

BY-BT001

蓝牙板载 PCB 天线技术规格书

V1.0

Shandong New Beiyang Information Technology Co., Ltd.

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声 明

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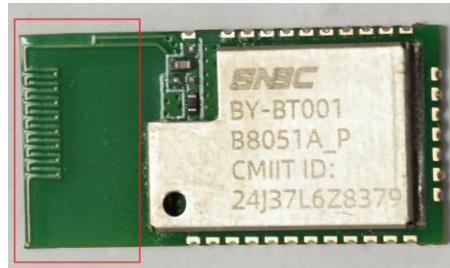
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1. Overview of antenna performance

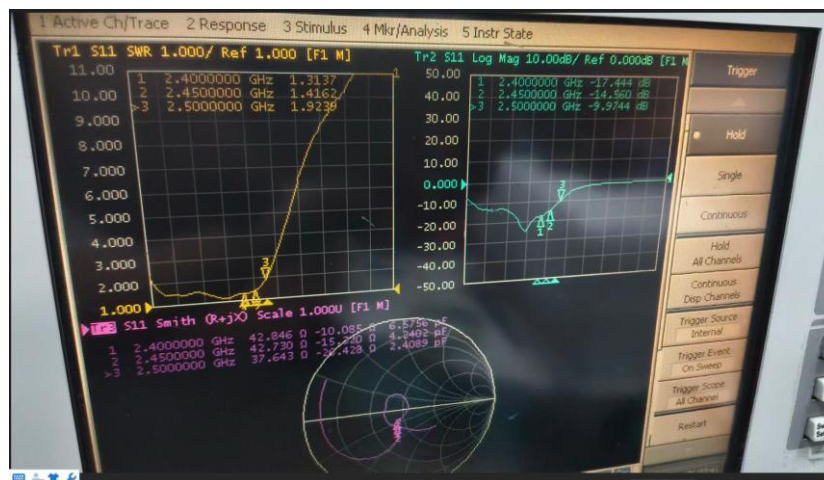
BY-BT001-B8051A_P is a dual-mode SOC module developed based on BR8051A, with an onboard PCB antenna type.



The performance parameters of the onboard PCB antenna are as follows:

Parameter list	
Frequency range	2400-2500MHz
Test conditions	Passive Testing
Input impedance	50 Ω
VSWR	≤ 2.0
Maximum gain	0.56 dBi
Radiation direction	Omnidirectional
Polarization direction	Vertical polarization
Operating temperature	-20 $^{\circ}\text{C}$ ~ +75 $^{\circ}\text{C}$
Storage temperature	-20 $^{\circ}\text{C}$ ~ +75 $^{\circ}\text{C}$

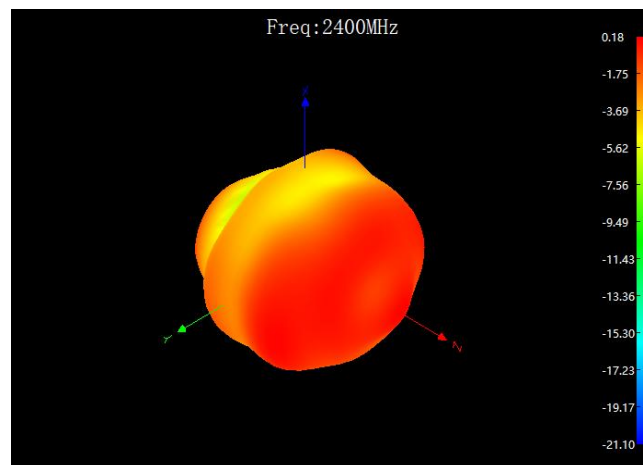
2. SWR/驻波图

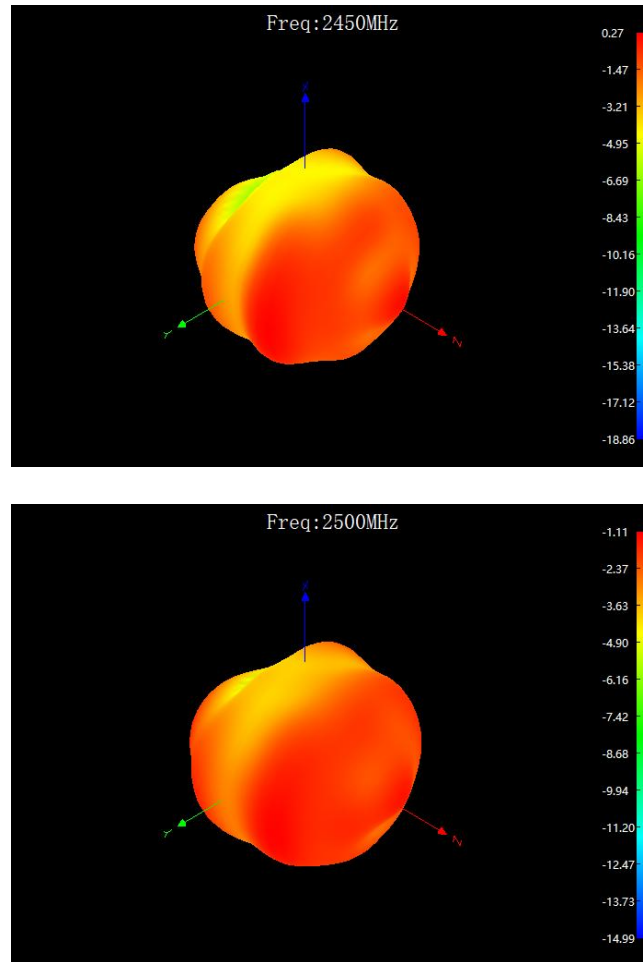


3. Efficiency and gain testing

Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi
2400	-3.4	45.71	0.18
2410	-3.28	46.99	0.56
2420	-3.58	43.85	-0.15
2430	-3.4	45.71	0.4
2440	-3.28	46.99	0.15
2450	-3.37	46.03	0.27
2460	-3.26	47.21	0.07
2470	-3.46	45.08	0.04
2480	-3.44	45.29	-0.31
2490	-3.94	40.36	-0.69
2500	-3.92	40.55	-1.11

4. Radiation Pattern





5. Revision records

Rev	Date	Description
1.0	2024.12.11	Original