



Antenna Part Specification

Customer name:	Tianjian
Project name:	M01
Material category:	BT antenna
Version:	V1.0
Date:	2023.08.14



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变更记录栏 Change record			
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2023.08.14	初版发行 first edition	初版发行 first edition	V1.0



一：无源测试报告

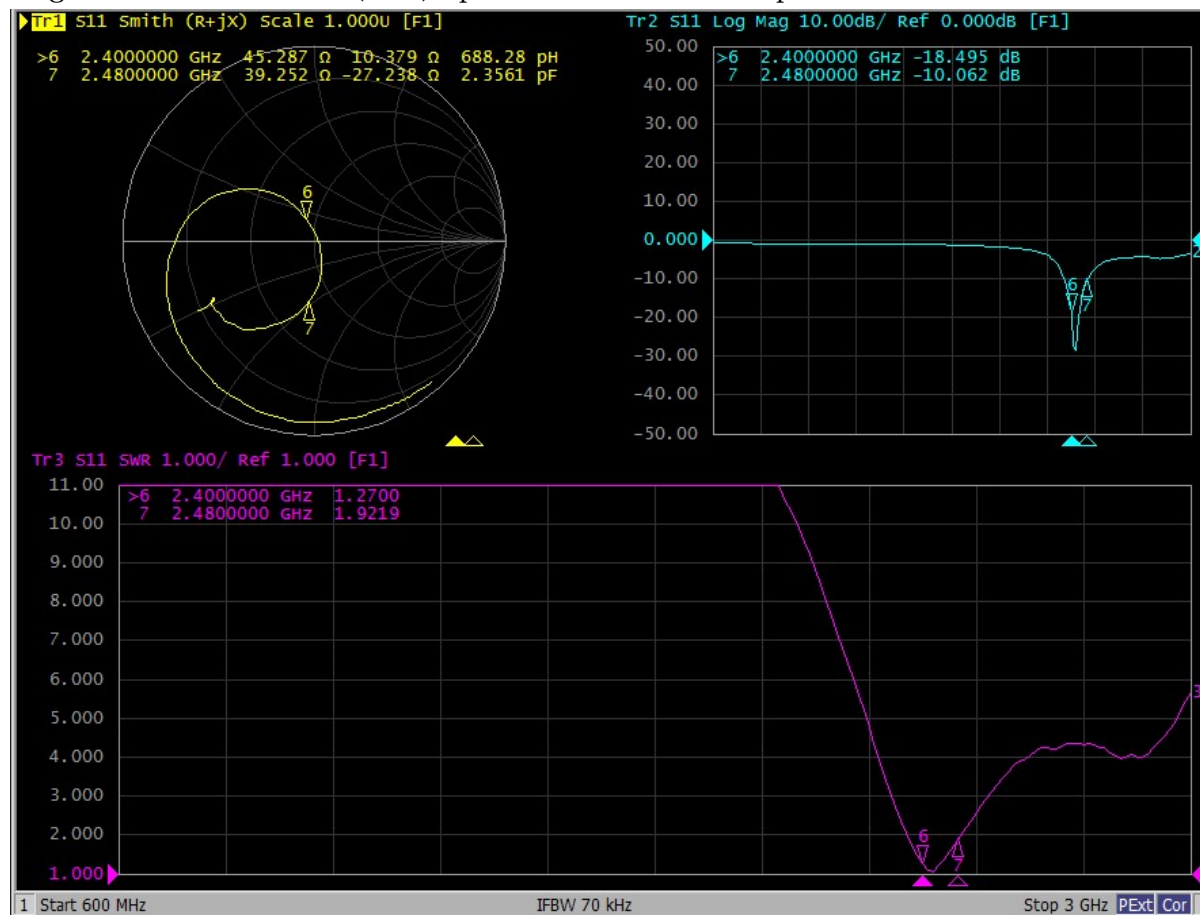
I: The report of passive data



Angilent E5071C

右耳天线 S 参数（自由空间）

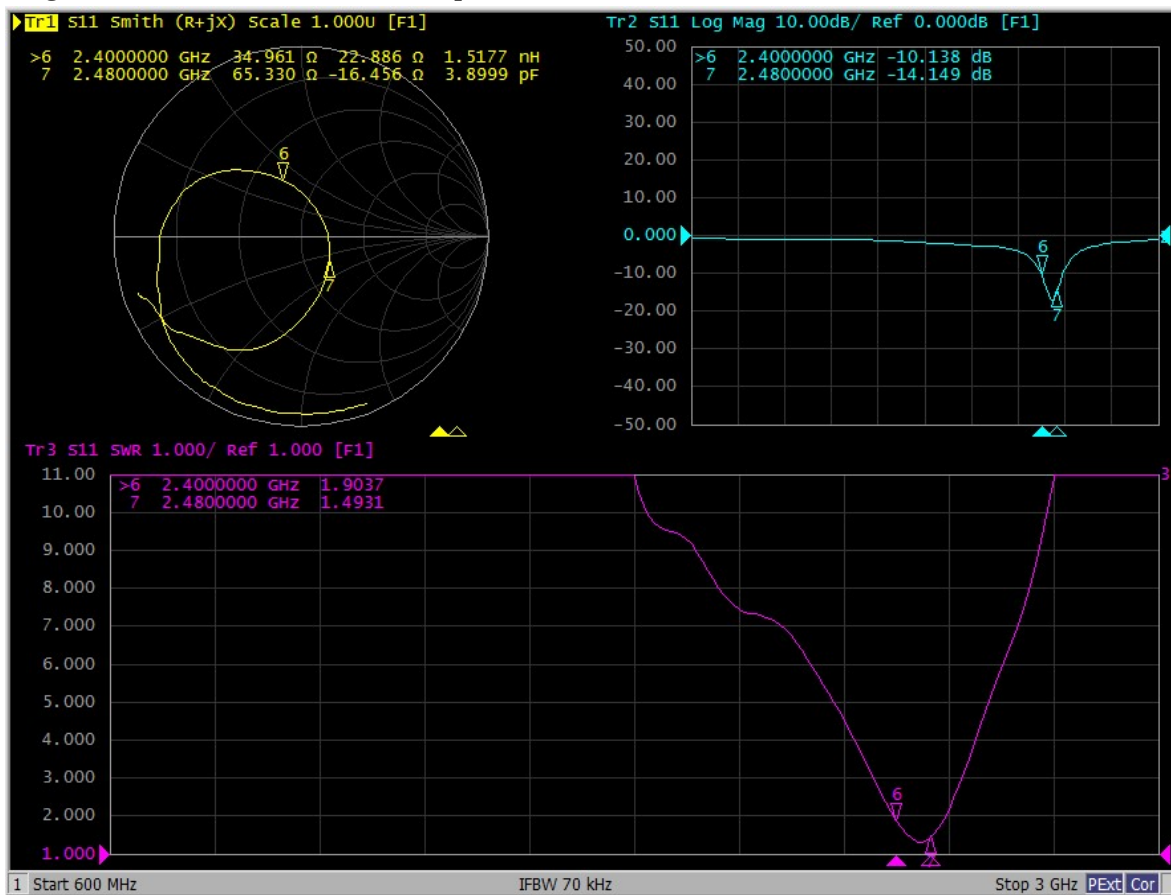
Right antenna VSWR(S11) parameter (free space)





右耳天线 S 参数 (头模)

Right antenna VSWR(S11) parameter (headform)





右耳天线无源效率与增益（自由空间）

Passive efficiency and gain of Right ear antenna (free space)

R			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-3.57	-5.51	28.14
2410	-3.63	-5.61	27.48
2420	-3.64	-5.86	25.96
2430	-3.96	-5.90	25.69
2440	-4.24	-6.30	23.46
2450	-4.17	-6.32	23.33
2460	-4.40	-6.44	22.70
2470	-4.18	-6.27	23.63
2480	-3.94	-6.08	24.64
Average value	-3.97	-6.03	25.00

右耳天线无源效率与增益（头模）

Passive efficiency and gain of Right ear antenna (headform)

