

深圳市千目通讯科技有限公司

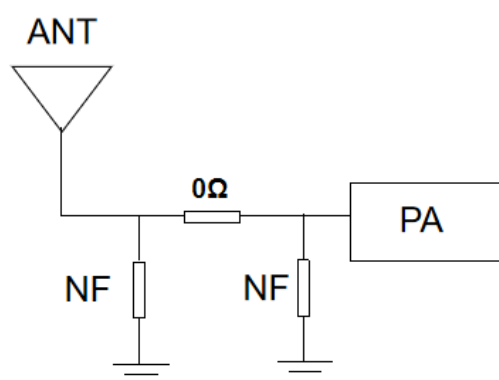
Shenzhen Qianmu Communication Technology Co.,Ltd.

Antenna Acknowledgement

Applicable model	VORMOR-Z6		
Customer	Shenzhen Beibo Intelligent Technology Co., Ltd.		
Specification description			
	Product content	Specification	Customer material code
Specification description	antenna	FPC/Black/Character BBZN-F1-Z6-WIFI/BT	01.BBDZ600008
Change of resume			
Serial number	Date	Version	Brief description of the changes
1	2023-08-18	V1.0	New project
2			
3			

Supplier sample confirmation					
Research and development	Structure	Audit	Judgement		
			PASS		
Customer sample confirmation					
Electron	Structure	Project	Procurement	Quality	Audit
Reasons for rejection or other precautions:					

