



SPECIFICATION FOR APPROVAL

Customer Name	PIXSTAR		
Customer Project Name	M08PRO-2178A	SDC Project Name	M08PRO-2178A
Machine information		SDC P/N	WF140B-0813R-80
Band	WIFI2. 4G/BT		
Version	A0		
Designer Information			
RF Engineer	Fu xuerong	R&D Diretor	Xia chenglei
ME Engineer	Huang zongbao		

Approval				Customer Approval	
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	Huang zongbao	Xia chenglei	Chen minghua		
Date	2023.9.12	2023.9.12	2023.9.12		

Change Log				
Version	Change Description	Person in Charge	Approval By	Date



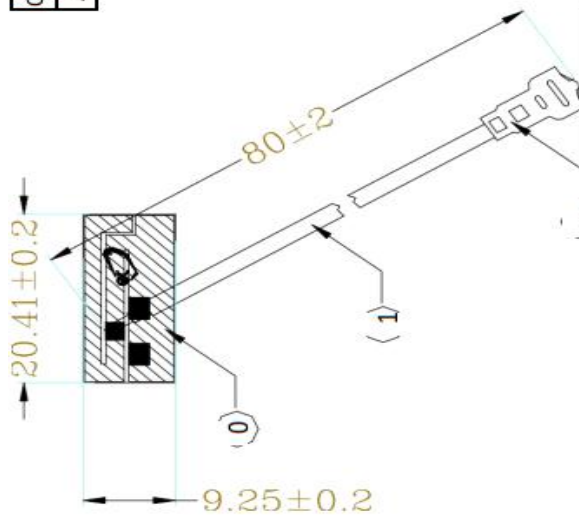
Catalogue

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Drawing or Product Image

Order of the edition	Designer	Date
A0	Li yaona	2023.9.12



NO.	DESCRIPTION		QTY
1	Terminal	IPEX3	1
2	Cable	Φ0.8 Cable Black, 50Ω	80
3	FPC	FPC - Black oil black lettering half to half substrate, treated with antioxidant, 3M with adhesive backing.	1
SHUN DA CHENG TECHNOLOGY CO., LTD			
XXX.	±10.0	Name	WIFI antenna
XX.	±5.0	Design	Liyaona
X.	±2.0	Examine	Finished product
X.X	±0.5	Ratio	WF10B-0813R-80
X.XX	±0.2	Proportion	
		Order of the edition	Unit
free			mm
View			Change mark

Note: For wires within 60mm, if there are no customer requirements, the default terminal head is facing.



Sample Dimensions Test Report

Test Date	2023.9.12	Sample Qty.	3	Inspector	Xu yanfang
Dimension No.	Standard	Sample 1	Sample 2	Sample 3	Pass/NG
①Length	20.41±0.2mm	20.41	20.51	20.41	Pass
②Width	9.25±0.2mm	9.25	9.35	9.25	Pass
③Thickness	0.1±0.03mm	0.1	0.1	0.1	Pass
④Line length	80±2mm	80	81	80	Pass
⑤					
⑥					
⑦					
Conclusion					PASS
Inspector & Date	Xu yanfang2023.9.12		Approval & Date		



RF Performance Test Report

Antenna Test Equipment Introduction

Test of antenna input characteristics using **Agilent E5071C and Agilent 5062A** vector network analyzer; The radiation pattern of the antenna are tested using the guangping 3D near field Anechoic Chamber, and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

