

Shenzhen New Link Technology Co.,Ltd

Sample specification

ANTENNA APPROVAL SHEET

Customer: Chen Zhan

Item: TBX-100

P / N	5170070816F2 5170070805F1 3900900008F0 3900900012F0	examine	Peng Li
Radio frequency engineer	Kong xianghua	Structural engineer	Yang Hai
address	Fifth Floor, Office Building, Fifth Industrial Zone, North District, High-tech Park, Nanshan District, Shenzhen		
telephone	13902948715	website	www.kpantenna.com
The company mailbox	sales@kpanenna.com	contacts	Peng Li

Project: TBX-100		Zhang Hai Dong	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28			
Revision	V2.1	<u>Lipeng</u>	
Mould			
Confidential			Not Spread

1.Overview

This report mainly describes the performance of the antenna. The antenna frequency range of the TBX-100 project is WIFI antenna frequency: 2.4-2.5GHz,5.15-5.85GHz, BT antenna frequency: 2.4-2.5GHz, and the antenna is located outside the machine

2.detailed introduction

2.1building-out circuit （The match is not changed）

3.Debugging Settings

Emission power (TX Power) and reception sensitivity (RX Sensitivity) The mission power and reception sensitivity are 3D results measured using CMW500 in a microwave dark chamber (6m * 3m * 3m)

3.1 TRP、TIS

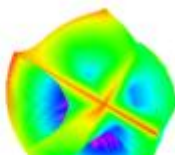
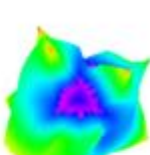
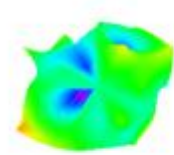
WIFI 1 Antenna data

Frequency (MHz)	2400	2450	2480	5150	5550	5850
Gain (dBi)	-7.15	-7.42	-7.18	-5.36	-5.78	-5.23
Frequency (MHz)	2400	2450	2480	5150	5550	5850
Efficiency(%)	6.42	7.28	7.15	9.75	10.27	8.54

2400.000MHz

2450.000MHz

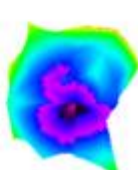
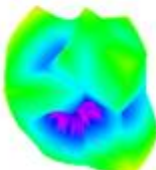
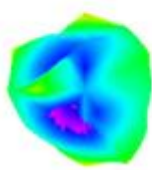
2480.000MHz



5150.000MHz

5550.000MHz

5850.000MHz

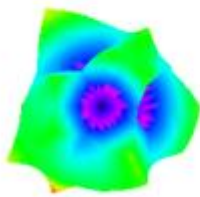


WIFI 2 Antenna data

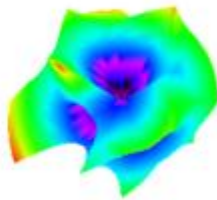
Project: TBX-100		Zhang hai	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28		ong	
Revision	V2.1	<u>Lipeng</u>	
Mould			
CONFIDENTIAL Brotone.com			

Frequency (MHz)	2400	2450	2480	5150	5550	5850
Gain (dBi)	-7.75	-7.96	-8.02	-6.01	-5.74	-5.56
Frequency (MHz)	2400	2450	2480	5150	5550	5850
Efficiency(%)	7.05	7.74	6.89	10.15	10.08	10.11

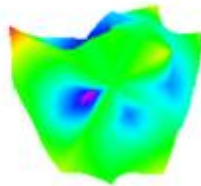
2400.000MHz



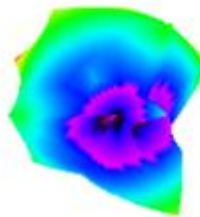
2450.000MHz



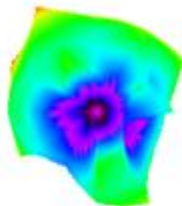
2480.000MHz



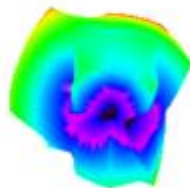
5150.000MHz



5550.000MHz



5850.000MHz

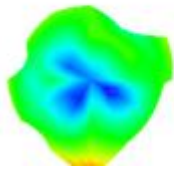


BT antenna data

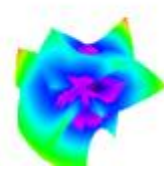
Frequency (MHz)	2400	2450	2480
Gain (dBi)	-1.96	-2.22	-2.72
Frequency (MHz)	2400	2450	2480
Efficiency(%)	22.82	20.12	20.04

