



深圳顺达成科技有限公司

Antenna Specifications



客户名称：多元数码

项目名称：10QH

频段：GPS/WIFI2.4G/5.8G/BT

版本：A

制作日期：2025-6-27



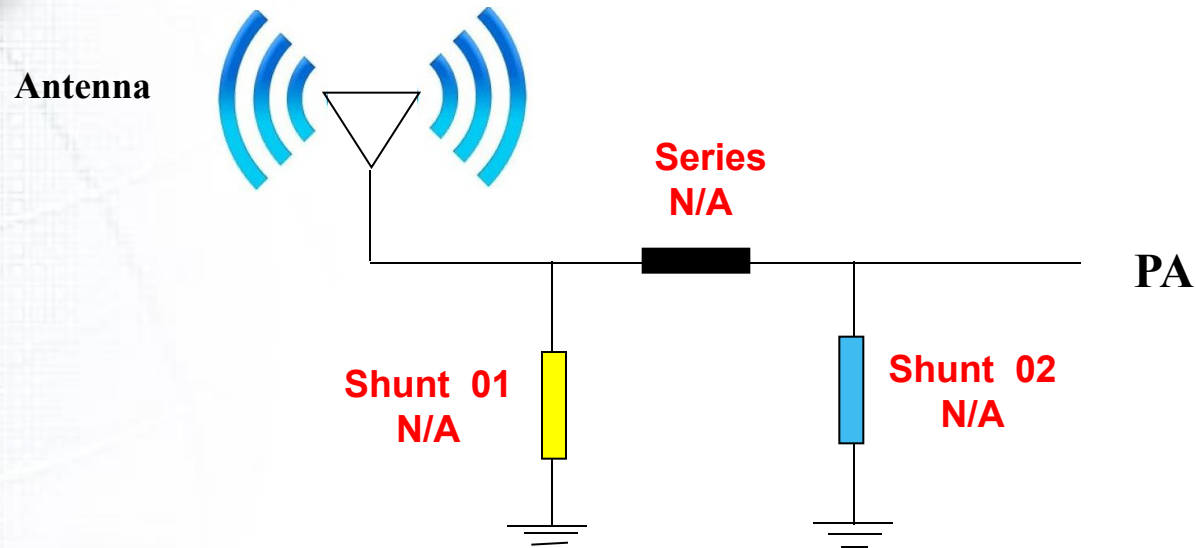
Content

- 1. Antenna Matching Network**
- 2. *S11* Parameter-VSWR**
- 3. 1 Gain & Efficiency**
- 3. 2 3D Pattern**
- 4. OTA Data**
- 5. Antenna Assembly & environmental processing**
- 6. conclusion**



