

Shenzhen bafangda communication co., ltd

Test report of Z5019E antenna

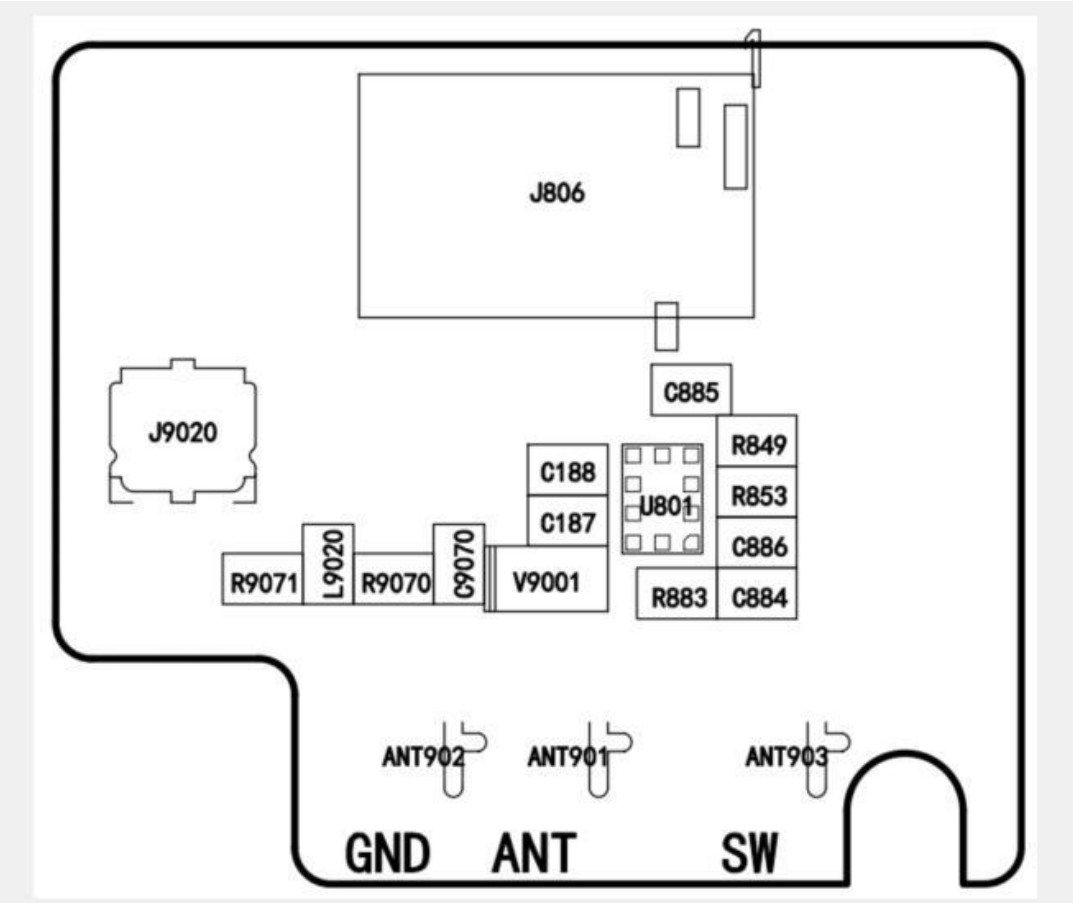
Project: Mao Yuzheng

Test Date: October 10, 2022

Antenna frequency band design

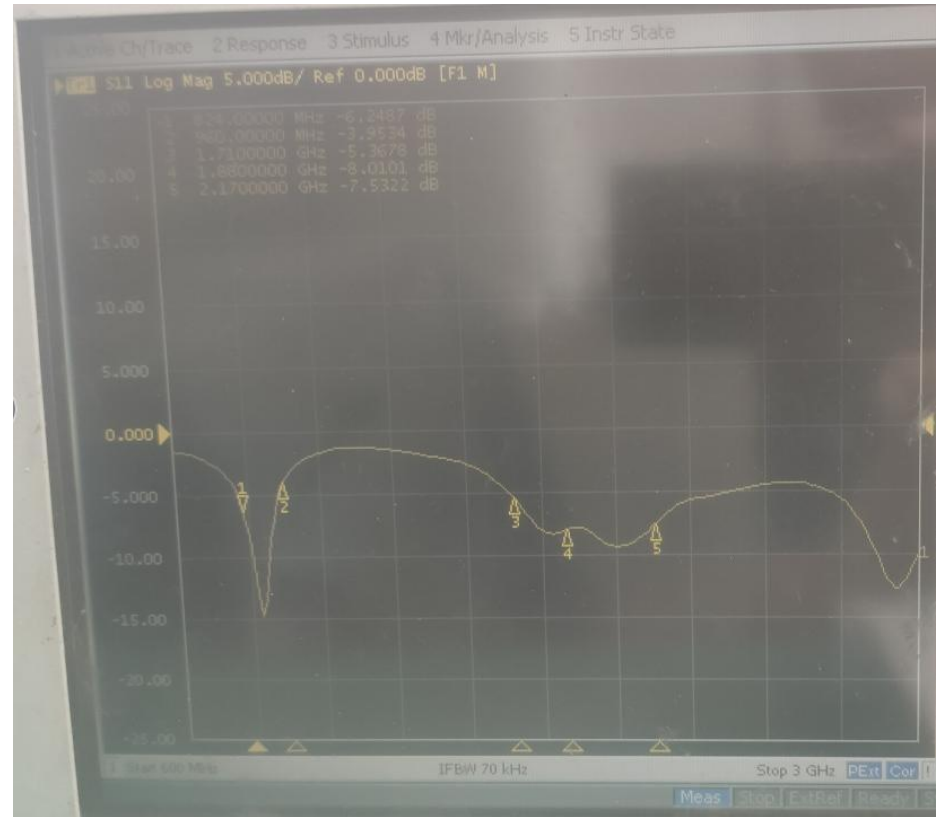
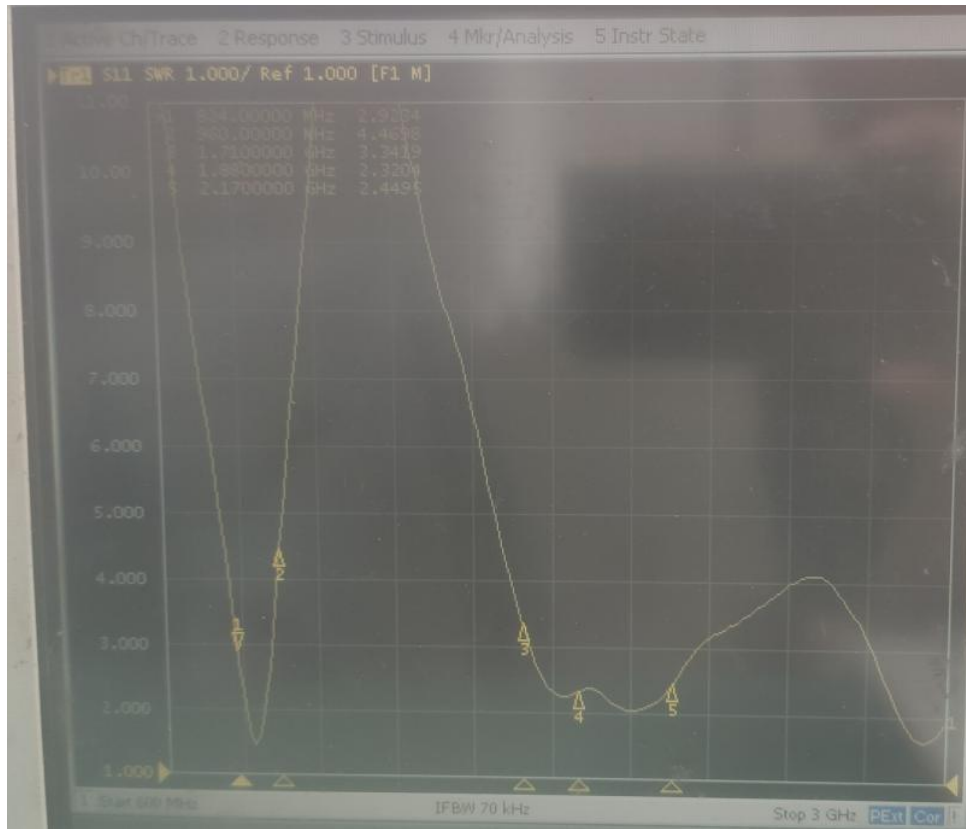
radio frequ ency	Network mode	GSM+W+LTE+BT+WIFI+ GPS		
	Frequenc y band requireme nt	GSM: B2 B3 B5 B8 WCDMA: B2 B5 LTE: B2 B5 B66		
	Number of communication antennas	Main antenna	GSM+W+LTE	
		Triple antenna	WIFI+BT+GPS	
		Diversity antenna		