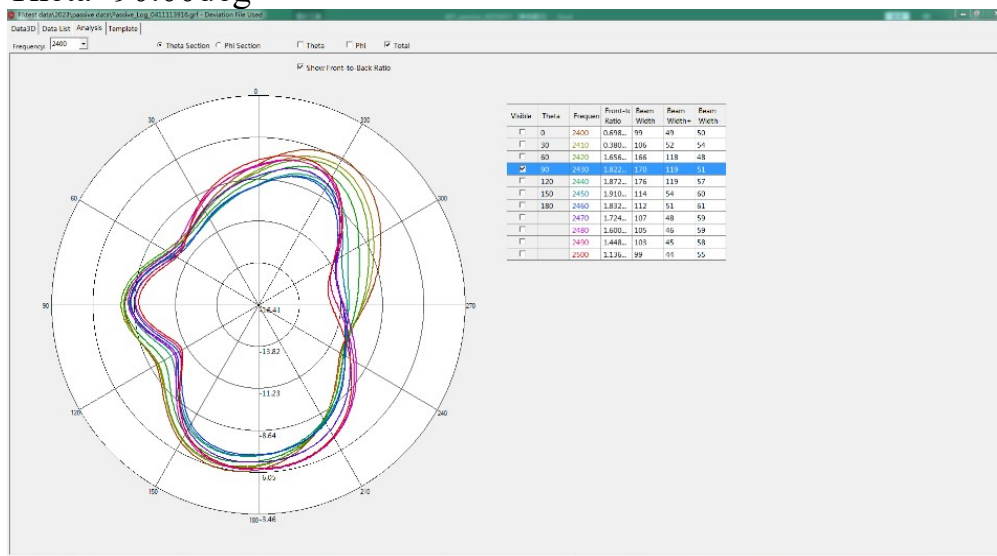
R			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-5.72	-10.88	8.17
2410	-5.90	-10.96	8.01
2420	-6.10	-11.10	7.76
2430	-6.09	-10.99	7.96
2440	-6.21	-11.04	7.88
2450	-5.94	-10.70	8.51
2460	-5.74	-10.42	9.07
2470	-5.92	-10.59	8.72
2480	-5.89	-10.63	8.65
Average value	-5.94	-10.81	8.30