深圳顺达成科技有限公司

2. Antenna Matching Network



Location	Description	Vendor
Shunt 01	N/A	N/A
Series	N/A	N/A
Shunt 02	N/A	N/A

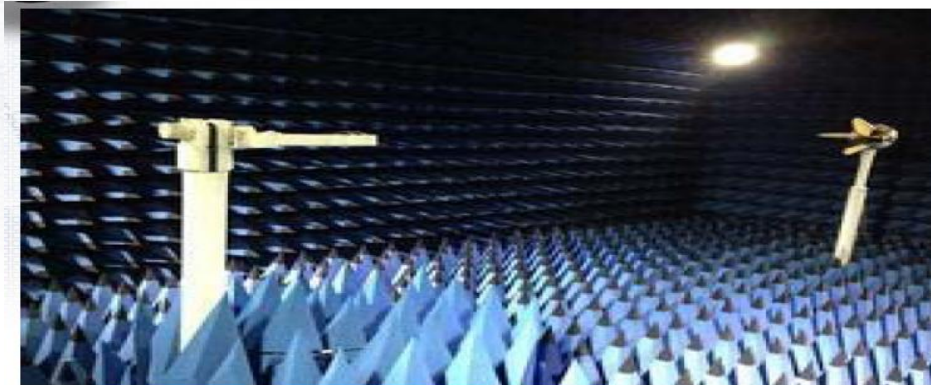
未改动主板
匹配电路



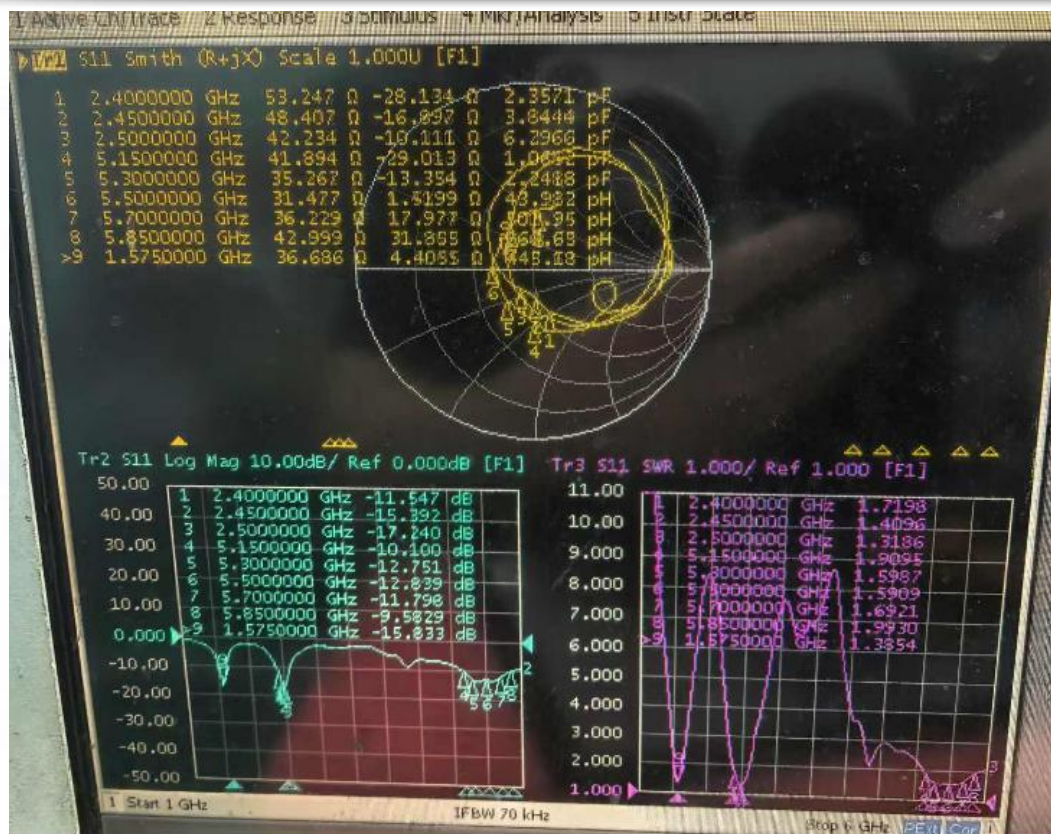
深圳顺达成科技有限公司

1. Test system

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW2 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