1、Matching circuit- antenna



The original matching circuit has not changed

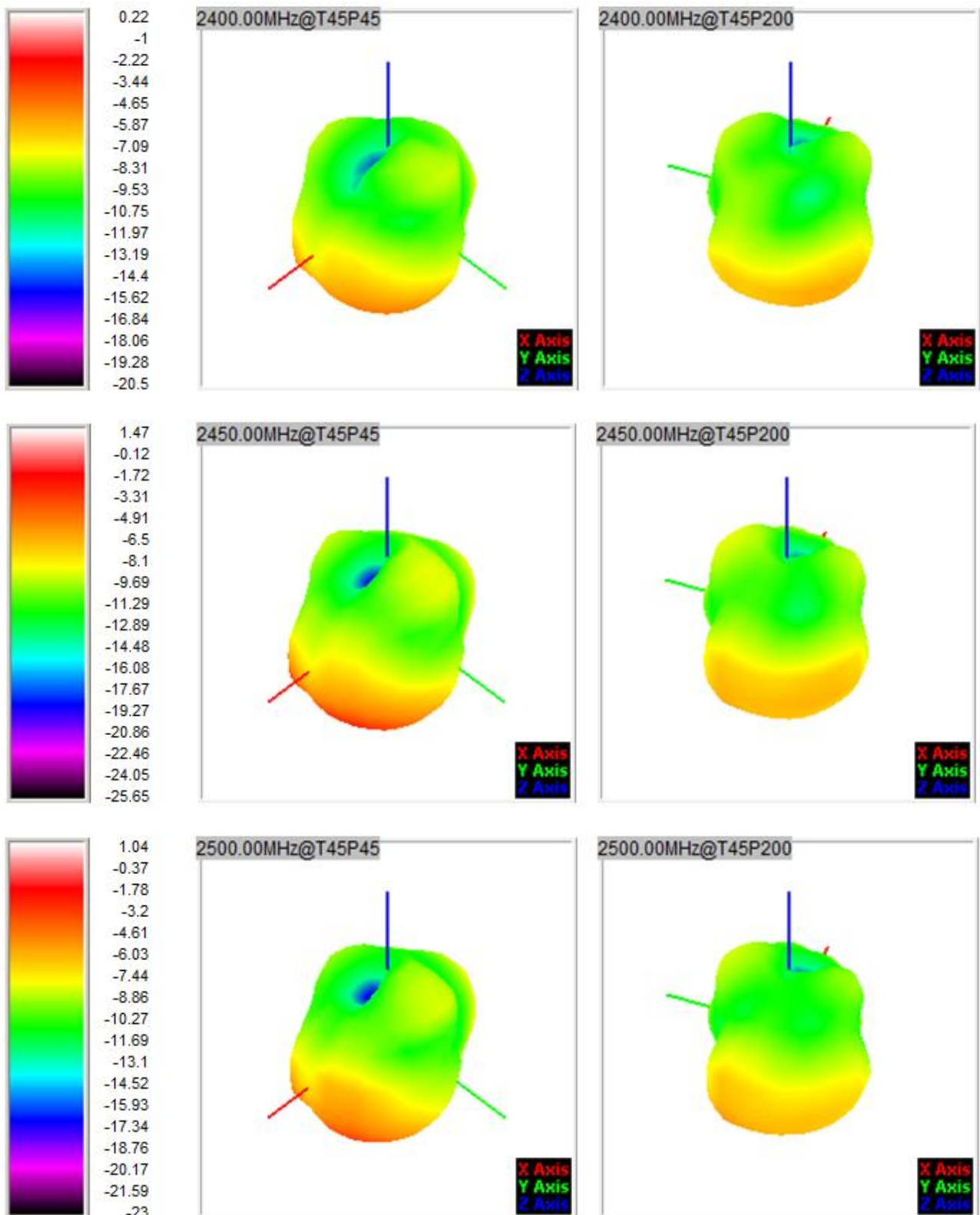
2. Antenna 2400–2500MHz active data

	WIFI 2400~2500MHz 802.11b 11Mbps		
Channel	1	6	11
TRP	13.23	13.33	13.12
TIS	-81.47	-82.16	-81.66