Antenna matching circuit description

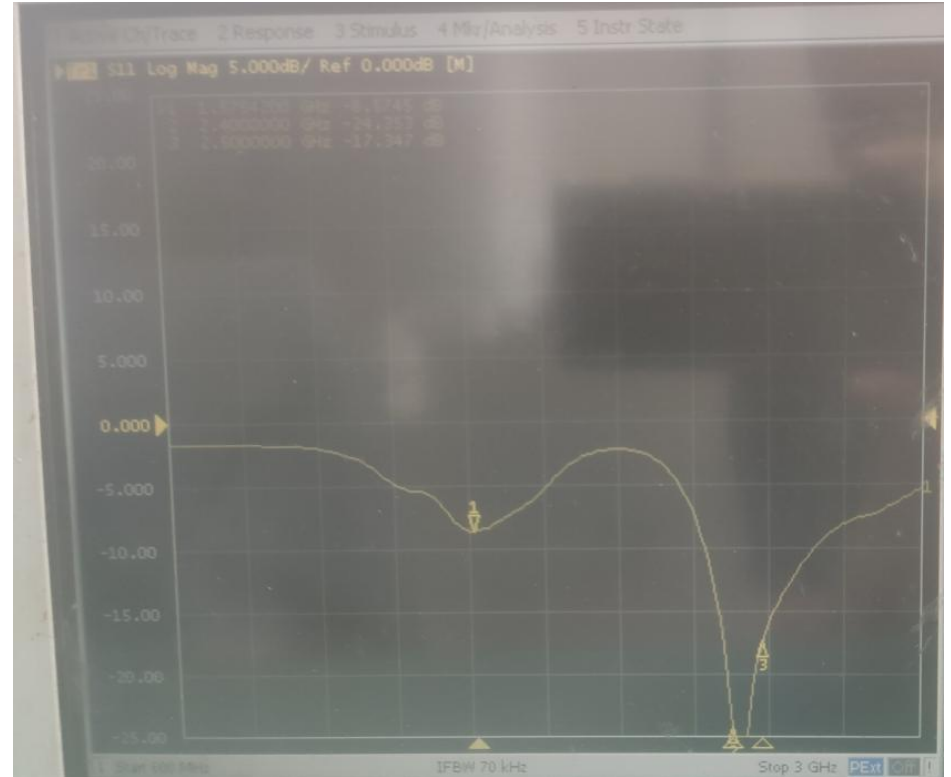
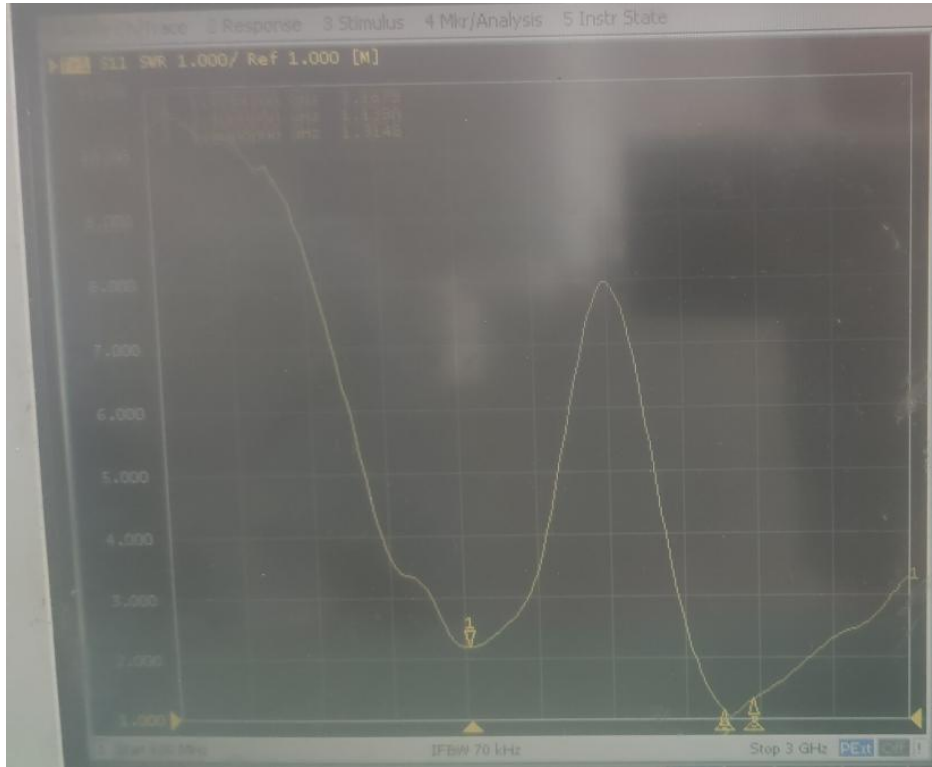