Project: TBX-100		Zhang hai	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28		ong	
Revision	V2.1	<u>Lipeng</u>	
Mould			
CONFIDENTIAL			
Brotone.com			

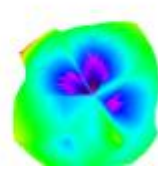
2400.000MHz



2450.000MHz



2480.000MHz



3.3.Environmental treatment

No change

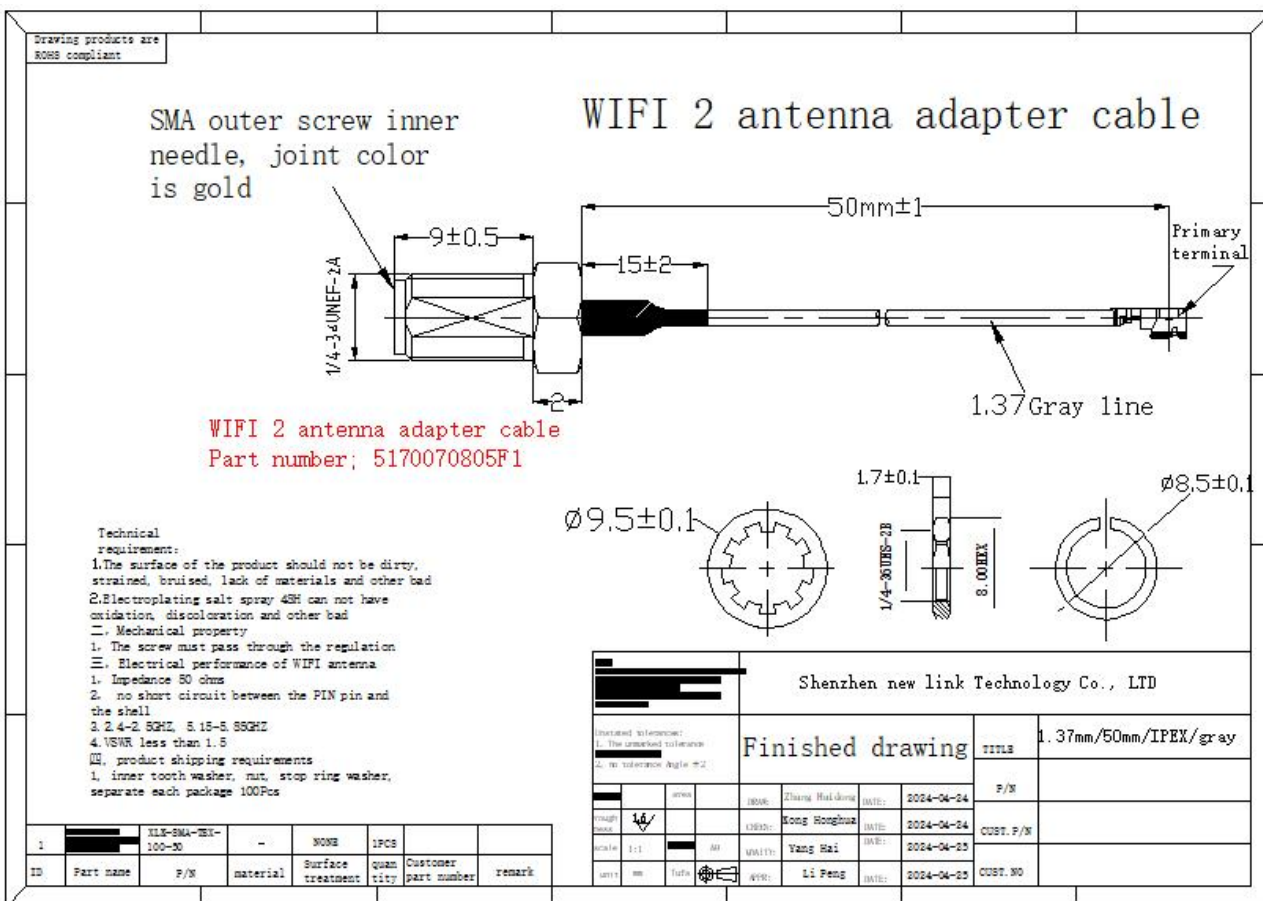
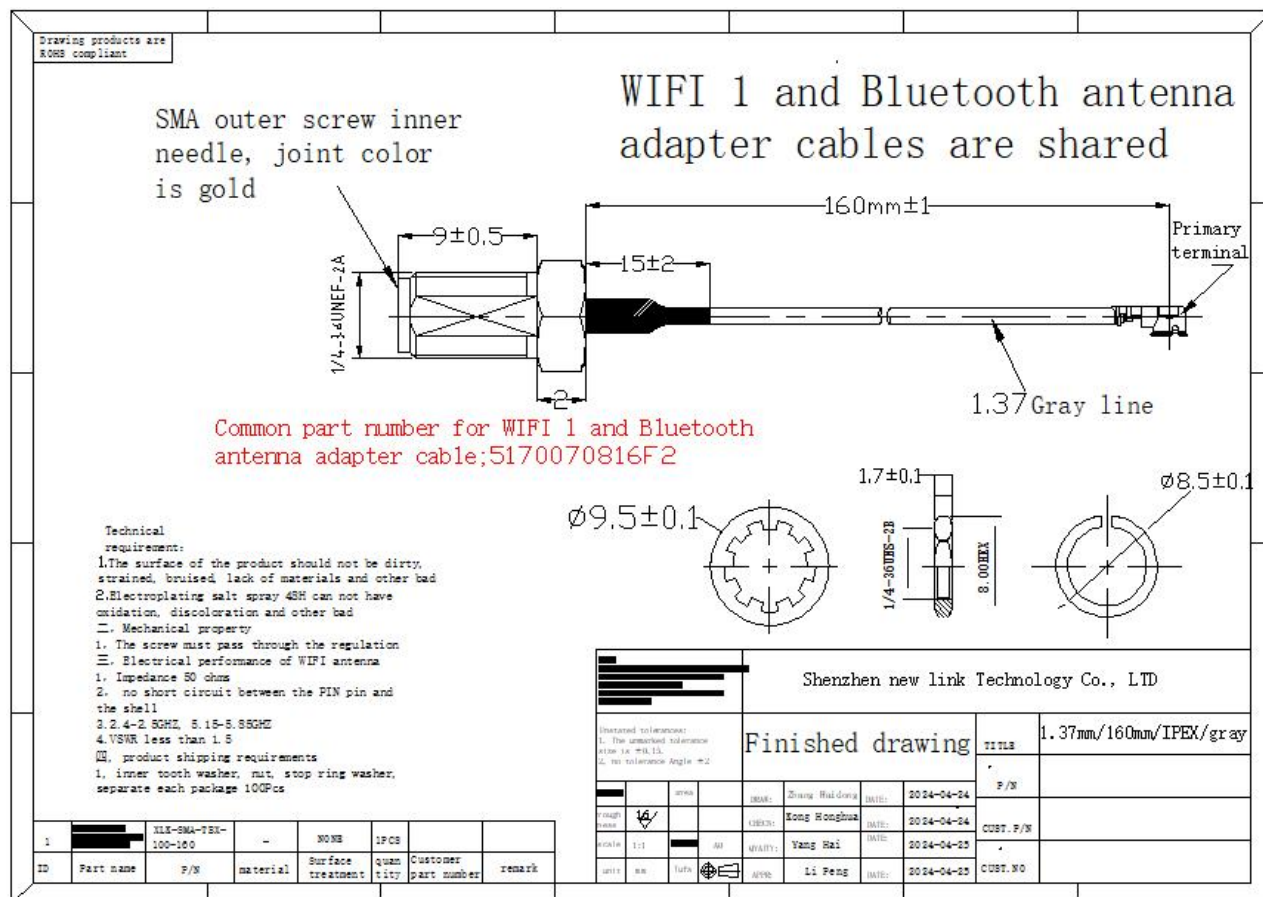
4. assumption diagram