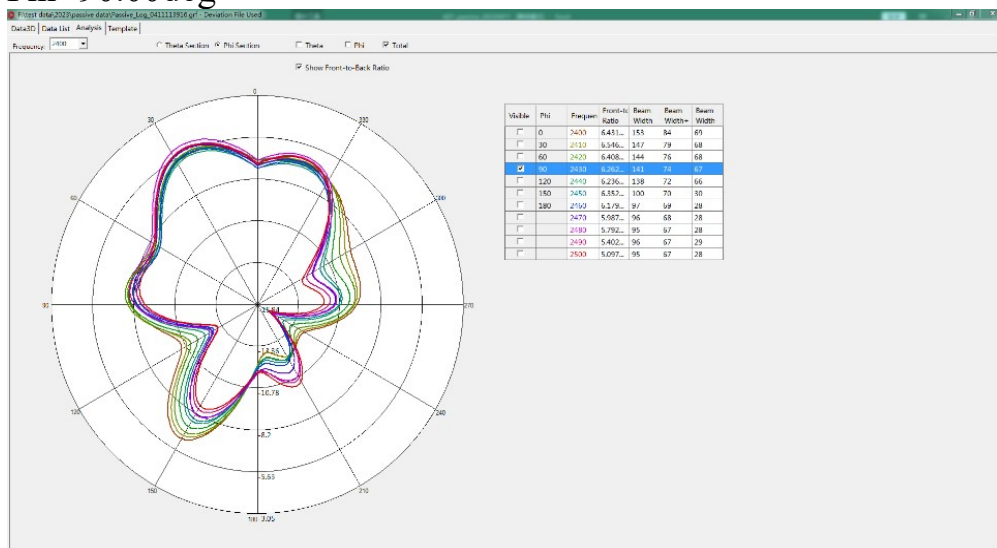
天线无源方向图（自由空间）

Antenna radiation pattern （free space）

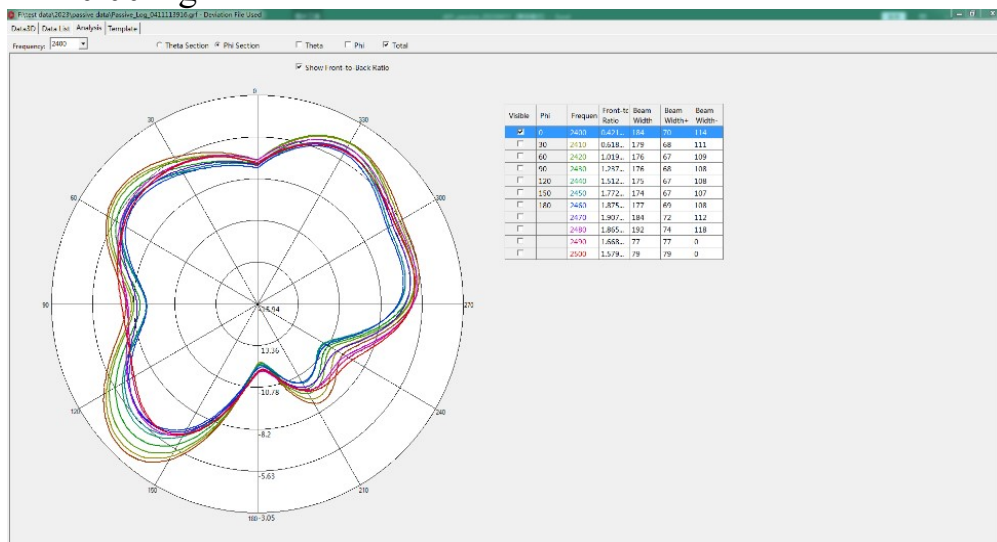
Theta=90.00deg



Phi=90.00deg