R883 去掉
C884 4.3nH

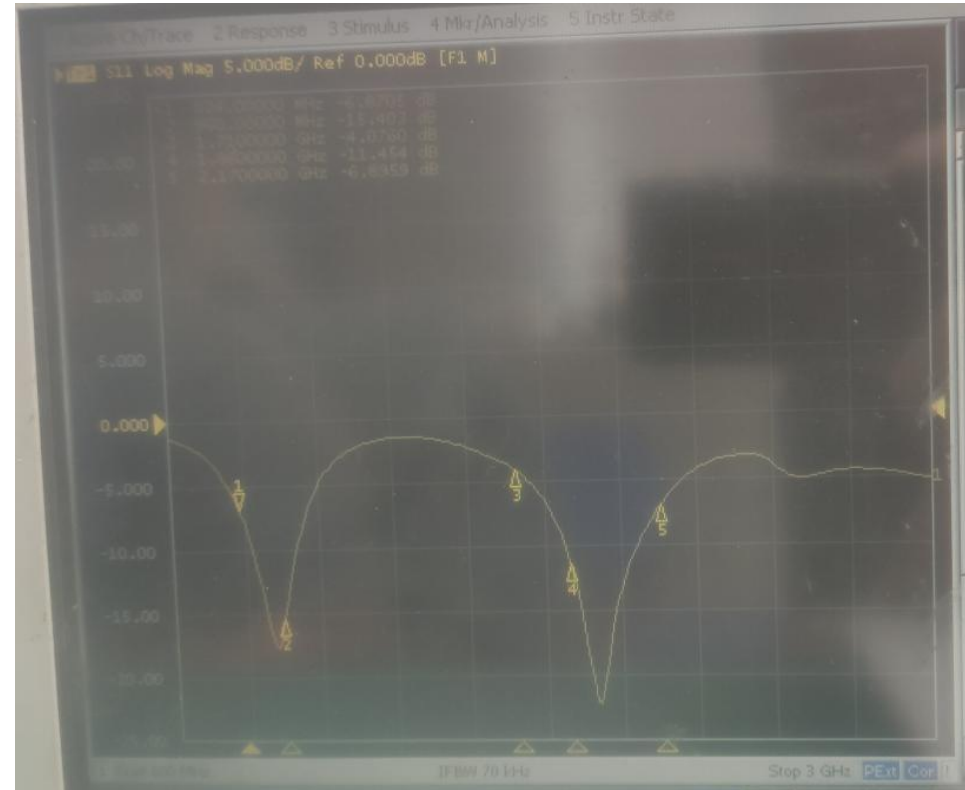
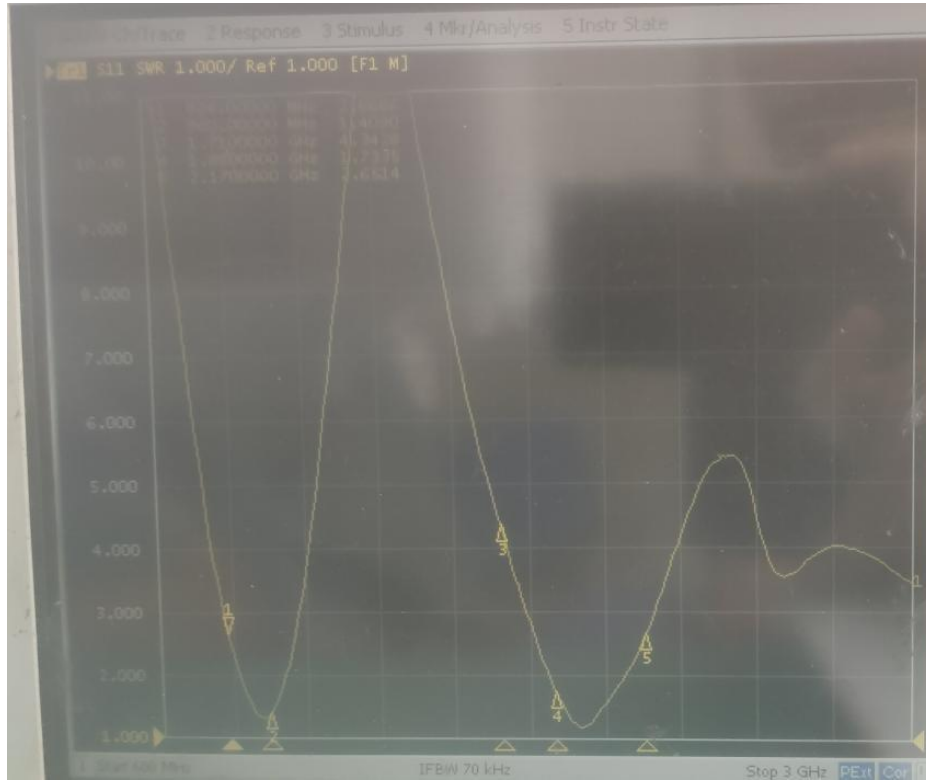
Main antenna passive data



