



福贝特国际（香港）有限公司

**Customer: Omni
Denko**

Model: B702

Producer: Andy

Date: May 30, 2023



directory

Introduction to project debugging

2 . Test instruments and environment

Outline of three project versions

4 chips conduction

5 impedance, return loss, standing wave ratio

6 OTA active data (free field).

7 OTA active data (headform).

8. Actual measurement and environment

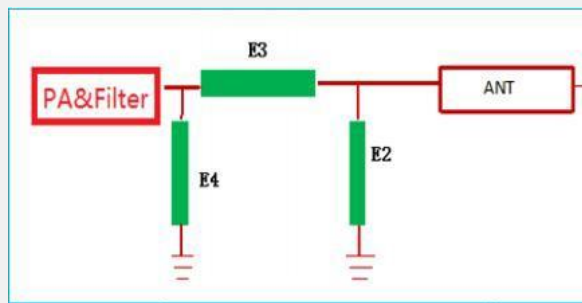
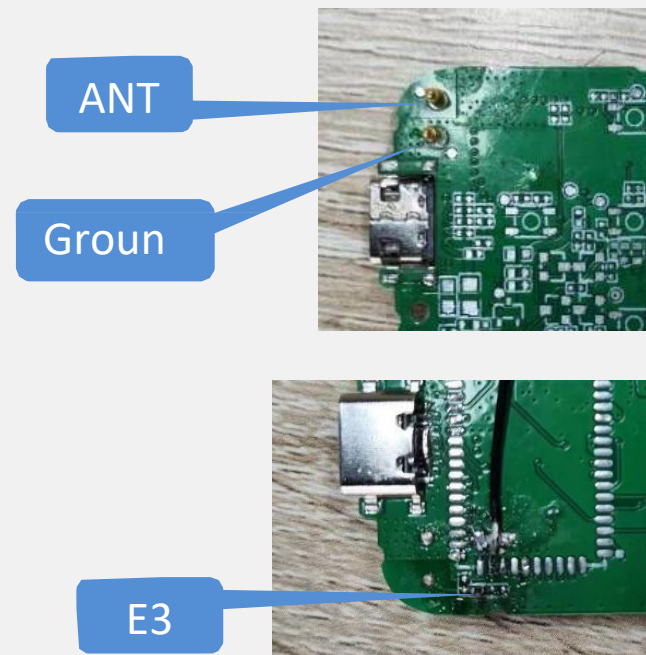
9 . Antenna environmental treatment

10 Summary

Model category	TWS headphones	
Debug frequency band and material	BT	2.4GHz
	Material	FPC antenna
Debug performance	Subject to the actual customer experience	
version	V1.0	

Mockup exterior drawing

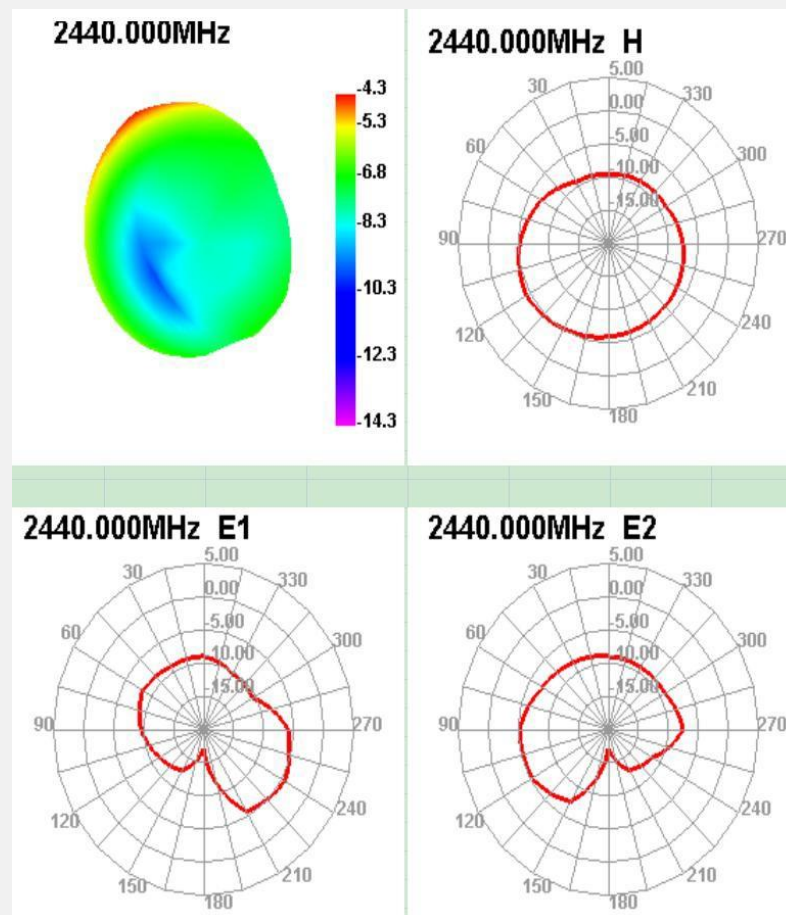




Element	parameter value
ANT	FPC
E2	NC
E3	0 ohms
E4	NC

Passive test (double thimble).

