HEYUAN XUNWEI COMMUNICATION CO.,LTD

customer：	HD	
CUSTOMER PART NO：	**MC01**	
material code：		
edition：	**V1.0**	
Creation Date：	**2025-04-28**	
organization	RF audit	Structural review	Approval/Seal
LYD	Qiu Dazhong	Li Wenbo	
Customer confirmation signature：xionglq			

Company Address: Room A316, 3rd Floor, Building A, Languang Technology Park, Gaoxin North Sixth Road, Nanshan District, Shenzhen
Project contact person: Le Yongde
Mobile phone: 15072046607
Fax:

catalogue

2.1 Working frequency band of the main antenna
2.2. Antenna matching circuit
2.3 Passive testing indicators
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3.1 Passive testing indicators
3.2 Active Test Data
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3.4 Antenna Material and Installation Method
4. Other
5. Engineering dimension drawing

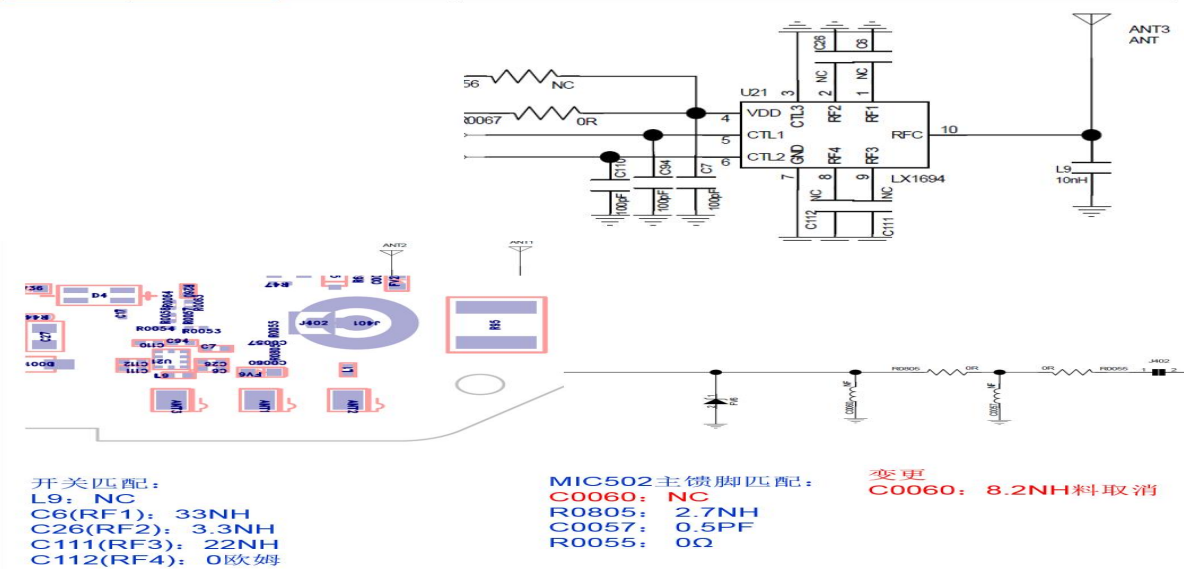1. Project Basic Information Description
1.1 Appearance diagram of locator:

1. Project Basic Information Description
1.1 Appearance diagram of locator
1.2 Model and Shell Material
1.3. Positioner motherboard model
2. Main antenna
2.1 Working frequency band of the main antenna
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1. Project Basic Information Description

1.1 Appearance diagram of locator:

4.1、下天线调谐开关电路配置 （MC01-NV-25.03.13）

RF端口	位号	值	应用频段
RF1	C6	待定33NH	LTE-B12/B17
RF2	C26	待定3.3NH	LTE-B5/B26
RF3	C111	待定22NH	LTE-B14
RF4	C112	待定0欧	LTE-B2/B4/B7/B25/B66/B41

开关匹配：
L9： NC
C6(RF1)： 33NH
C26(RF2)： 3.3NH
C111(RF3)： 22NH
C112(RF4)： 0欧姆

MIC502主馈脚匹配：
C0060： NC
R0805： 2.7NH
C0057： 0.5PF
R0055： 0Ω

变更
C0060： 8.2NH料取消

Our company has made modifications to the antenna matching

： 2.3 Passive testing indicators:

Frequency range（MHz）	699-960	1710-2700
VSWR	＜3.5	＜3.5

2.4 Active 3D test data:

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LTE 3D测试数据（手臂）

Band	Channel	TRP	TIS	Band	Channel	TRP	TIS
LTE-B2 (10M)	18650	12.2		LTE-B17 (10M)	23780	4.3	
	18900	11.0			23790	3.8	
	19150	9.5	-82.4		23800	4.1	-79.5
LTE-B4 (10M)	20000	12.7		LTE-B25 (5M)	26065	12.9	
	20175	13.8			26365	12.3	
	20350	12.4	-82.7		26665	11.7	-87.5
LTE-B5 (10M)	20450	10.1		LTE-B26 (5M)	26715	10.3	
	20525	9.9			26865	11.2	
	20600	8.3	-78.7		27015	10.8	-82.3
LTE-B7 (10M)	20850	11.8		LTE-B66 (10M)	132022	8.7	
	21100	11.6			132322	8.2	
	21350	11.7	-86.2		132622	8.1	-81.5
LTE-B12 (5M)	23035	5.2		LTE-B41 （10M）	39750	15.8	
	23095	5.2			40620	15.3	
	23155	5.1	-79.2		41490	14.4	-86.7
LTE-B14 (10M)	23330	4.1					
	23330	4.2	-78.5				
	23330	4.3					

LTE 3D测试数据（自由空间）

Band	Channel	TRP	TIS	Band	Channel	TRP	TIS
LTE-B2 (10M)	18650	15.8		LTE-B17 (10M)	23780	6.3	
	18900	15.7			23790	6.0	
	19150	14.5	-86.2		23800	6.2	-81.5
LTE-B4 (10M)	20000	14.4		LTE-B25 (5M)	26065	13.5	
	20175	15.7			26365	14.2	
	20350	14.2	-88.5		26665	13.7	-87.7
LTE-B5 (10M)	20450	11.5		LTE-B26 (5M)	26715	11.8	
	20525	13.2			26865	13.7	
	20600	13.4	-82.2		27015	11.9	-81.2
LTE-B7 (10M)	20850	12.8		LTE-B66 (10M)	132022	10.5	
	21100	11.5			132322	9.8	
	21350	13.5	-88.4		132622	11.2	-85.2
LTE-B12 (5M)	23035	6.7		LTE-B41 （10M）	39750	17.2	
	23095	7.2			40620	17.5	
	23155	7.5	-80.5		41490	15.8	-88.5
LTE-B14 (10M)	23330	6.1					
	23330	6.2	-80.8				
	23330	6.2					

Test conclusion and precautions:

MC01 active test data basically meets

LTE-B2/B4/B5/B7/B12/B14/B17/B25/B26/B66/B41

Communication requirements: This report is only applicable to MC01 debugging prototypes and MC01 models with the same configuration. Any changes in motherboard version or RF material, or changes in locator accessories (such as cameras, screens, speakers, motors, etc.) must be tested and verified by our company before use.
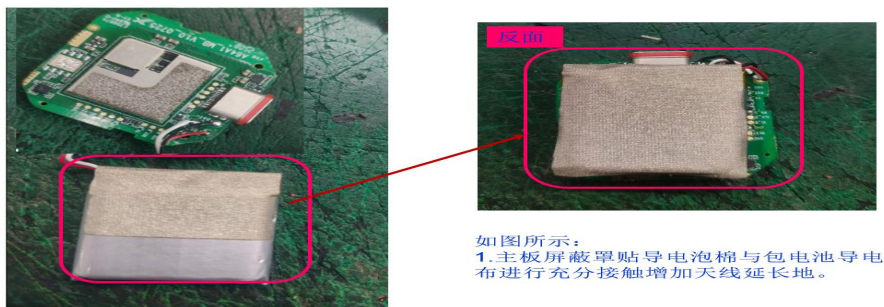
2.5 Environmental treatment:

Test conclusion and precautions:

MC01 active test data basically meets
LTE-B2/B4/B5/B7/B12/B14/B17/B25/B26/B66/B41

Communication requirements: This report is only applicable to MC01 debugging prototypes and MC01 models with the same configuration. Any changes in motherboard version or RF material, or changes in locator accessories (such as cameras, screens, speakers, motors, etc.) must be tested and verified by our company before use.