3in one antenna passive data



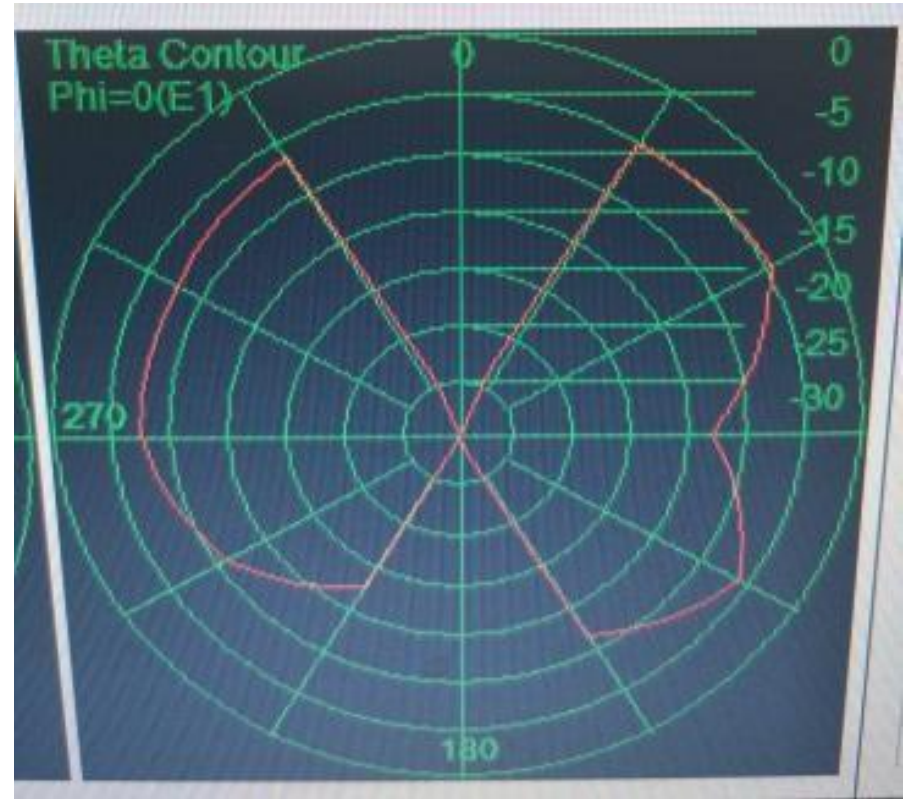
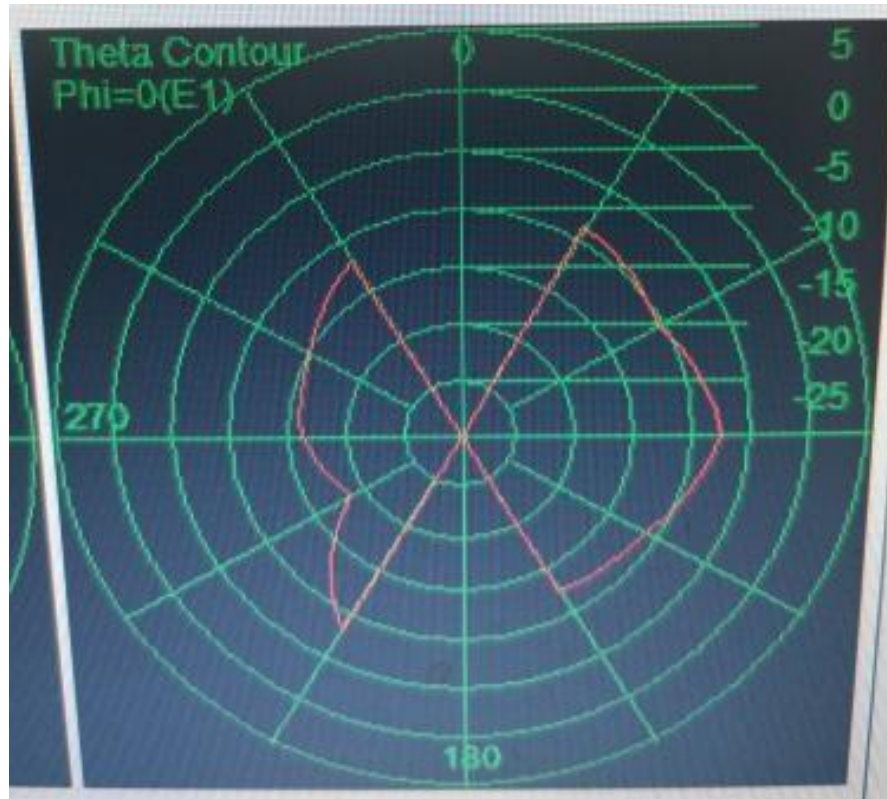
Diversity antenna data



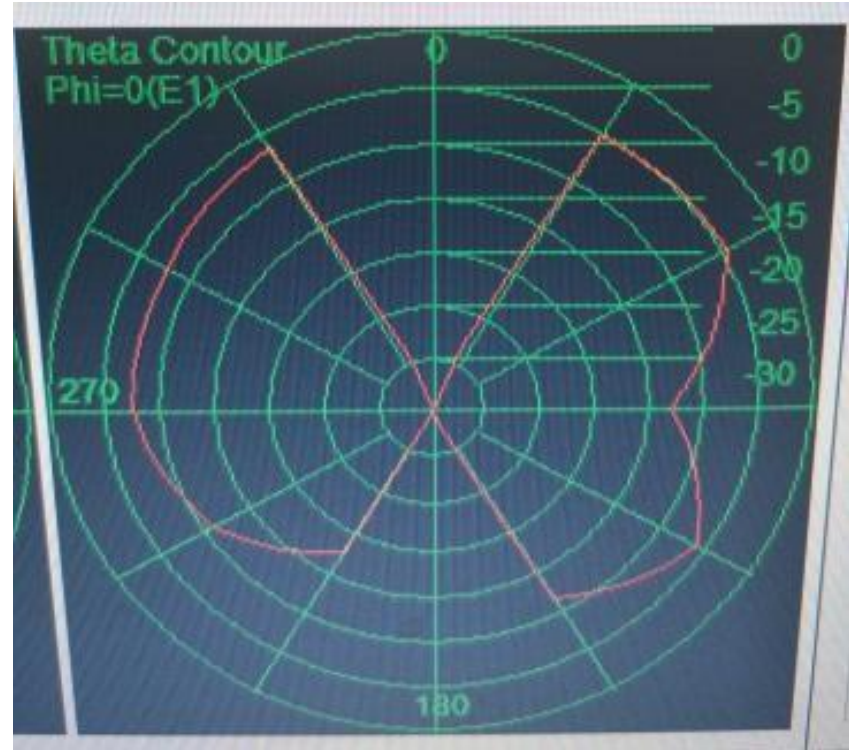
antenna gain

Frequency (MHZ)	Average Gain (dB)	Peak Gain (dBi)
GSM850	0.81	0.94
GSM900	0.72	0.89
DCS1800	0.48	0.79
PCS1900	0.52	0.83
WCDMA850	0.81	0.81
WCDMA1900	0.52	0.83
LTE B2	0.52	0.83
LTE B5	0.81	0.94
LTE B66	0.55	0.86
GPS	0.27	0.77
WIFI/BT	0.25	0.34