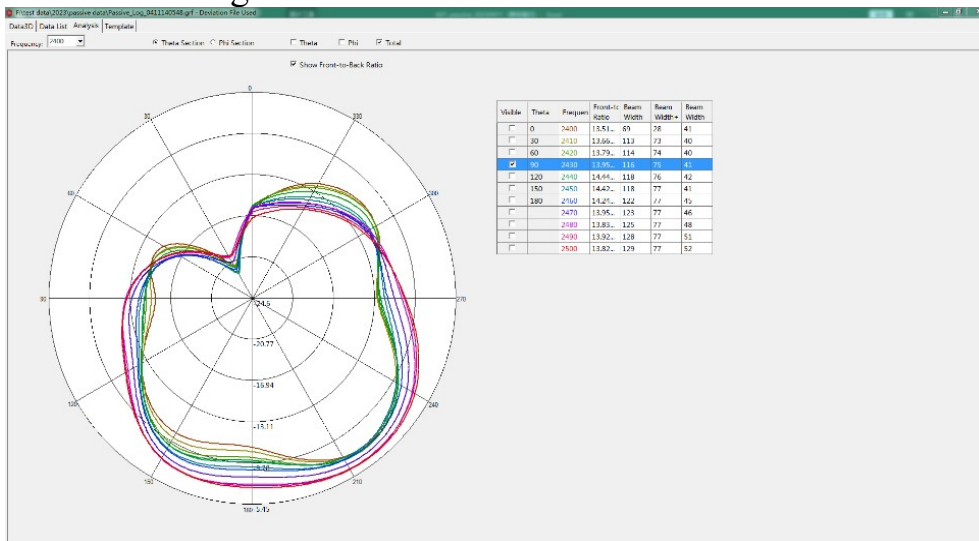


Phi=0.00deg

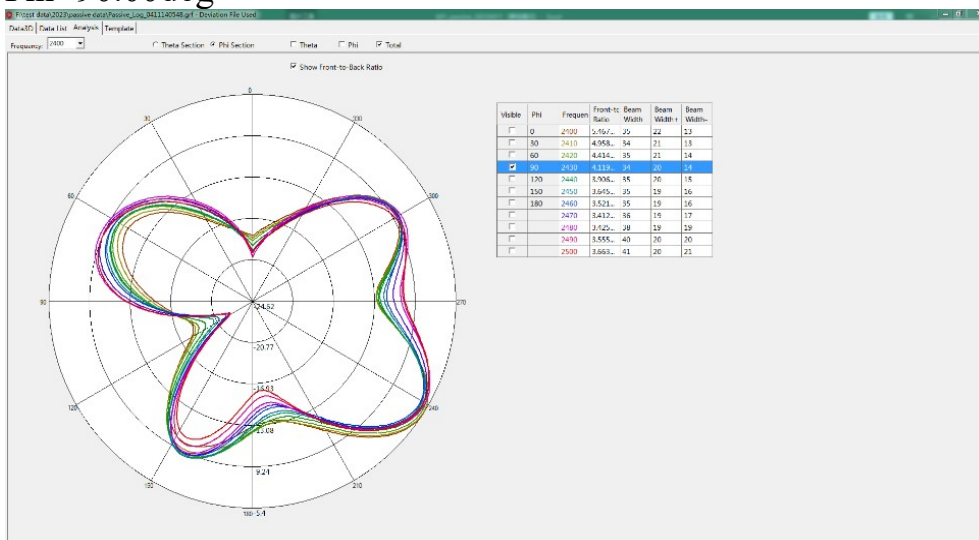




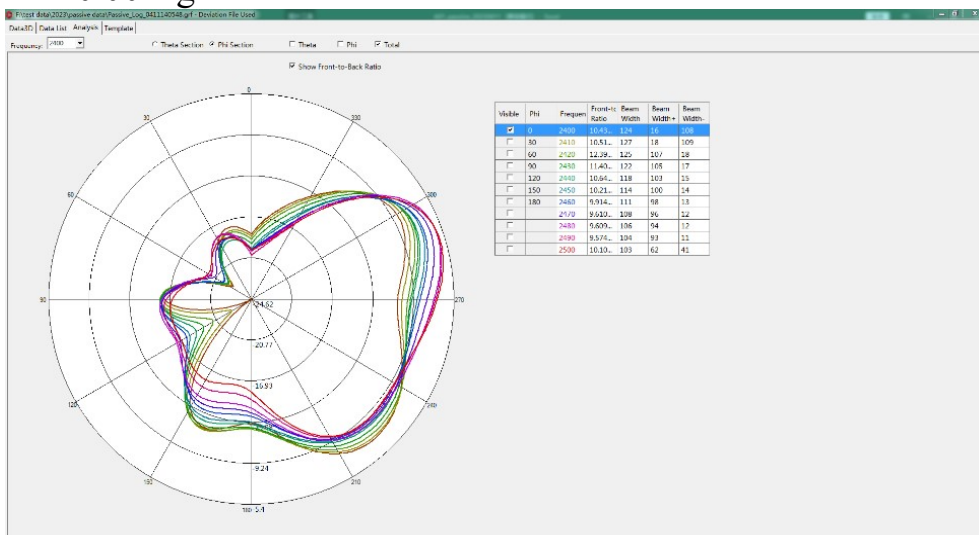
天线无源方向图（头模） Antenna radiation pattern (headform) Theta=90.00deg