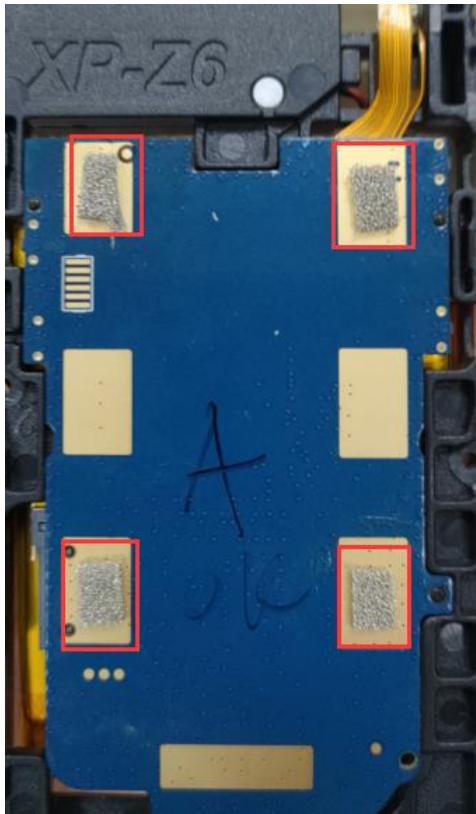
3. Antenna gain and efficiency

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0
Tot. Rad. Pwr. (dBm)	-4.6	-4.64	-4.54	-4.41	-4.38	-4.21	-4.27	-4.56	-4.61	-4.54	-4.68
Peak EIRP (dBm)	0.22	0.26	0.54	0.89	1.14	1.47	1.53	1.3	1.26	1.26	1.04
Directivity (dBi)	4.82	4.9	5.08	5.29	5.52	5.68	5.8	5.86	5.86	5.79	5.73
Efficiency (dB)	-4.6	-4.64	-4.54	-4.41	-4.38	-4.21	-4.27	-4.56	-4.61	-4.54	-4.68
Efficiency (%)	34.7	34.4	35.1	36.2	36.4	37.9	37.4	35	34.6	35.2	34
Gain (dBi)	0.22	0.26	0.54	0.89	1.14	1.47	1.53	1.3	1.26	1.26	1.04
NHPRP ±Pi/4 (dBm)	-5.44	-5.47	-5.37	-5.22	-5.19	-5.01	-5.06	-5.36	-5.4	-5.34	-5.49
NHPRP ±Pi/6 (dBm)	-6.6	-6.62	-6.51	-6.35	-6.31	-6.11	-6.15	-6.42	-6.45	-6.38	-6.51
NHPRP ±Pi/8 (dBm)	-7.5	-7.52	-7.41	-7.24	-7.19	-6.98	-7	-7.25	-7.27	-7.18	-7.3
Upper Hem. PRP (dBm)	-9.01	-8.99	-8.8	-8.6	-8.54	-8.34	-8.42	-8.71	-8.74	-8.63	-8.7
Lower Hem. PRP (dBm)	-6.56	-6.63	-6.59	-6.49	-6.49	-6.33	-6.38	-6.67	-6.73	-6.68	-6.88
Upper Hem. PRP (%)	12.57	12.63	13.17	13.81	13.98	14.66	14.4	13.45	13.38	13.72	13.48
Lower Hem. PRP (%)	22.09	21.72	21.94	22.43	22.46	23.27	23.02	21.51	21.25	21.47	20.53

4. Antenna pattern and apple pattern



5、 Environmental treatment



Main board is attached with conductive wool and screen is grounded



Antenna location

6、 Structural drawings

1	2	3	4	5	6	7	8																																																																								
Note: the FPC to use a half, and the toughness is better, not easy to tear.																																																																															
A	○ Peripheral and through holes ● Copper platinum ▨ Base material ● Gold-plated nickel — plating Zigzag paper break line □ Backless zone □ Back glue area																																																																														
B	10.80±0.15 BBZN-FIT/20 -FIT/MT 19.35±0.15 6.85±0.15																																																																														
C	Requirement: 1. The A surface represents the FPC copper laying line part, the B surface represents the back 3 M 9471 rubber paper part; 2. FPC total thickness of 0.1mm, is 1Uin~3Uin and gold plated 3. A single layer PI base material, electrolytic copper; 4. Oil film matte black, character bright white; 5. FPC incoming materials around to be neat.																																																																														
D	<table><tr><td colspan="2">第三角法</td><td colspan="2">FPC</td><td colspan="2">Design</td><td>DATE</td><td>2023-08-18</td></tr><tr><td>0~10</td><td>±0.10</td><td>○</td><td>0.02</td><td colspan="2"></td><td></td><td></td></tr><tr><td>10~20</td><td>±0.12</td><td>◎</td><td>0.03</td><td colspan="2">name</td><td>RF</td><td>2023-03-31</td></tr><tr><td>20~40</td><td>±0.15</td><td>⊥</td><td>0.02</td><td colspan="2">number</td><td>ME</td><td></td></tr><tr><td>40~50</td><td>±0.20</td><td>∠</td><td>0.04</td><td colspan="2">material quality</td><td></td><td></td></tr><tr><td></td><td></td><td>∠</td><td>0.02</td><td colspan="2">PI substrate, electrolytic</td><td>Check</td><td></td></tr><tr><td colspan="2"></td><td></td><td></td><td colspan="2">Proportion:FIT</td><td>Unit:mm</td><td></td></tr><tr><td colspan="2">DATE</td><td colspan="2">UPDATE</td><td colspan="2">Position</td><td colspan="2">深圳市千目通讯科技有限公司 Shenzhen Qianmu Communication Technology Co., Ltd</td></tr><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr></table>							第三角法		FPC		Design		DATE	2023-08-18	0~10	±0.10	○	0.02					10~20	±0.12	◎	0.03	name		RF	2023-03-31	20~40	±0.15	⊥	0.02	number		ME		40~50	±0.20	∠	0.04	material quality						∠	0.02	PI substrate, electrolytic		Check						Proportion:FIT		Unit:mm		DATE		UPDATE		Position		深圳市千目通讯科技有限公司 Shenzhen Qianmu Communication Technology Co., Ltd		1	2	3	4	5	6	7	8
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