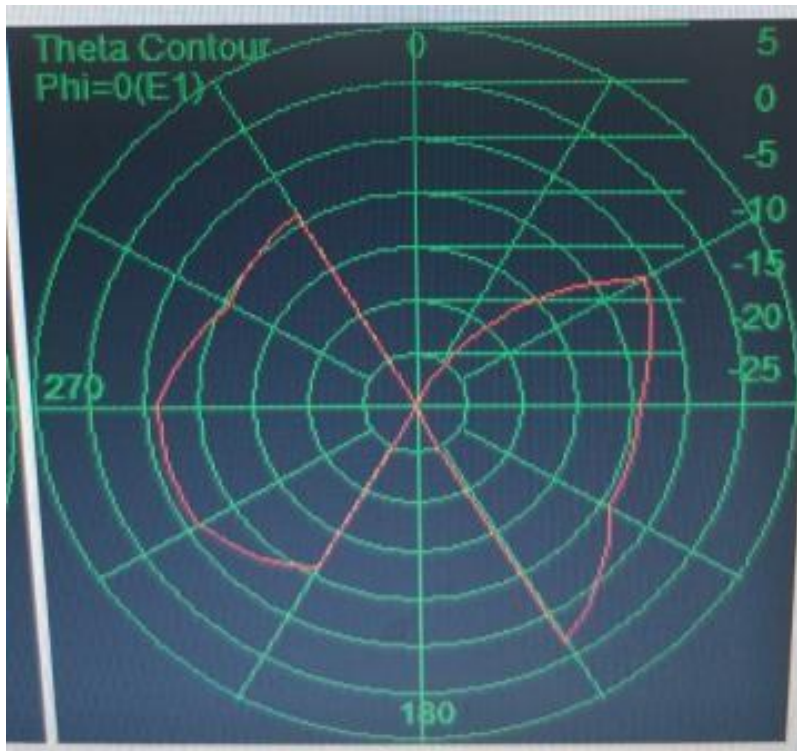
850MHz gain data oscillograph



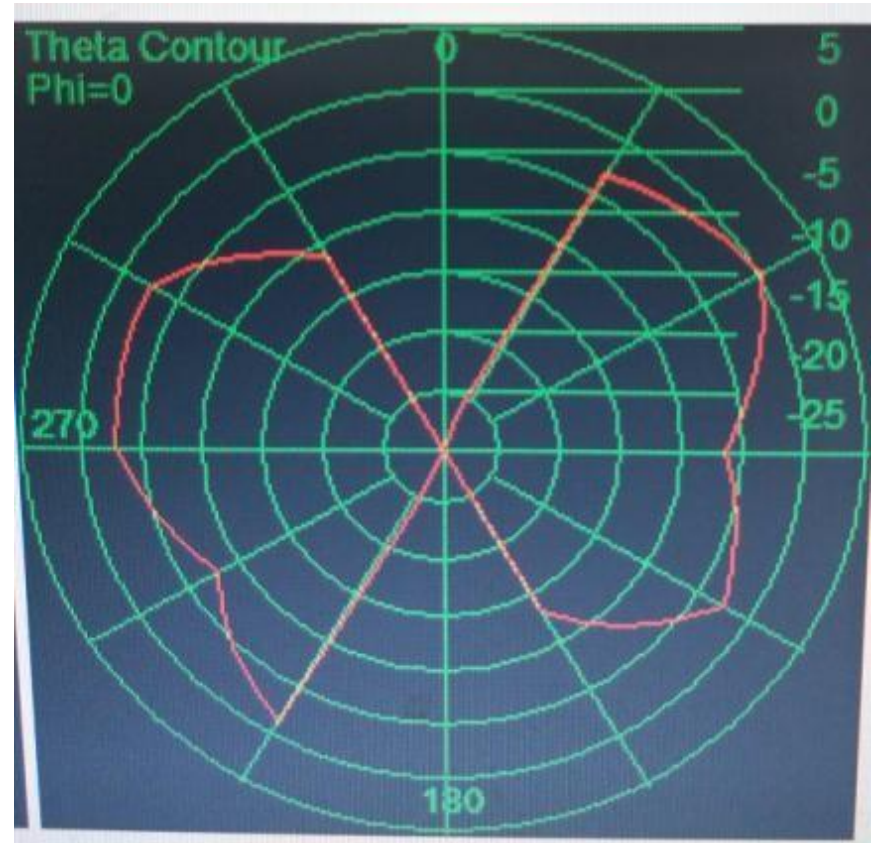
900MHZ gain data oscillograph



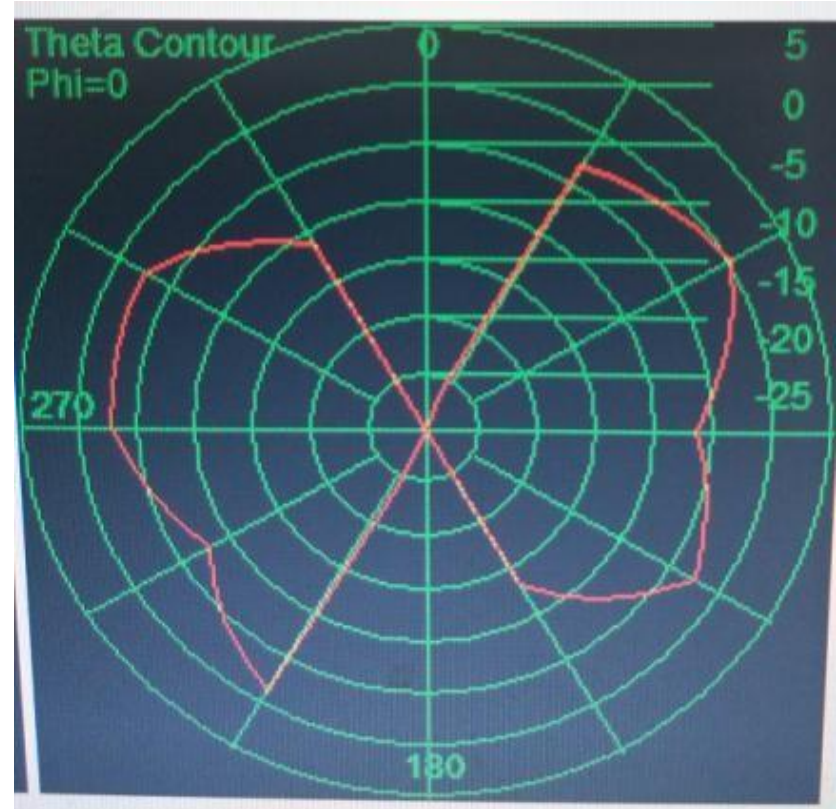
