SPECIFICATION FOR APPROVAL

Customer name： Panjiarui iot Technology (Xiamen) Co., LTD

Item type：MP80ID3

Customer part number：3421270000740M

Product name：CBL,ANTENNA, Hao Tiancheng,MP80ID3-NFC-HTC

Gauge lattice：NFC antenna FPC, single side with adhesive

The original part number：MP80ID3-4

Date of recognition：

Supplier/Agent: Shenzhen Haotiancheng Wireless Technology Co., LTD	
Examine	Handle
Xiao Qiang	Sun Jiwei

Admitted by: Panjiarui Internet of Things Technology (Xiamen) Co., LTD			
structure	corpuscle	Quality	examine

Shenzhen Haotiancheng wireless technology Co., LTD	Name：Sample Approval
	Ver：V1.0
	date：2024.4.28

Sample Approval Sheet

Project Name：MP80ID3

Sample Name：NFC antenna

Sample SPEC：FPC material, gold plated, 3M300 adhesive backing

Customer PN.：3421270000740M

Transfer Date： 2024.4.28

Supplier Confirm	Project	Engineer	Quality
	Xiao Qiang	Michael	Gu Shuang
Date	2024.4.28	2024.4.28	2024.4.28

Customer confirm	PM	Electron	MD	PD	QE
date					

Conclusion	□ MP □ Limits use（ ）K

□ **ROHS**

Supplier name:Shenzhen Haotiancheng wireless technology Co., LTD

Supplier address:5E, Building L, Baicai Science Park, Lane 2, Liuxian 1st Road, Baoan District, Shenzhen

Phone: 0755-23013857 Fax: 0755-23013857

E-mail: sunjiwei@htc-wireless.com

Catalogue

1. Summary of the admission

The letter describes the MP80ID3 built-in NFC antenna condition, its frequency band NFC the manufacturer is Shenzhen Hao Tiancheng Wireless Technology Co., LTD.