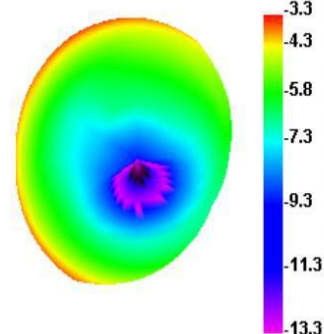
Passive Test For BT			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	18.35	-7.33	-4.91
2410	18.36	-7.36	-4.78
2420	19.65	-7.53	-4.99
2430	19.23	-6.19	-4.51
2440	20.16	-6.92	-4.26
2450	19.39	-6.13	-3.52
2460	17.1	-7.67	-4.13
2470	19.88	-7.8	-3.18
2480	18.15	-7.96	-3.39



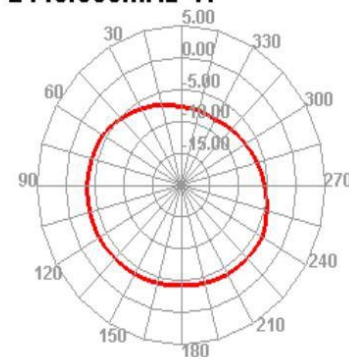
Passive test (single thimble).

Passive Test For BT			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	23.78	-6.24	-2.77
2410	22.59	-6.46	-2.98
2420	23.48	-6.68	-3.36
2430	24.38	-6.31	-3.2
2440	26.43	-6.24	-3.27
2450	27.62	-5.59	-2.66
2460	25.36	-6.13	-3.16
2470	27.35	-5.63	-2.62
2480	22.32	-6.51	-3.41

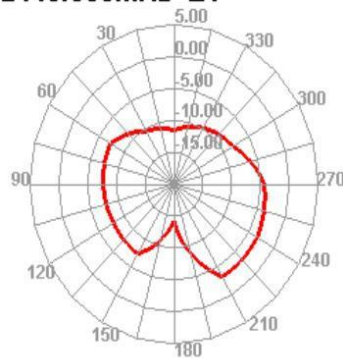
2440.000MHz



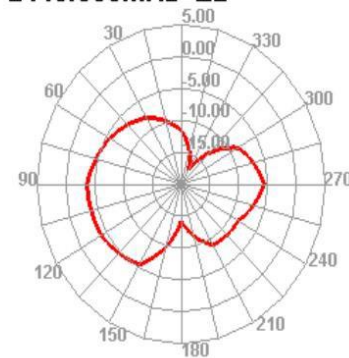
2440.000MHz H



2440.000MHz E1



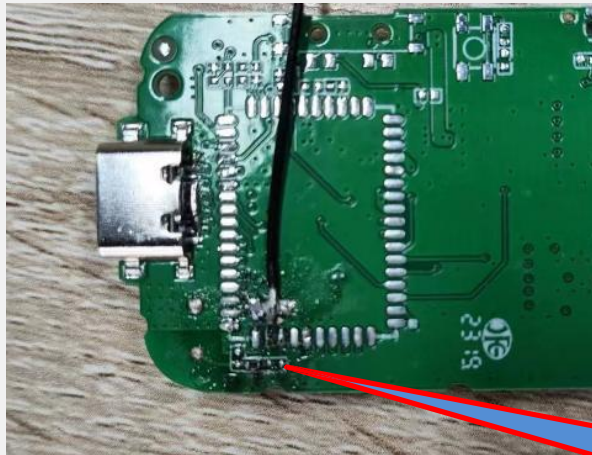
2440.000MHz E2



Suggestions for improvement



A solder joint is reserved next to the feed point that can affect network clutter



1. the microstrip line should not be done at right angles, do arc,
2. microstrip lines are too long

总结&附加说明

1. At present, from the data point point point will be more efficient, but considering the anti-interference problem, the doubly-fed point is now used
2. Due to the debugging of the blank board, there will be some changes in the frequency after the board is attached to the device, and subsequent optimization and confirmation are required.



Thank you and happy cooperation!

The Concepts National Income And National Product Have Roughly The Same Value And Can Be Used Interchangeably If Our Interest Is In Their

Thank You!