1800MHZ gain data oscillograph



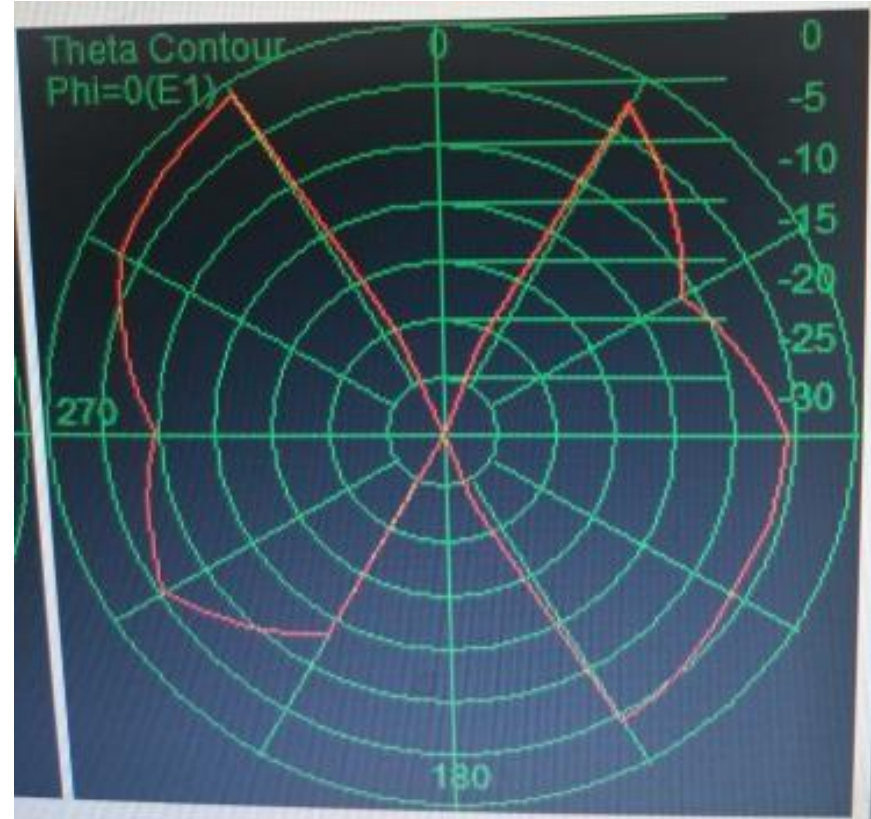
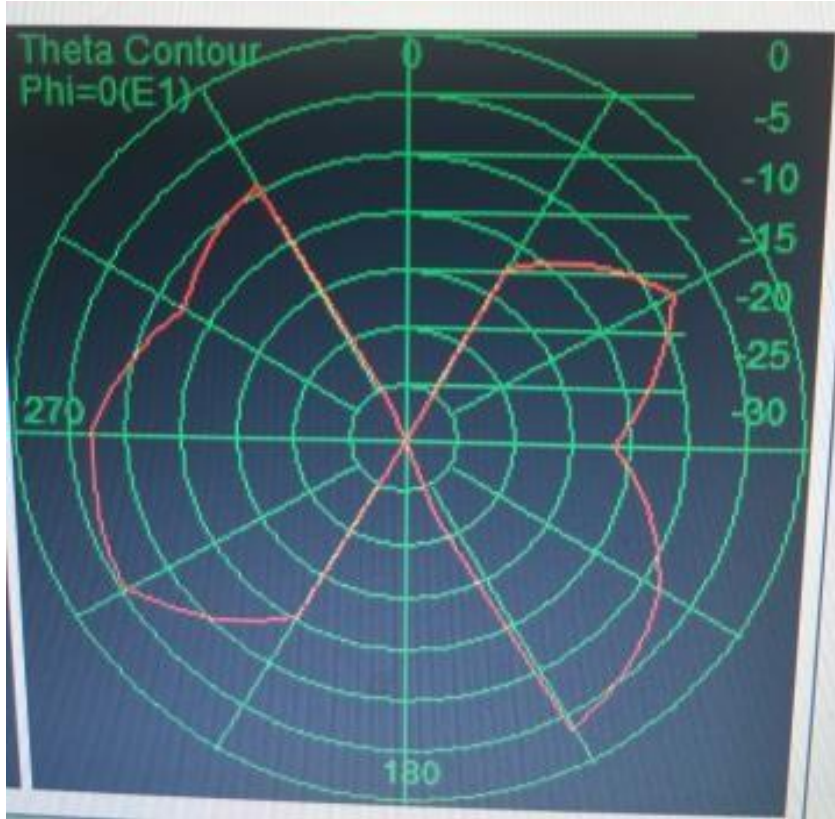
1900MHZ gain data oscillograph