Project: TBX-100		Zhang hai png	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28			
Revision	V2.1	<u>Lipeng</u>	
Mould			
CONFIDENTIAL Brotone.com			

Drawing products are RoHS compliant																																							
Technical requirement: WIFI 1, WIFI 2 antenna common material number;3900900008F0 —, Surface requirement: 1.The surface of the product should not be dirty, strained, bruised, lack of materials and other bad 2.Electroplating salt spray 48H can not have oxidation, discoloration and other bad 二, Mechanical property 1, The screw must pass through the regulation 三, Electrical performance of WIFI antenna 1, Impedance 50 ohms 2, WIFI antenna operating frequency: 2.4-2.5GHZ, 5.15-5.85GHZ WIFI 1 and WIFI 2 antennas are shared																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Shenzhen new link Technology Co., LTD</td> </tr> <tr> <td colspan="2" style="text-align: center;">Finished drawing</td> </tr> <tr> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="2" style="text-align: center;">WIFI antenna</td> </tr> <tr> <td colspan="2" style="text-align: center;">P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. NO</td> </tr> </table>				Shenzhen new link Technology Co., LTD		Finished drawing		TITLE		WIFI antenna		P/N		CUST. P/N		CUST. NO		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Shenzhen new link Technology Co., LTD</td> </tr> <tr> <td colspan="2" style="text-align: center;">Finished drawing</td> </tr> <tr> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="2" style="text-align: center;">WIFI antenna</td> </tr> <tr> <td colspan="2" style="text-align: center;">P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. NO</td> </tr> </table>								Shenzhen new link Technology Co., LTD		Finished drawing		TITLE		WIFI antenna		P/N		CUST. P/N		CUST. NO	
Shenzhen new link Technology Co., LTD																																							
Finished drawing																																							
TITLE																																							
WIFI antenna																																							
P/N																																							
CUST. P/N																																							
CUST. NO																																							
Shenzhen new link Technology Co., LTD																																							
Finished drawing																																							
TITLE																																							
WIFI antenna																																							
P/N																																							
CUST. P/N																																							
CUST. NO																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Shenzhen new link Technology Co., LTD</td> </tr> <tr> <td colspan="2" style="text-align: center;">Finished drawing</td> </tr> <tr> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="2" style="text-align: center;">WIFI antenna</td> </tr> <tr> <td colspan="2" style="text-align: center;">P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. NO</td> </tr> </table>												Shenzhen new link Technology Co., LTD		Finished drawing		TITLE		WIFI antenna		P/N		CUST. P/N		CUST. NO															
Shenzhen new link Technology Co., LTD																																							
Finished drawing																																							
TITLE																																							
WIFI antenna																																							
P/N																																							
CUST. P/N																																							
CUST. NO																																							