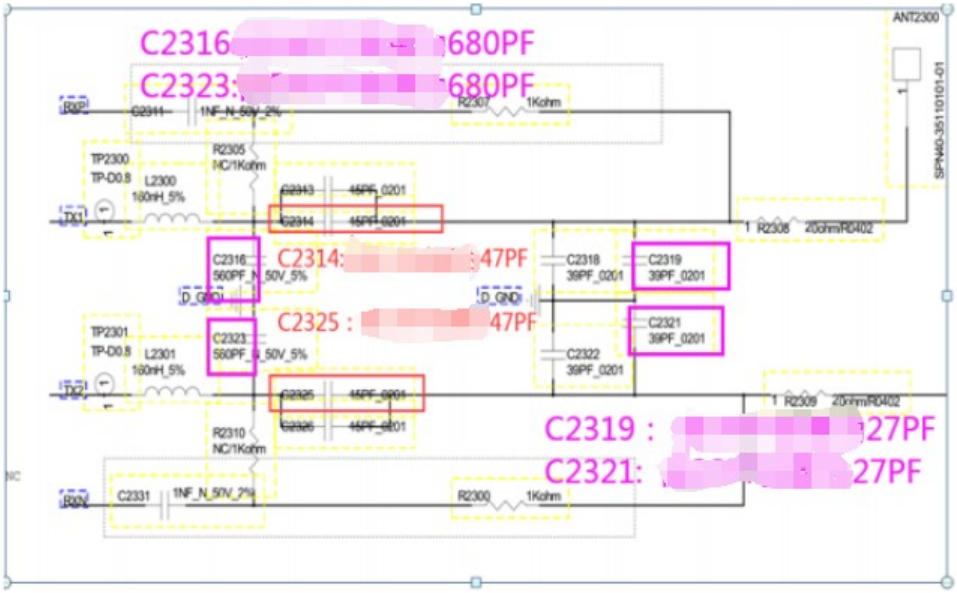
2. Appearance

3. Electrical properties

3.1. Antenna band

	NFC
Transmitting band(MHz)	13.56
Receiving band(MHz)	13.56

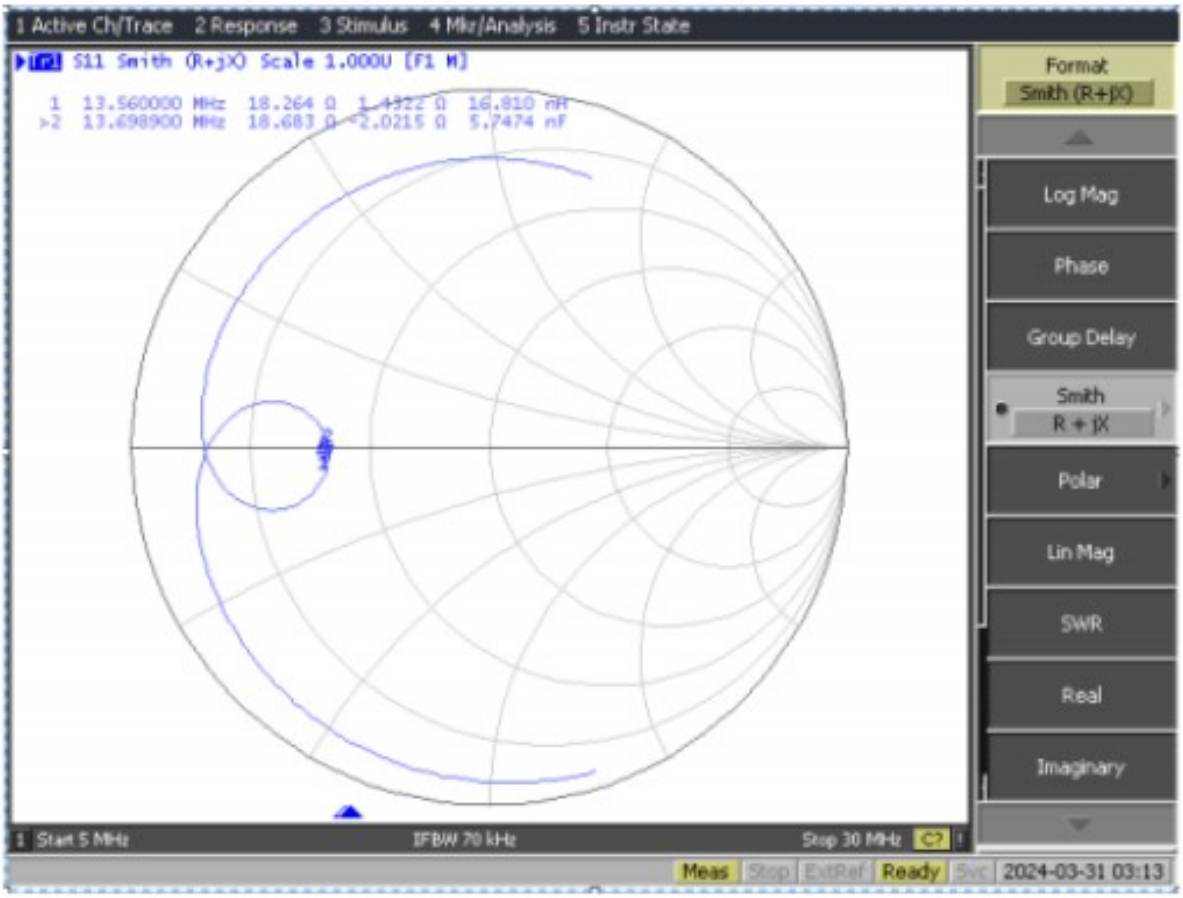
3.2. Matching circuit



3.3. Impedance requirement

50 ohm

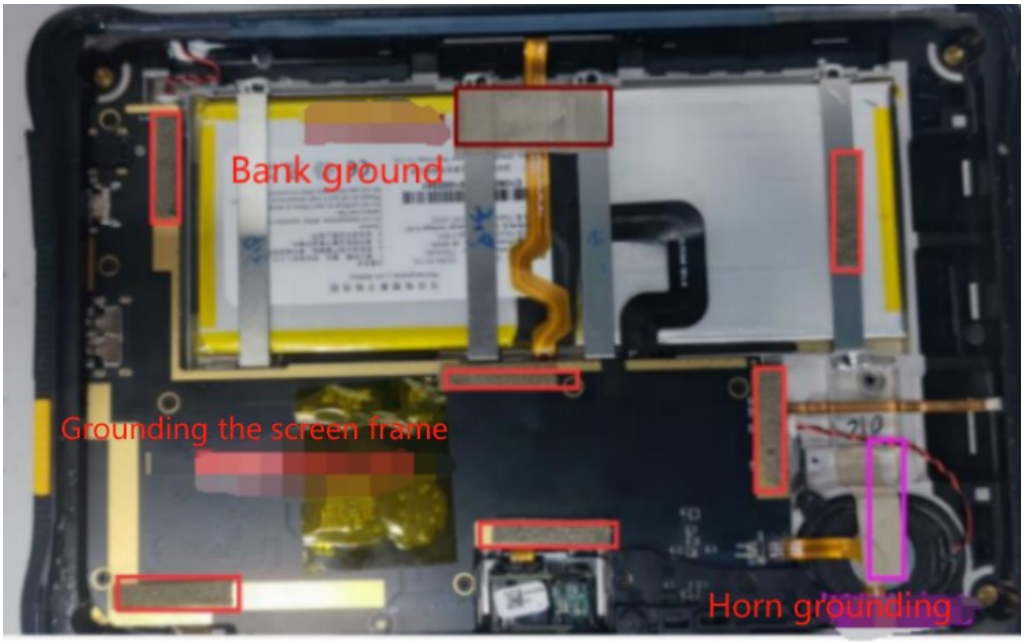
3.4. NFC antenna Smith circle diagram