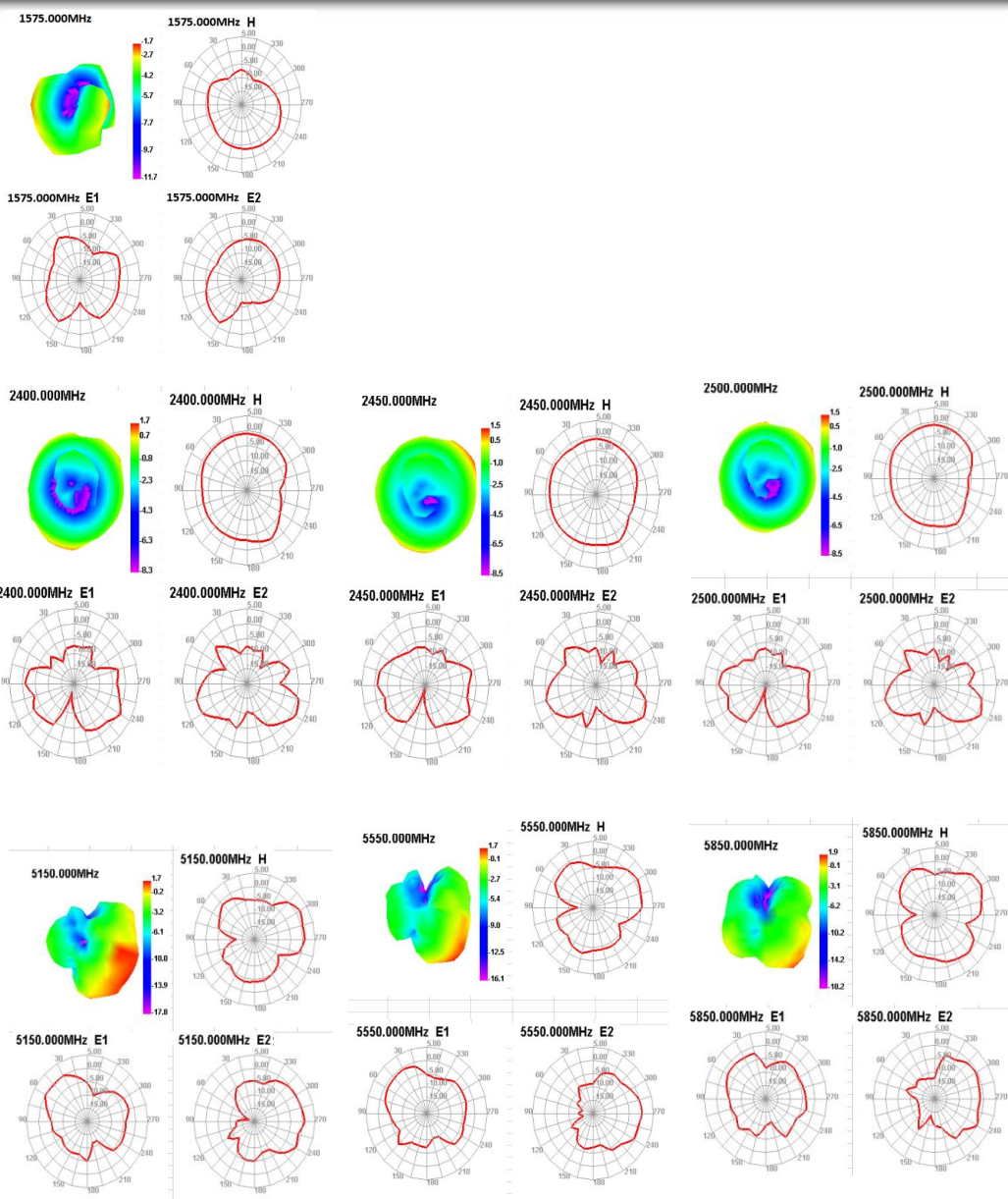
S11 SWR /Smith/ Log Mag



频率 (MHZ)	1575	2400	2450	2500	5150	5300	5500	5700	5850
驻波比	1.3	1.7	1.4	1.3	1.9	1.5	1.5	1.6	1.9
阻抗	36.6 Ω	53.2 Ω	48.4 Ω	42.2 Ω	41.8 Ω	35.2 Ω	31.4 Ω	36.2 Ω	42.9 Ω
回损	-15.8	-11.5	-15.3	-17.2	-10.1	-12.7	-12.8	-11.7	-9.5

增益&效率

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
1575	32.61	-1.65
2400	42.11	1.67
2450	44.58	1.45
2500	43.63	1.48
5150	45.19	1.71
5350	43.51	1.65
5550	46.33	1.66
5750	44.12	1.79
5850	42.36	1.86