2100MHZ gain data oscillograph



WiFi gain data oscillograph



Antenna data

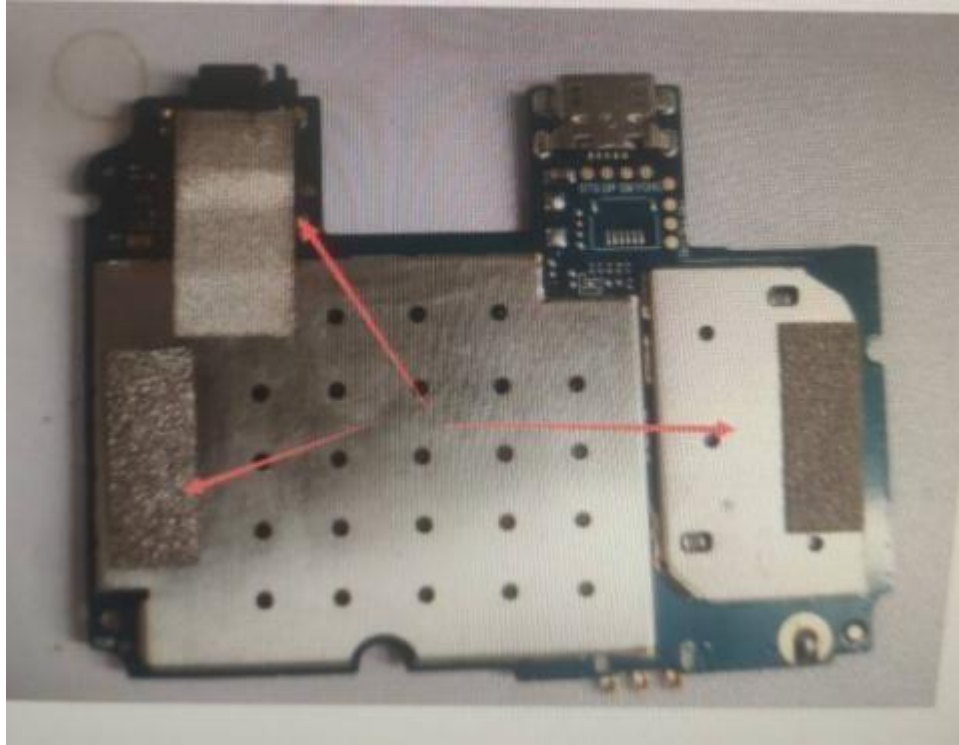
Modulation	GSM 850			GSM 900			DCS 1800			PCS 1900		
Channel	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
TRP	26.23	26.52	27.11	27.13	27.10	26.46	25.06	25.21	25.24	25.09	25.27	25.13
TIS	-103.35	-102.82	-102.24	-102.18	-102.17	-102.06	-103.16	-104.25	-103.26	-104.53	-105.21	-104.71
Modulation	WCDMA B2			WCDMA B5								
Channel	Low	Medium	High	Low	Medium	High						
TRP	17.17	17.25	17.29	18.26	18.37	18.32						
TIS	-106.15	-105.62	-105.53	-105.68	-105.55	-105.31						

Modulation	LTE B2			LTE B5			LTE B66		
Channel	Low	Medium	High	Low	Medium	High	Low	Medium	High
TRP	18.10	18.65	19.43	17.91	18.52	18.44	17.23	17.42	17.31
TIS	-93.13	-93.05	-93.07	-93.81	-93.74	-93.78	-92.30	-92.34	-92.33

GPS/WIFI/BT active test report

GPS	Maximum signal strength	Number of searching stars	Average positioning time	weather regime
	41	eight	120S	fine
WIFI	Received signal strength 6m away from WIFI router		Barrier-free normal internet access distance	
	-55dB		20m	
BT	Clear talking distance with barrier-free back			
	7m			

