

Antenna Specification

Date: 2022年03月03日

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test environment

- Antenna characteristics use ETS test system microwave anechoic chamber, microwave anechoic chamber size 7m x 4m x 3m, test frequency 700MHz---6GHz.
- S11 testing using Agilent E5071B network analyzer



Anechoic room



Agilent E5071B Network Analyzer

Project Description

Antenna Manufacture: Shenzhen Qinxin Technology Co.,Ltd.

Antenna Manufacture Address: Room 101, Building A, No. 36 Dongcheng Road, Liulian Community, Pingshan sub-district, Pingshan District, Shenzhen City, Guangdong Province, China

Antenna Type: FPC antenna

Antenna Model: D100

Antenna frequency band: WIFI-2.4G-5.8G



Debug build record

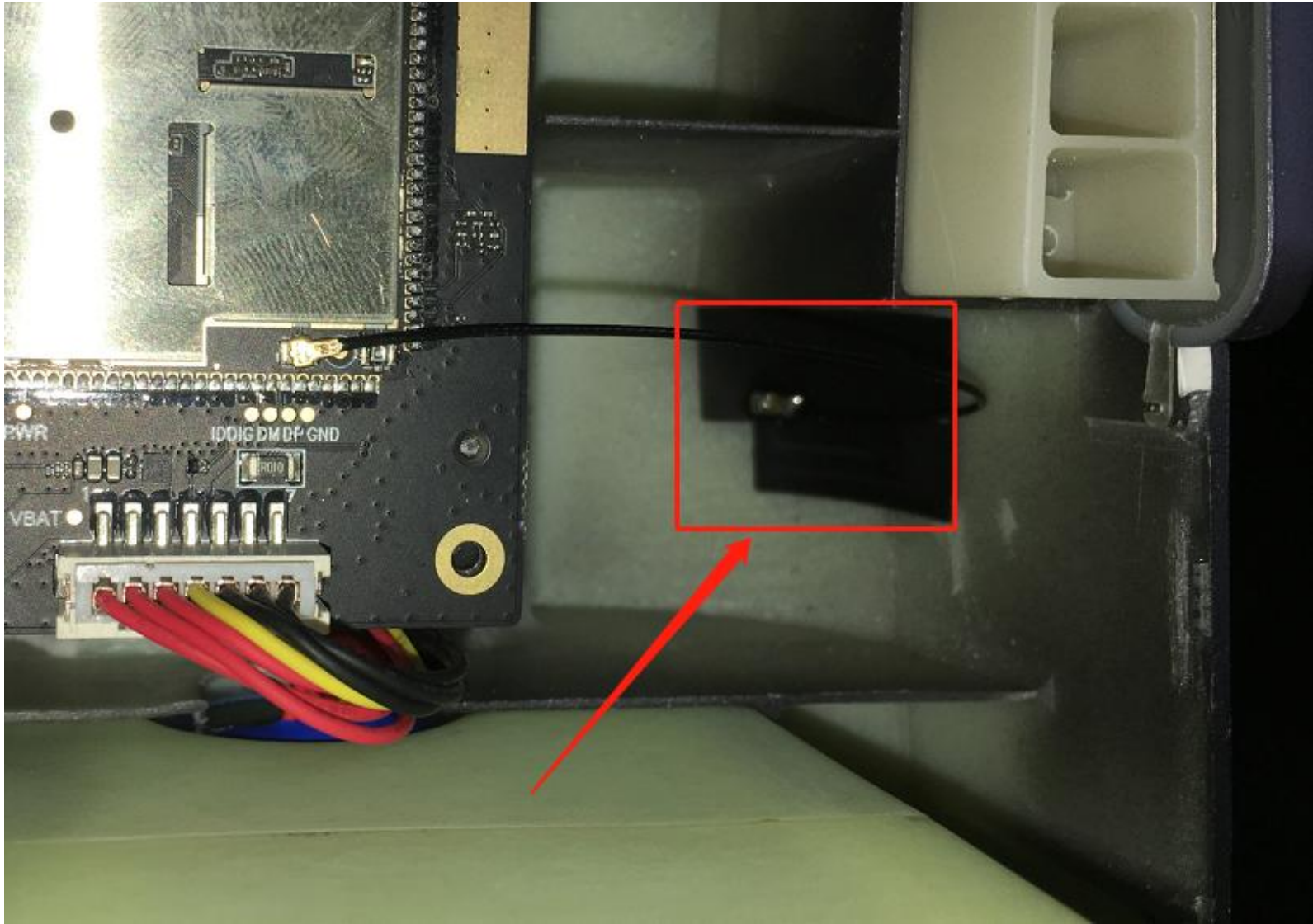
Version	Date	Overview
V1	2021/11/24	test sample
V2		
V3		
V4		
V5		
V6		