Phi=90.00deg



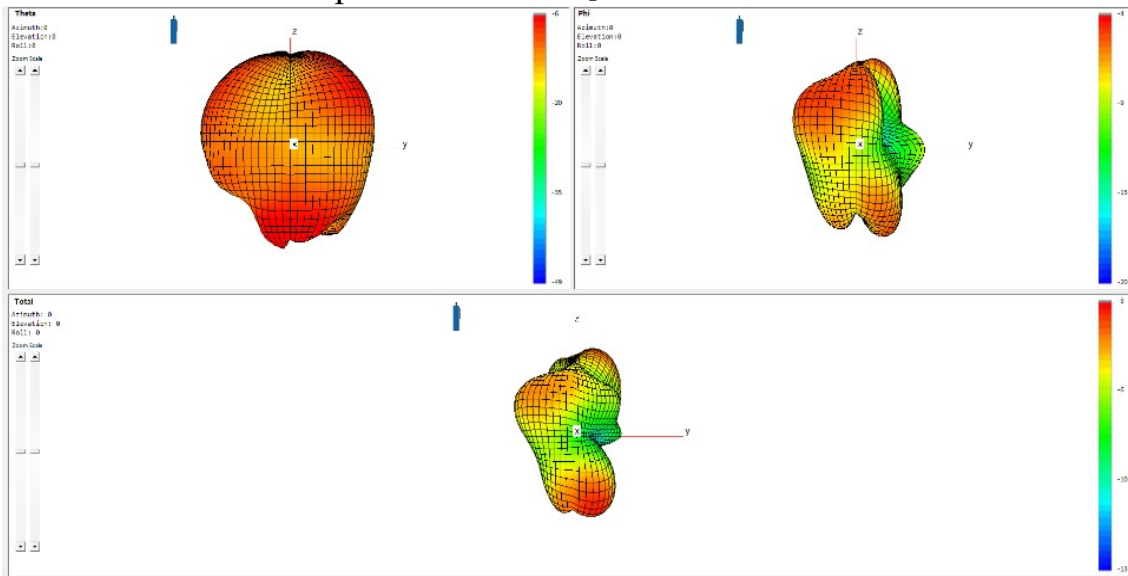
Phi=0.00deg





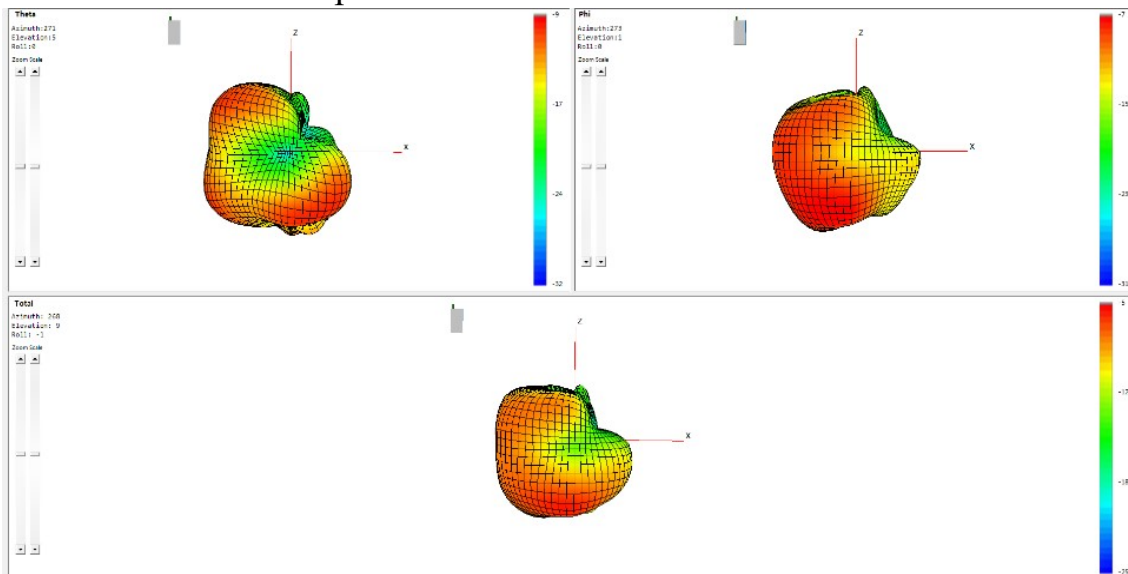
天线无源 3D 方向图（自由空间）

3D Antenna radiation pattern (free space)



天线无源 3D 方向图（头模）

3D Antenna radiation pattern (headform)





二：暗室有源测试数据

II: 3D Active test report of antenna

Free/自由空间	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	1.0	-90.8
	CH 39	0.5	-91.3
	CH 78	-0.6	-92.0

Headform/头模	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	-6.7	-81.3
	CH 39	-6.6	-81.7
	CH 78	-7.0	-82.4

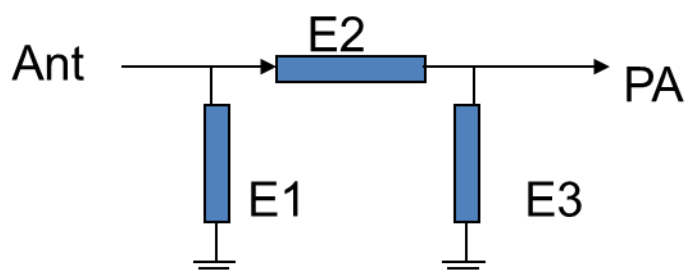


OTA Standard Chamber

三：匹配电路

III: Matching circuit

Element	Value
E1	0.5pF
E2	0Ω
E3	N/A



Red box position matches bit and 0.5pF capacitor





四：结构图档
IV: Structure file