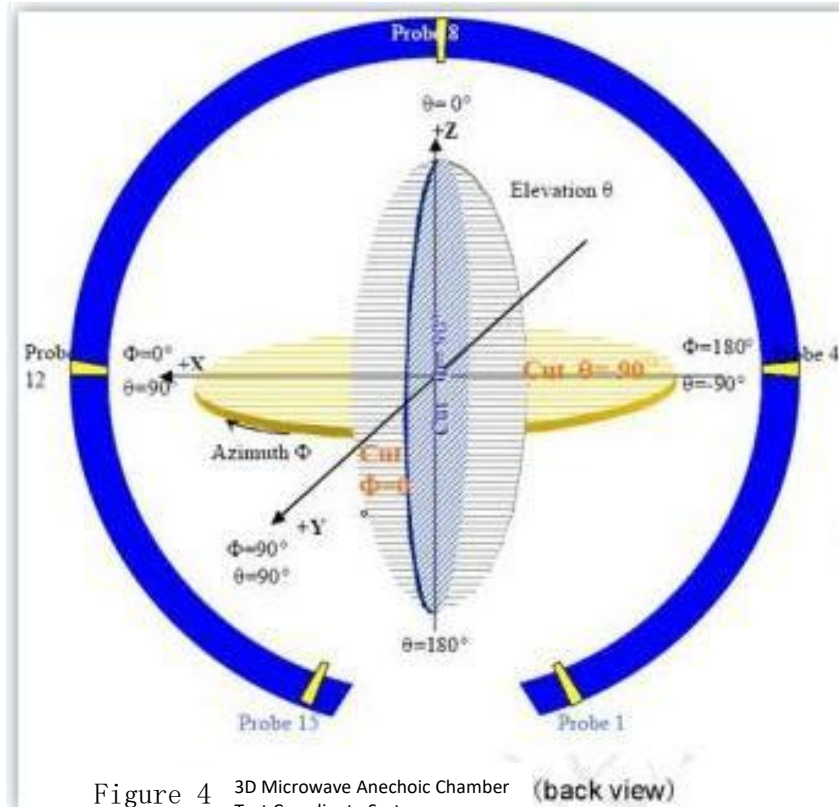


Figure 4 3D Microwave Anechoic Chamber Test Coordinate System

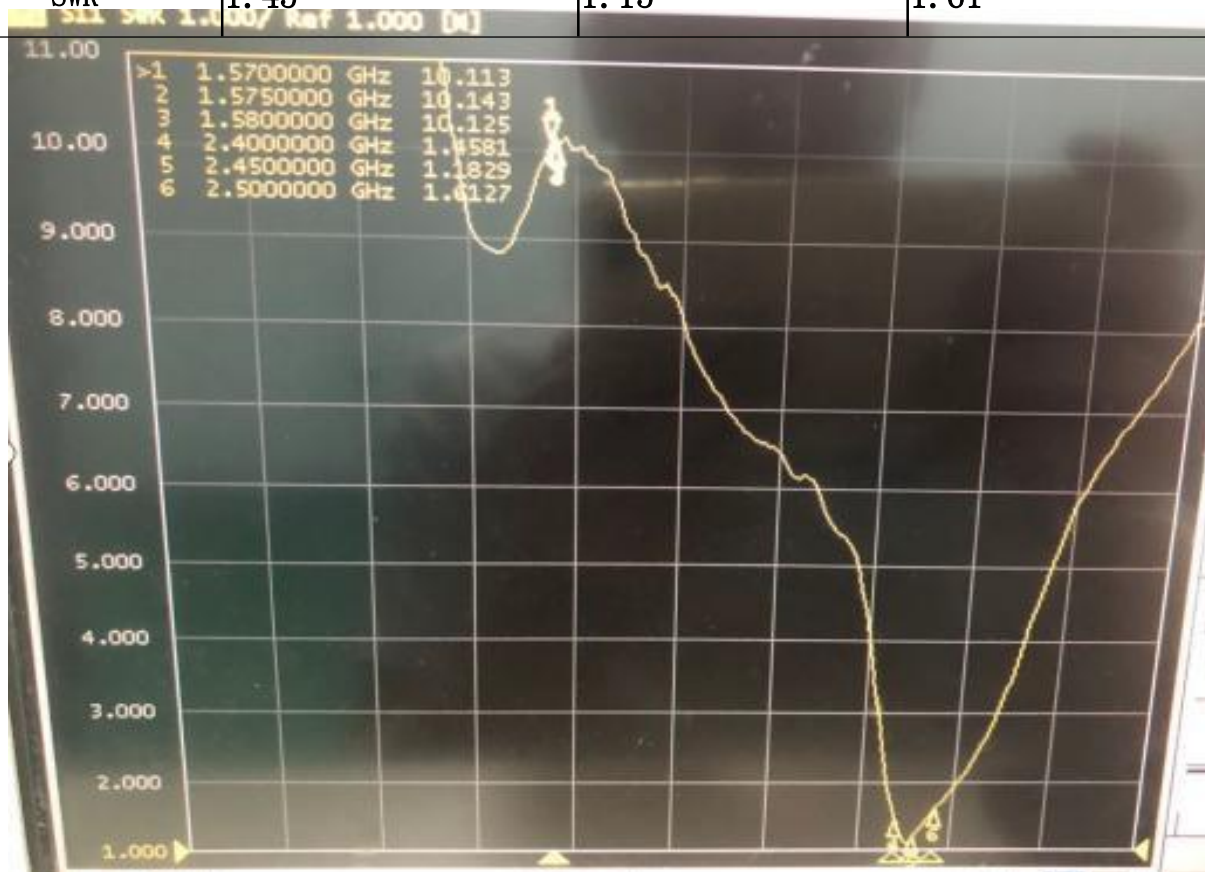
1. S11 **S11 Parameter-VSWR**

Measuring Method is a $50\ \Omega$ coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.

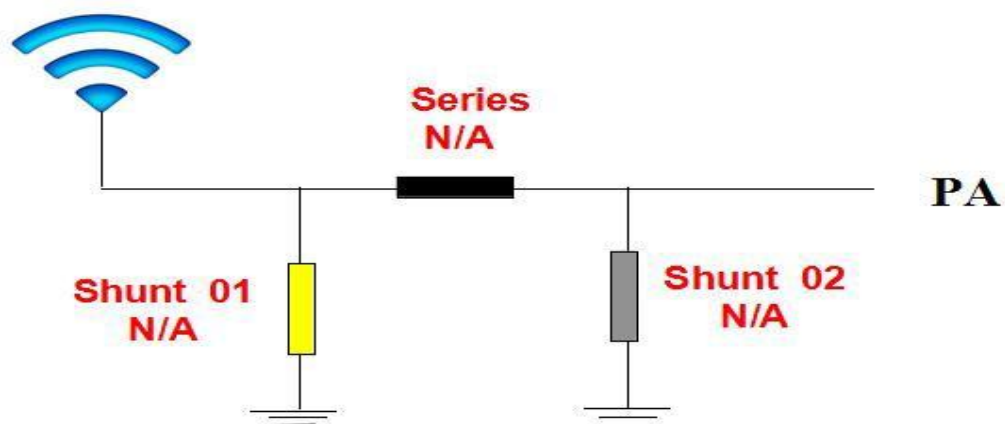


S11 Parameter-VSWR

(MHZ)	2400	2450	2500
SWR	1.45	1.15	1.61



2. Antenna Matching Network
Antenna





3. Gain & Efficiency

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	42. 61	1. 22
2450	42. 75	1. 16
2500	41. 39	1. 31



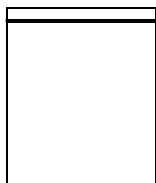
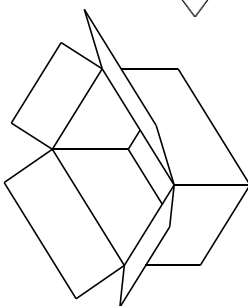
SHUN DA CHENG TECHNOLOGY CO., LTD