2.4G 吞吐量

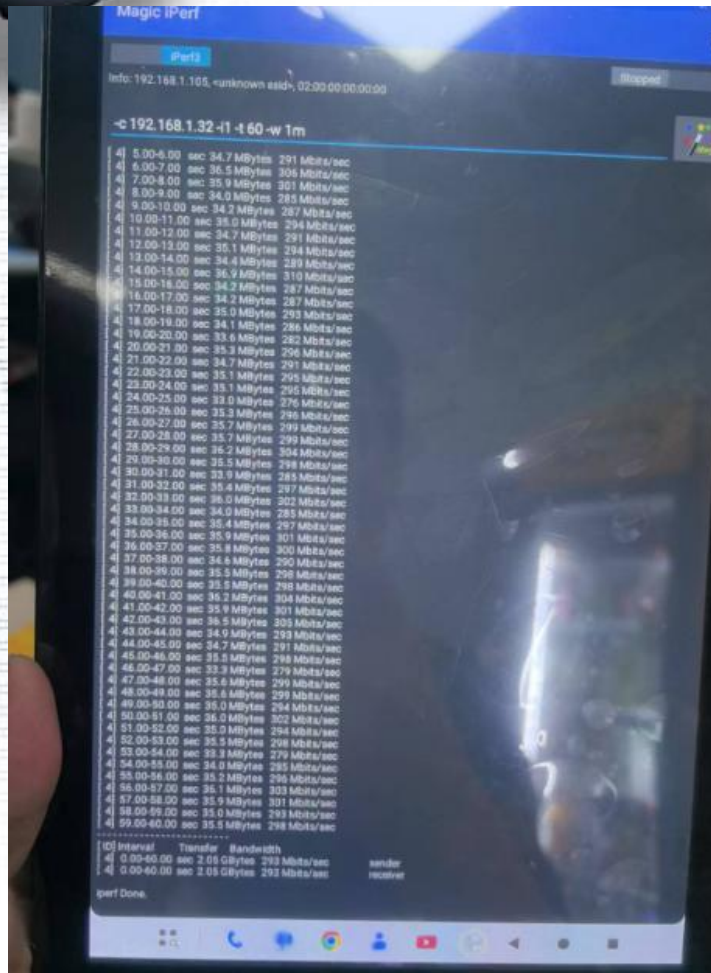


下载

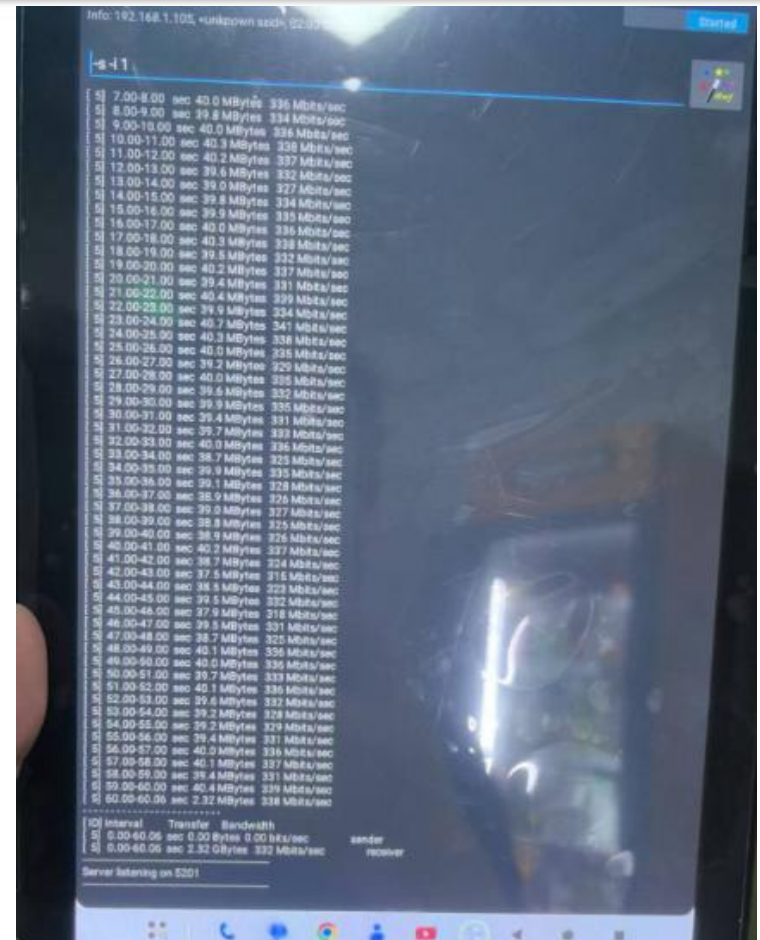


上传

5G吞吐量



下载



上传

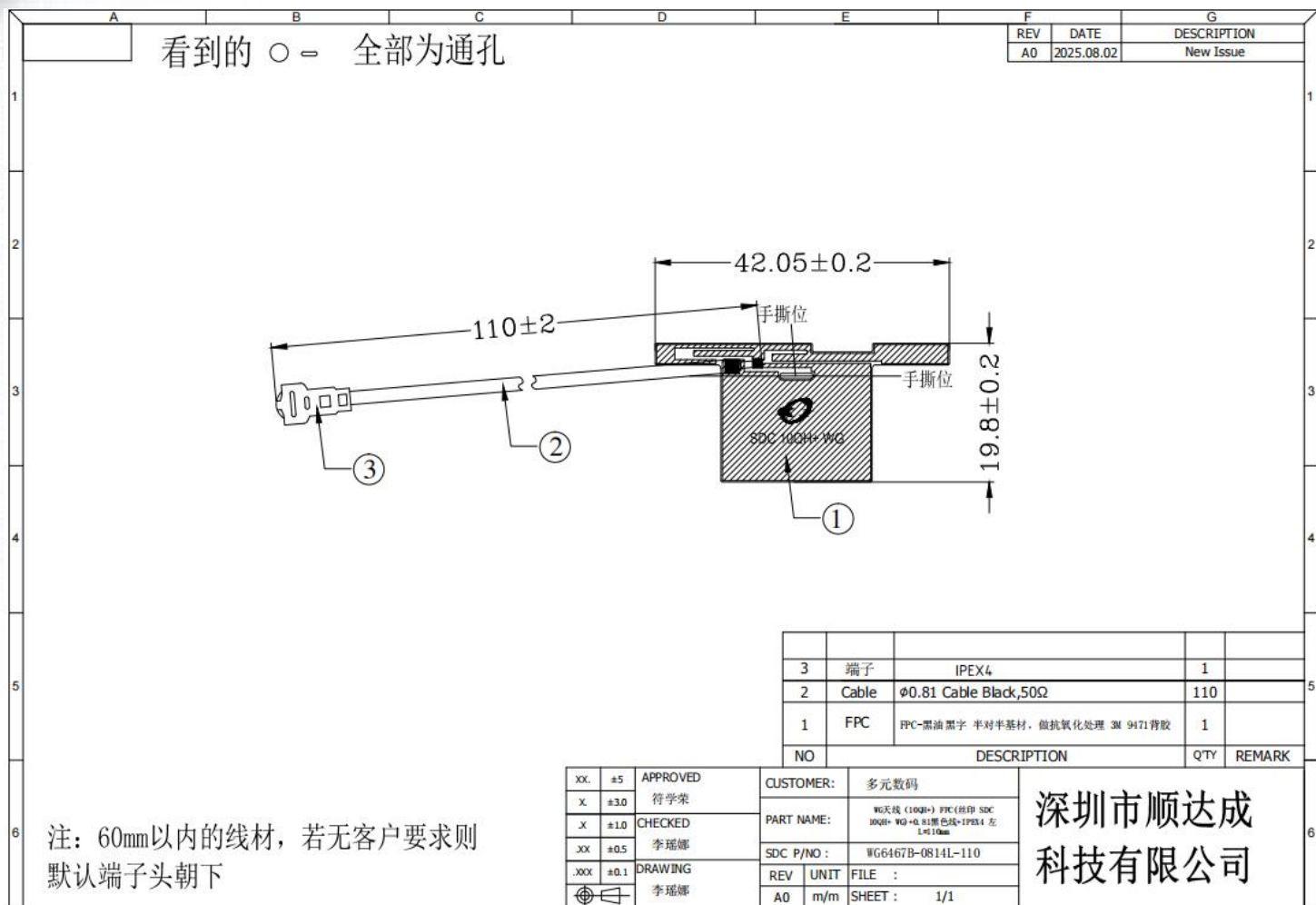


WIFI OTA Data

2.4G WIFI	TRP			TIS		
Channel	CH1	CH6	CH12	CH1	CH6	CH12
802.11 b , 11M	13.58	13.51	13.32	-82.41	-81.59	-82.27
802.11 g , 54M	12.76	12.31	12.26	-70.53	-69.62	-69.75
802.11 n , MCS7 (65M)	12.59	12.25	12.11	-68.25	-67.36	-67.79