Drawing products are RoHS compliant																																							
Technical requirement: Bluetooth antenna part number;3900900012F0 —, Surface requirement: 1.The surface of the product should not be dirty, strained, bruised, lack of materials and other bad 2.Electroplating salt spray 48H can not have oxidation, discoloration and other bad 二, Mechanical property 1, The screw must pass through the regulation 三, Electrical performance of WIFI antenna 1, Impedance 50 ohms 2, WIFI antenna operating frequency: 2.4-2.5GHZ, Bluetooth antenna																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Shenzhen new link Technology Co., LTD</td> </tr> <tr> <td colspan="2" style="text-align: center;">Finished drawing</td> </tr> <tr> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="2" style="text-align: center;">Bluetooth antenna</td> </tr> <tr> <td colspan="2" style="text-align: center;">P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. NO</td> </tr> </table>				Shenzhen new link Technology Co., LTD		Finished drawing		TITLE		Bluetooth antenna		P/N		CUST. P/N		CUST. NO		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Shenzhen new link Technology Co., LTD</td> </tr> <tr> <td colspan="2" style="text-align: center;">Finished drawing</td> </tr> <tr> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="2" style="text-align: center;">Bluetooth antenna</td> </tr> <tr> <td colspan="2" style="text-align: center;">P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. NO</td> </tr> </table>								Shenzhen new link Technology Co., LTD		Finished drawing		TITLE		Bluetooth antenna		P/N		CUST. P/N		CUST. NO	
Shenzhen new link Technology Co., LTD																																							
Finished drawing																																							
TITLE																																							
Bluetooth antenna																																							
P/N																																							
CUST. P/N																																							
CUST. NO																																							
Shenzhen new link Technology Co., LTD																																							
Finished drawing																																							
TITLE																																							
Bluetooth antenna																																							
P/N																																							
CUST. P/N																																							
CUST. NO																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Shenzhen new link Technology Co., LTD</td> </tr> <tr> <td colspan="2" style="text-align: center;">Finished drawing</td> </tr> <tr> <td colspan="2" style="text-align: center;">TITLE</td> </tr> <tr> <td colspan="2" style="text-align: center;">Bluetooth antenna</td> </tr> <tr> <td colspan="2" style="text-align: center;">P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. P/N</td> </tr> <tr> <td colspan="2" style="text-align: center;">CUST. NO</td> </tr> </table>												Shenzhen new link Technology Co., LTD		Finished drawing		TITLE		Bluetooth antenna		P/N		CUST. P/N		CUST. NO															
Shenzhen new link Technology Co., LTD																																							
Finished drawing																																							
TITLE																																							
Bluetooth antenna																																							
P/N																																							
CUST. P/N																																							
CUST. NO																																							

Project: TBX-100		Zhang hai		Chen Zhan-TBX-100 antenna specification book	
Date: 2024.06.28		png			
Revision	V2.1	Lipeng			
Mould					
CONFIDENTIAL Brotone.com					



5、Salt mist detection report

Project: TBX-100		Zhang hai ong	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28			
Revision	V2.1	<u>Lipeng</u>	
Mould			
CONFIDENTIAL Brotone.com			

Handset Model	TBX-100			Tested Quantity	5PCS		
Standard	GB2423.17			Product material	PCB+ABS+SMA		
Tested Items	Required Standard	Actual value	Result	Tested Items	Required Standard	Actual value	Result
Tester Model	KD-60	KD-60	OK	Tested Period	24H	24H	OK
Salt Fog Test Type	NSS Neutral NSS	NSS Neutral NSS	OK	Salt Fog Box Temperature	35° C	35℃	OK
Salt PH	6.5-7.2	6.8	OK	amount of precipitation of Salt fog (H. 80C)	1-2ml	1.8ml	OK
Fog spit type	Continued fog	Continued fog	OK	Material	FPC	FPC	OK
Volume of salt	5%/NaCL	5%/NaCL	OK	Compressed air pressure	1±0.1KG/CM ²	1	OK
saturated temperature	47° C	47℃	OK	Sample location angel	90°	90°	OK
Observed Period	Observed phenomenon						
4H	NA						
12H	NA						
24H	NA						
Judged Standard: Judged by the method of GB5944-86, over Level 9 is qualified.							
Final Tested Result	Qualified ✓			Unqualified			
Tested by	Benyuan He	Supervised by	Aibing Wang	Approved by			
Remark: normal salt fog tested methods is NSS,AASS and CASS.							

Project: TBX-100		Zhang hai Lipeng	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28			
Revision	V2.1	<u>Lipeng</u>	
Mould			
CONFIDENTIAL Brotone.com			

delivery mode

Material category	Packing method	
PCB+ABS+SMA	1、 PET plastic bag packaging	

Note: Please store this product in low temperature, low humidity (temperature 18-28°C, humidity 35% -75% RH) without corrosive gas, and it is recommended to use it within one week after opening the bag

Project: TBX-100		Zhang hai	Chen Zhan-TBX-100 antenna specification book
Date: 2024.06.28		ong	
Revision	V2.1	<u>Lipeng</u>	
Mould			
CONFIDENTIAL Brotone.com			