3.5. Antenna test data

The effective distance is 2-3cm

3.6. Environmental treatment

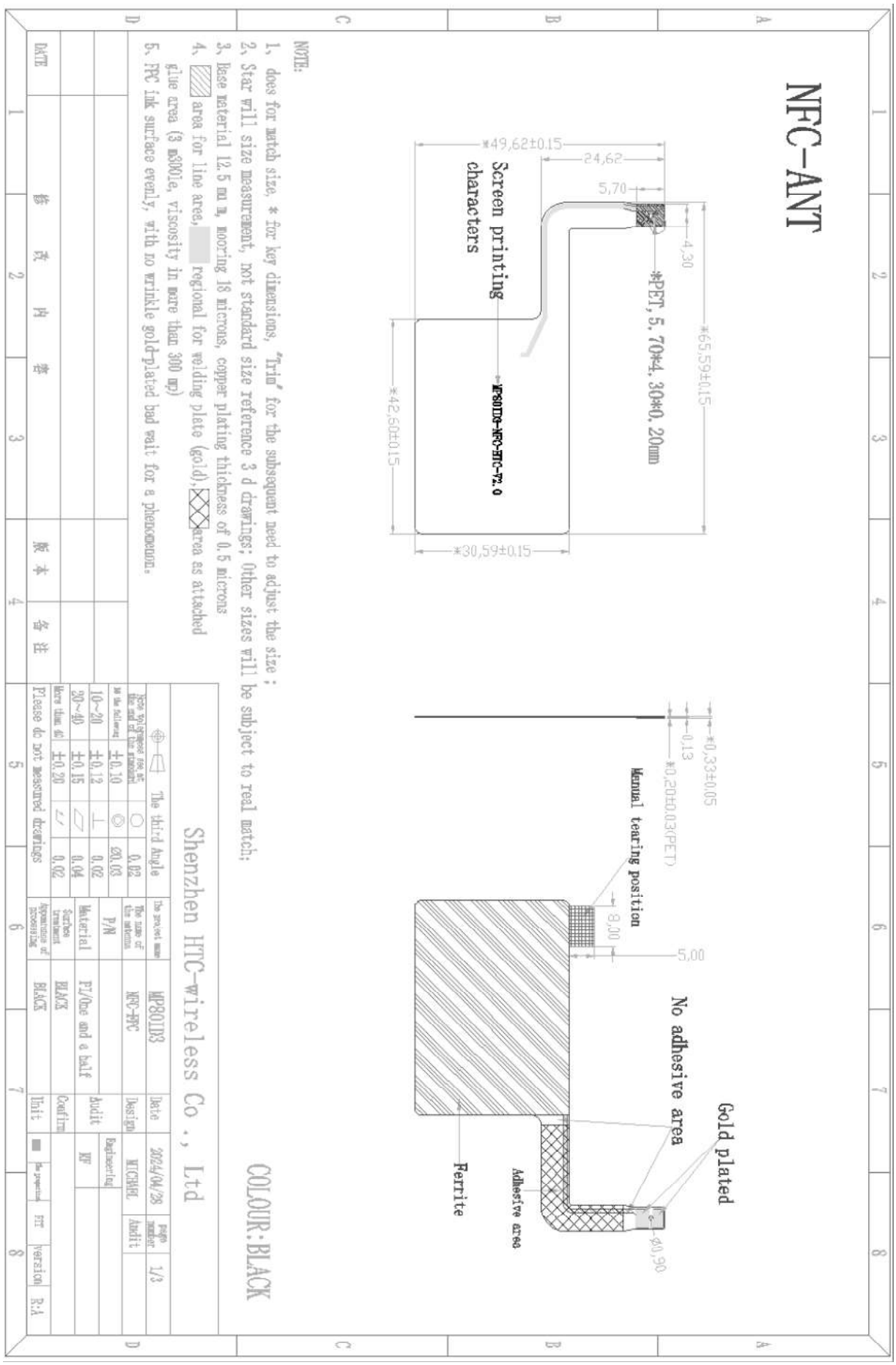


4. Appearance and Structure

4.1 Antenna Material

Antenna material: FPC antenna, black ink, gold plating in exposed copper area.
Base material + double-sided tape + release paper