Machine shape



Antenna placement



Antenna passive

Return Loss Graph



Antenna darkroom 3D test data

Test Condition:		Free space			
WIFI-2.4G	2.4G 802.11b	Channel	1	6	13
		TRP	9.8	9.6	9.6
		TIS	-77.4	-77.2	-77

Test Condition:		Free space			
WIFI-2.4G	2.4G 802.11g	Channel	1	6	13
		TRP	9.5	9.2	9
		TIS	-76.7	-76.6	-76.3

Test Condition:		Free space			
WIFI-5G	5.8G 802.11A	Channel	36	149	161
		TRP	7.4	7.5	7.7
		TIS	-67.8	-67.7	-67.8



Antenna Efficiencies

WIFI 2.4G

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	61.62	-2.1	2.06
2410	62.88	-2.01	2.16
2420	62.17	-2.06	2.03
2430	68.02	-1.67	2.29
2440	73.03	-1.36	2.63
2450	75.27	-1.23	2.72
2460	75.44	-1.22	2.69
2470	71.57	-1.45	2.58
2480	75.31	-1.23	2.76
2490	79.26	-1.01	2.78
2500	77.76	-1.09	2.73



Antenna Efficiencies

WIFI 5.8G

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	68.09	-1.67	1.25
5160	63.22	-1.99	1.22
5170	59.37	-2.26	1.47
5180	55.17	-2.58	1.35
5190	68.75	-1.63	1.45
5200	69.48	-1.58	1.33
5210	68.86	-1.62	1.02
5220	64.8	-1.88	1.08
5230	62.5	-2.04	1.21
5240	70.88	-1.5	1.34
5250	71.16	-1.48	1.31
5260	71.27	-1.47	1.37
5270	68.21	-1.66	1.28
5280	62.51	-2.04	1.24
5290	68.23	-1.66	1.41
5300	66.21	-1.79	1.36
5310	72.43	-1.4	1.11
5320	77.89	-1.08	1.18
5330	69.31	-1.59	1.19
5340	71.32	-1.47	1.19
5350	68.09	-1.67	1.25
5360	78.99	-1.02	1.38
5370	84.8	-0.72	1.44
5380	75.26	-1.23	1.41
5390	72.95	-1.37	1.43
5400	79.31	-1.01	1.35
5410	87	-0.6	1.43
5420	92.81	-0.32	1.44
5430	84.67	-0.72	1.42
5440	87.68	-0.57	1.26
5450	80.33	-0.95	1.18
5460	85.12	-0.7	1.21
5470	92.02	-0.36	1.25
5480	86.33	-0.64	1.22

5490	90.5	-0.43	1.23
5500	84.75	-0.72	1.33
5510	83.89	-0.76	1.24
5520	90.12	-0.45	1.42
5530	87.26	-0.59	1.38
5540	91.82	-0.37	1.37
5550	90.19	-0.45	1.35
5560	88.51	-0.53	1.45
5570	90.78	-0.42	1.34
5580	90.98	-0.41	1.25
5590	92.04	-0.36	1.44
5600	95.68	-0.19	1.09
5610	86.25	-0.64	1.11
5620	90.94	-0.41	1.18
5630	88.84	-0.51	1.13
5640	85.77	-0.67	1.37
5650	95.54	-0.2	1.42
5660	89.19	-0.5	1.37
5670	91.43	-0.39	1.34
5680	90.12	-0.45	1.29
5690	86.02	-0.65	1.23
5700	89.97	-0.46	1.21
5710	83.31	-0.79	1.32
5720	87.14	-0.6	1.31
5730	92.01	-0.36	1.34
5740	86.6	-0.63	1.11
5750	93.7	-0.28	1.13
5760	87.94	-0.56	1.16
5770	84.65	-0.72	1.17
5780	86.34	-0.64	1.26
5790	84.74	-0.72	1.21
5800	89.24	-0.49	1.19
5810	92.52	-0.34	1.35
5820	88.78	-0.52	1.16
5830	90.77	-0.42	1.23
5840	90.97	-0.41	1.35
5850	91.67	-0.38	1.42