5.8G WIFI	TRP			TIS		
Channel	CH36	CH60	CH165	CH36	CH161	CH165
802.11 A , 54M	11.48	10.4	11.06	-71.86	-71.18	-70.08

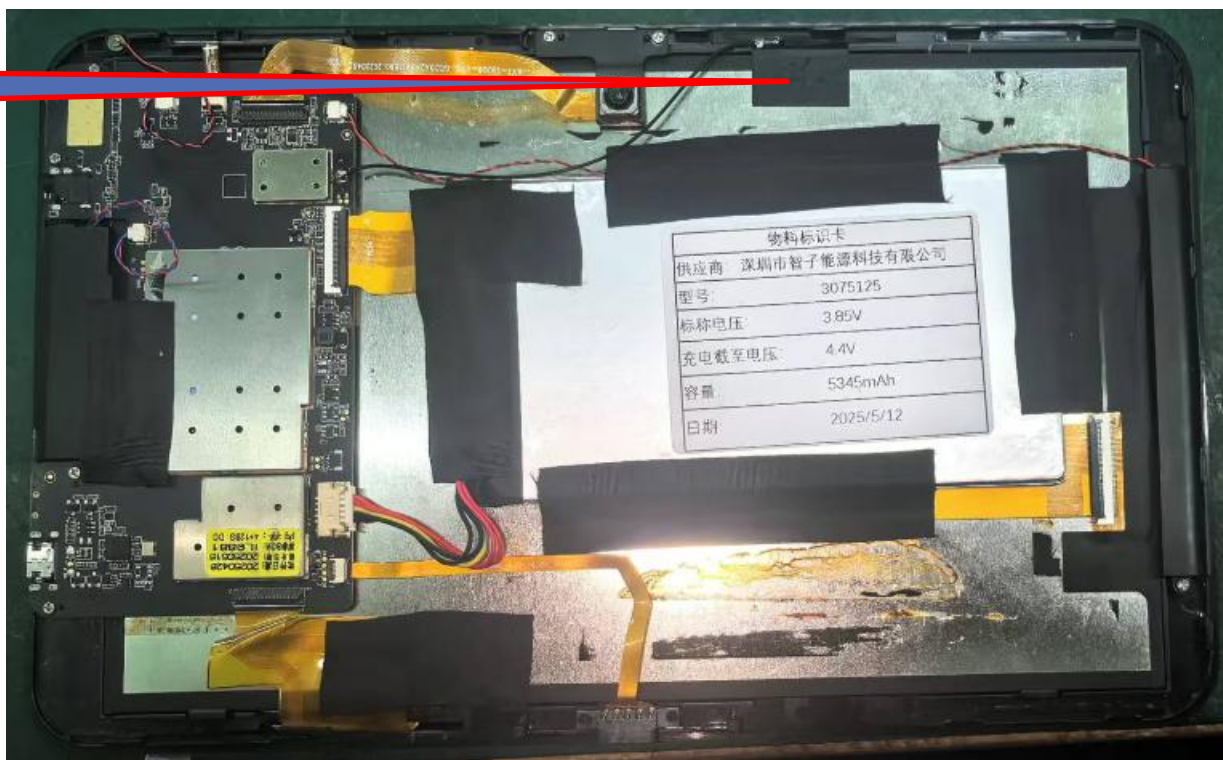
10B4+
MT8786



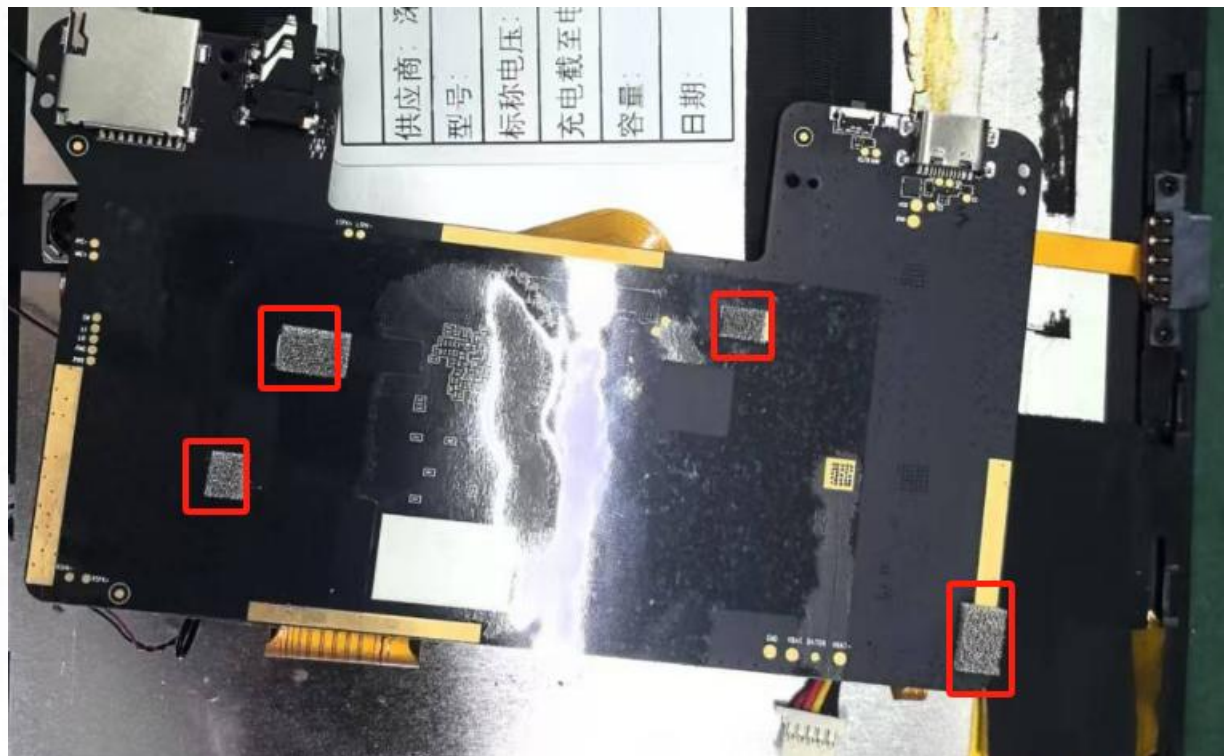
天线安装位置



WGB 天线



环境处理



主板底部漏铜区域贴导电海绵跟屏接地



深圳顺达成科技有限公司

顺达成感谢您的支持

Shenzhen Shundacheng Technology Co., Ltd

Address: No. 109, Zone 1, Building B, Mingyou Industrial Product Exhibition and Procurement Center, No. 168 Baoyuan Road, Xixiang Street, Bao'an District, Shenzhen, China

Phone: +86-755-27211658

Fax: +86-755-29485750

e-Mail: shundacheng168@163.com