4.2 Structural Drawings

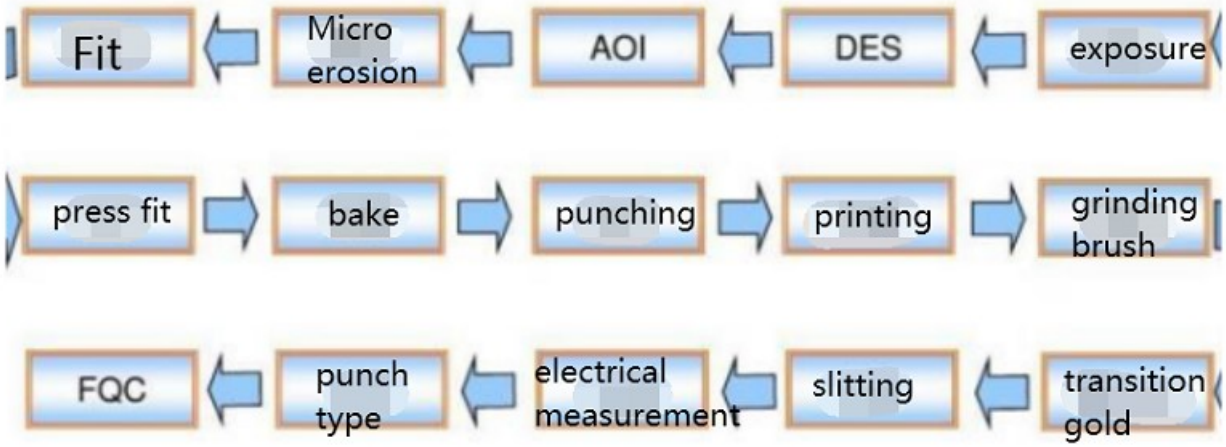


5. Bill of Materials (BOM)

List of main materials

number	Product information						Test report	
	Code (component Code)	Product name	重量 (g)	Name of raw material	Raw material No Chemical registration number	Raw material supplier	Certification company	Report no
1	FPC antenna	Copper foil substrate (PI)	0.0542	CU	SP14-033405-SH	Cai lungeti	SGS	SHA16-245544-02
			0.03	polyimide film				
2		Ink (black)	0.005	PRINT INK (Printing ink)	P800	Youli	SGS	
3		Adhesive paper	0.1132	3M	3M9471LSE	Meilihua	SGS	
4		Electrogold	/	additive	JSTD8001	Kingsoft	SGS	CANEC1617433203

6. Production flow chart



7. Reliability test report

Shenzhen HaoTian Cheng Wireless Technology CO. Ltd

Reliability test report

customer	Panjiarui	The customer model	MP80ID3	Product model	NFC	DATE	2024/4/27	Inspector: GU
Number	Reliability project	The experimental method	Decision criteria	Cycle	number of experiments	1	2	3
1	Peel strength	Tension meter	From 70 to 80 n / 100 mm (paste) on ABS material	1 time/batch	5PCS	OK	OK	OK
2	The coating adhesion	Clean surface of FPC goldfinger, then on the surface of gold finger put new 3 m600 back glue, laminating surface to cover the surface of gold finger, and residual pressure must not have bubbles with his fingers. About 10 seconds, along with gold finger side into the direction of the Angle of 90 degrees quickly pull up the tape, and repeat this three times this action.	Check the surface gold finger without coating fall off phenomenon, there is no loss of coating film of adhesive tape.	1 time/batch	5PCS	OK	OK	OK
3	Salt fog	At 35 ℃ plus or minus 2 ℃ airtight environment, and the salt solution with a PH value of 6.5 to 7.25 (5% solution composition of 95% sodium chloride and distilled water) with 80 square centimeters to 10 cm in diameter of the atomizer in 16 hours average collection in 1 to 2 ml of spray amount, continuous spray after 48 hours to take out the test.	FPC not blister. Oxidation discoloration and rust.	1 time/batch	5PCS	OK	OK	OK
4	Bending test	Positive and negative bending 180 °, 30 times	Still conduction after bending, performance is good. No fracture	1 time/batch	5PCS	OK	OK	OK
5	High and low temperature impact	Will be set to high and low temperature test chamber cold - 30 ℃, the temperature is set to + 70 ℃, the switching speed for 30 seconds, each holding 0.5 H, is set to 32. After the test after back 2 hours at room temperature.	Good electrical	1 time/batch	5PCS	OK	OK	OK
6	High temperature and high humidity test	Test environment: temperature of 60 plus or minus 2 ℃; Humidity is 93 + / - 3% (RH); Place for 48 hours; Recovery time: 2 hours.	Good electrical	1 time/batch	5PCS	OK	OK	OK

Prepared : GU　　checked by :XIAO　　Control number: SR-FM-QRA-008

8. Antenna and accessory materials GP test report (ROHS.SGS.MSDS)：

Antenna partial data

Due to the large number of pages, the above ROHS.SGS.MSDS information will be provided in electronic format。

9. Packing method

FPC antenna single shipment, into a small PP bag, each bag has 100PCS; Then put in a small box after loading out. The actual shipment quantity shall prevail.