Reliability Test Report

Test Date	2023.9.12	Sample Qty.	3	Inspector	Xu yanfang	
Test Item	Requirement	Testing equipment	Sample 1	Sample 2	Sample 3	PASS/NG
high temperature storage	Expose to+85 °C for 24 hours and test after 2 hours of recovery	Constant temperature and humidity box	OK	OK	OK	Pass
low temperature storage	Expose to -40 °C for 24 hours, then test after 2 hours of recovery	Constant temperature and humidity box	OK	OK	OK	Pass
High temperature operation	Powered on for 24 hours at+60 °C	Constant temperature and humidity box	OK	OK	OK	Pass
Low temperature operation	Power on for 24 hours under - 20 °C conditions	Constant temperature and humidity box	OK	OK	OK	Pass
Salt spray test	(5 ± 0.5)% sodium chloride, pH value 6.5-7.2, experimental chamber temperature (35 ± 2) °C ☐ 24H ☒ 48H	Salt spray testing machine	OK	OK	OK	Pass
Connector riveting and pulling force	1.13 Wire diameter ≥10N 0.81 Wire diameter ≥8N RG174 ≥60N RG178 ≥50N	Push-pull force gauge	≥8N	≥8N	≥8N	Pass
Conclusion						Pass
Inspector & Date	Xu yanfang 2023.9.12		Approval &Date			



Packaging specifications

item name	M08PR0-2178A	Product Name	FPC antenna
FPC Finished antenna (一) ↓  (2) 100pcs of products per PE bag (subject to actual packaging) ↓  (3) Put the neatly packed antenna small packaging bag into 10 small bags (as shown in Figure 3) (based on the actual packaging) ↓  (4) The packaged antenna can be placed in a cardboard box and can hold 5 large bags. Each box can hold 5000PCS (Figure 4). (Based on actual packaging) ↓  (5) After packaging is completed, a shipping label needs to be attached (Figure 5)			



Install Wizard or Other

Take 1 piece of product, tear off the release paper on the back of the FPC by hand, then align the FPC positioning hole position with the shell positioning hole position (positioning rib or positioning line), and attach it flat to the shell. The specific position is shown in the following figure:

Installation process precautions:

- ☐ Ensure that the FPC is fully attached to the shell after pasting the antenna;
- ☐ Align the positioning hole with the position of the housing positioning column;
- ☐ Align the FPC edge with the outer shell edge;
- ☐ When attaching the terminal to the PCBA end of the motherboard, please first align the terminals and then attach them vertically;
- ☐ When disassembling antenna terminals, tools (such as specialized pry bars) should be used to vertically lift the terminals, and the wires should not be directly pulled for disassembly.



WiFi antenna





产品 ROHS 证书

Certificate

Certificate Number: UNIB23083106HC-01



Product: 5G/4G/WIFI/GPS/BT antenna
Applicant: ShenZhen ShunDaCheng Technology Co., Ltd.
4th Floor, Building B5, Xinfu Industrial Zone, Fuyong Chongqing Road,
Baoan District, Shenzhen
Manufacturer: N/A
Model No.: N/A
Trade Name: N/A
Test Methods: IEC 62321-2:2021, IEC 62321-3-1:2013, IEC 62321-4:2013 +A1:2017,
IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015
IEC 62321-7-2:2017, IEC 62321-8:2017

The laboratory tested the product provided by the applicant according to the above test methods. According to the test results, the product conforms to RoHS Directive [(2011/65/EU and Amendment (EU) 2015/863)] issued by the European Commission. It is possible to use CE marking to demonstrate the compliance with RoHS Directive.

The certificate applies to the tested sample above mentioned only and shall not imply an assessment of the whole production. It is only valid in connection with the test report number: UNIB23083106HR-01.

Note: According to the requirements of the applicant for testing, details are shown in the test report.

RoHS

Sep. 06, 2023
Issue Date

Hoffer Lau
Hoffer Lau



Shenzhen United Testing Technology Co., Ltd.

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Certificate of Compliance