasted



The conductive sponge LCD iron frame is pasted at this 2 and fully connected with the front shell, as

Note:

- 1、 This antenna is only applicable to the debugging prototype. Changes in main board PCB or radio frequency circuit materials, mobile phone accessories (such as camera, screen, horn, motor, battery, chassis process) and other changes must be tested and verified by our company before use.
- 2、 If your company wants to carry out verification of this project by a third party or a scheme company, please send the prototype to our company for retest OK at least one working day in advance, because the motherboard and environmental treatment will affect the antenna performance, so as to avoid delaying the project progress by sending the prototype twice or more times!