Environmental treatment description



Text

Motherboard is

1. The motherboard shall be grounded as shown in the figure.

Environmental treatment description

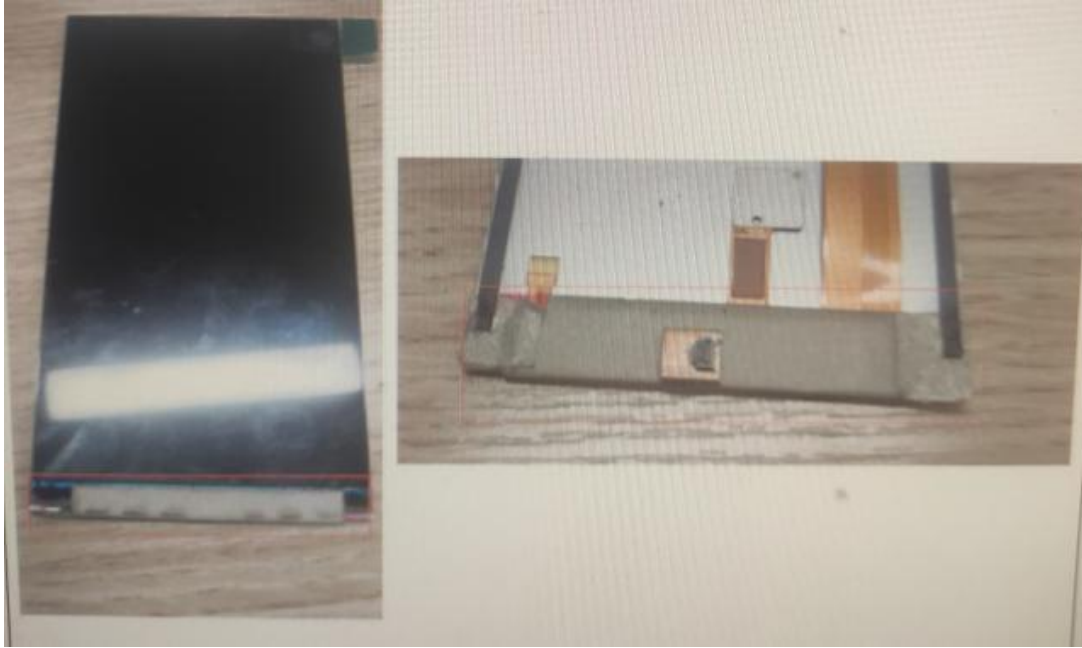


Text

The receiver

1. The motherboard shall be grounded as shown in the figure.

Environmental treatment description

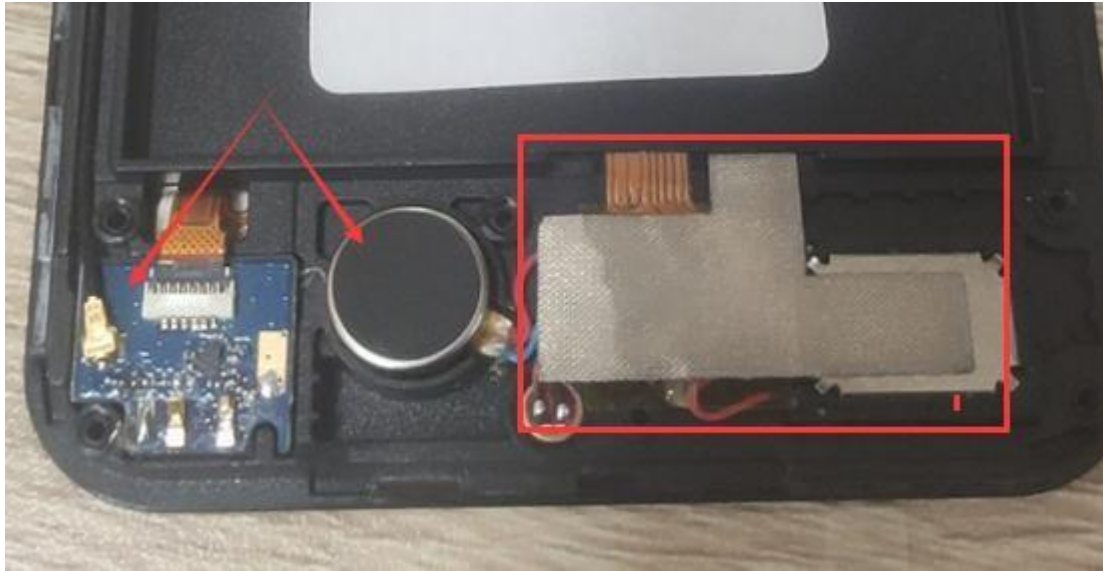


Text

Screen wiring is

1. The motherboard shall be grounded as shown in the figure.

Environmental treatment description



Text description

Ground foam on the back of the small board should be thickened appropriately.

Ground the motor.

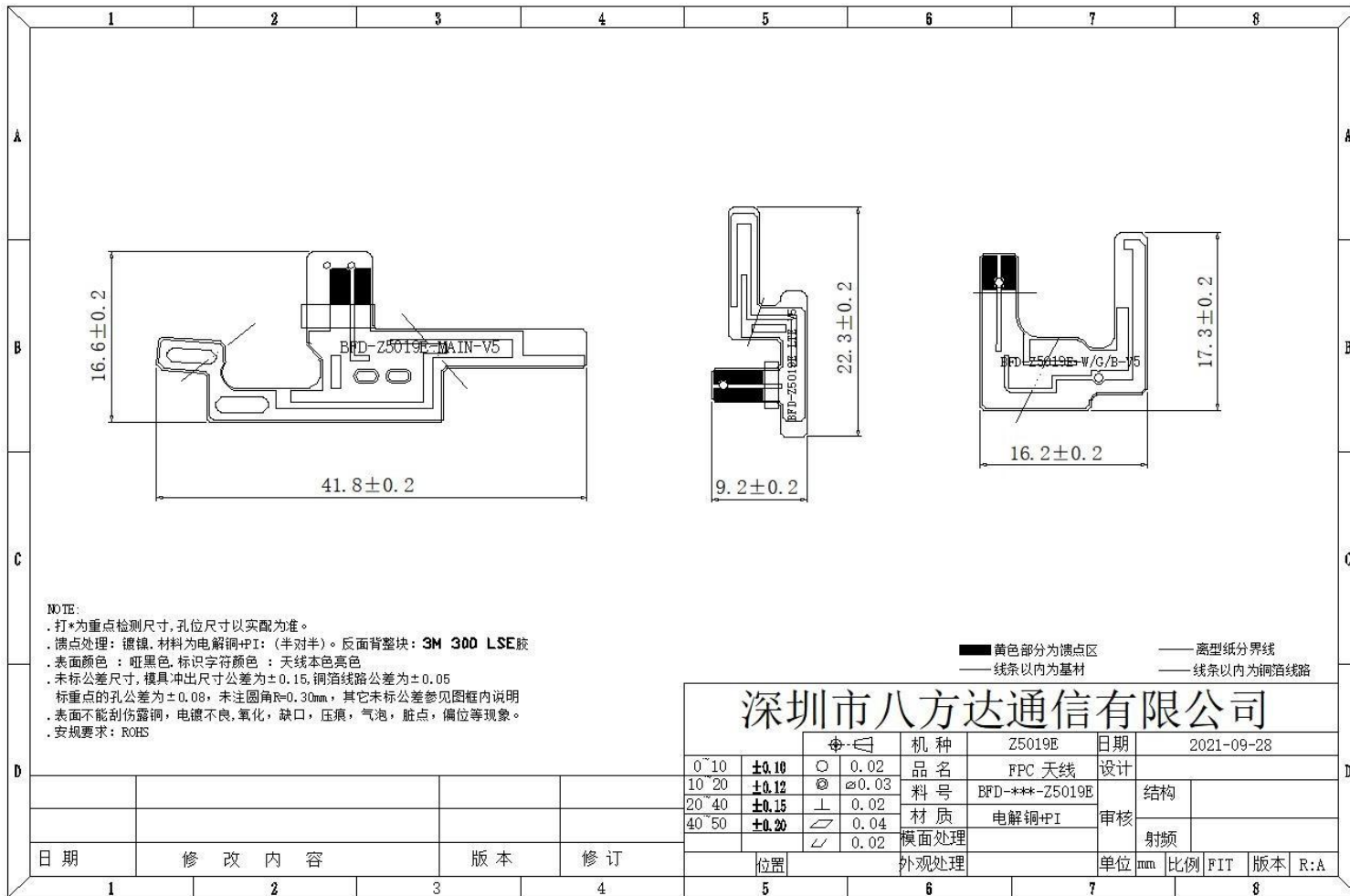
Conductive cloth grounding screen for red frame area

Cover. 223 but the slightest w q11141,

The motherboard shall be grounded as shown in the figure.

2. The back of the earphone holder is grounded with conductive cloth.

Antenna Dimensions (unit: mm)



Shenzhen bafangda communication

co., ltd

**SHENZHEN BFD COMMUNICATION EQUIPMENT
CO.,LTD**



THE END