2.5 Environmental treatment:

如图所示：
1.主板屏蔽罩贴导电泡棉与包电池导电布进行充分接触增加天线延长地。

2.6. Antenna appearance diagram

2.7 Antenna Material Description and Installation Method:
MC01 main antenna material FPC, installation method is to stick it on the back shell

3. GPS/BT antenna

3.1 Passive testing indicators

Frequency range(MHz)	1575.42	2400-2500
VSWR	< 3.5	< 3.5

3.2 Active Test Data

GPS/BT有源测试数据

Band	Channel	TRP	TIS
BT	0	2.95	-91.5
	20	3.44	-91.5
	39	3.52	-91.8
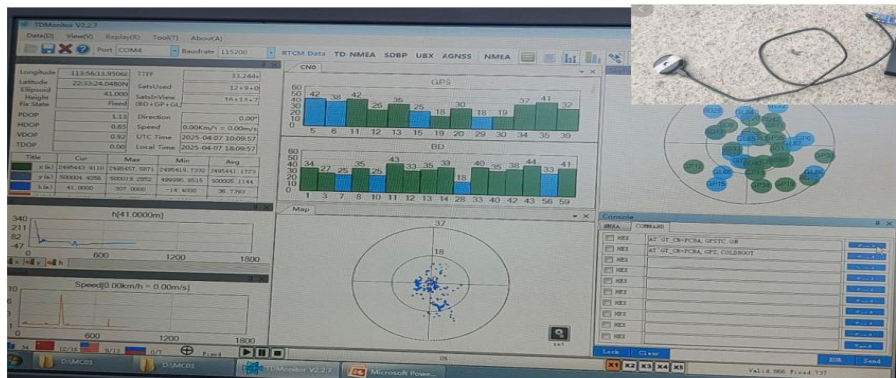
3.3. Appearance of GPS/BT antenna
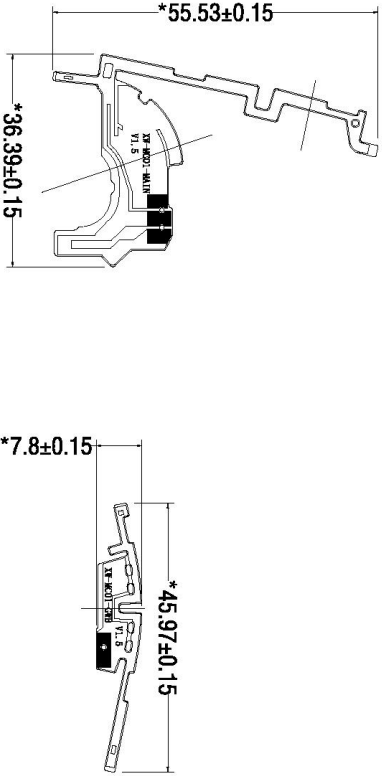
3.4 Antenna Material and Installation Method:

MC01 GPS/BT antenna material FPC, installation method is to stick it on the back shell

4. Other

5. Engineering dimension drawing

技术要求：
1. 表面平整、光滑，无污渍、破损、撕裂、折断、气泡、划痕、孔洞、脱层、起粘结物；
产品周边不能有毛边，溢胶、披胶，表面不能有折裂等缺陷；
2. 丝印字符为同色亮字，字迹需清晰；
3. FPC金手指镀层厚接80-250u" 镍金层厚度≥0.5u"
4. 油墨厚度 10-20UM。
5. 用于制造该零件的材料中的有害物质不能超过ROHS 2011/65/EU指
令及REACH No.1907/2006法规规定的限值要求，欧盟豁免项除外。
6. 打*为重点尺寸，未注尺寸以电子档为准，其余未注公差±0.1mm

*55.53±0.15

*36.39±0.15

*7.8±0.15

*45.97±0.15

第三视角		
⊕	⏥ 0.03	⊕ 0.03
0~5	±0.05	◯ 0.03
5~30	±0.08	⌀0.02
30~50	±0.10	⊥ 0.02
50~80	±0.12	▱ 0.05
角度	±1°	
第 1 页 共 1 页		

河 源 市 迅 维 通 讯 技 术 有 限 公 司

项目名称	MC01	日期		2025/04/21
普胶	3M9471	料号	制	
材料	一对半	审核	版	
颜色	黑	单位	mm	比例	1:1	版本	A