

# MPE TEST REPORT

Report No.: SHE23060039-04DE

Date: 2023-07-22

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**Applicant** : PETKIT Network Technology (Shanghai) Co., Ltd.  
**Address of Applicant** : Room 4139, Building 2, 588 Zixing Road, Minhang District, Shanghai

**Product Name** : PETKIT YUMSHARE DUAL-HOPPER WITH CAMERA  
SMART PET FEEDER  
**Brand Name** : PETKIT  
**Model Name** : P591  
**Sample Acquisition Method** : Sent by Client

**Sample No.** : E23060039-02#01

**FCC ID** : 2A72N-P591

**Standard** : FCC Part 2.1091

**Date of Receipt** : 2023-07-04  
**Date of Test** : 2023-07-04~ 2023-07-21  
**Date of Issue** : 2023-07-22

**Remark:**

*This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.*

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(Erik Yang)

Reviewed by: Jennifer Zhou  
(Jennifer Zhou)

Approved by: Guoyou Chi  
(Authorized signatory: Guoyou Chi)

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## 1 General Information

### 1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298, Pingan Road, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

### 1.2 Environmental conditions

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060
Ambient noise & Reflection (W/kg)	< 0.012

### 1.3 Details of Application

Applicant Company Name	PETKIT Network Technology (Shanghai) Co., Ltd.
Address	Room 4139, Building 2, 588 Zixing Road, Minhang District, Shanghai
Contact Person	TingHe
Telephone	13916991059
Email	ting.he@petkit.com
Manufacturer Company Name	Dongguan Zhihang Electronic Technology Co., LTD.
Address	Room 701 ,Building 15, No.1, Pushi Road I, Qiaotou Town, Dongguan City, Guangdong Province, China.
Factory Company Name	Dongguan Zhihang Electronic Technology Co., LTD.
Address	Room 701 ,Building 15, No.1, Pushi Road I, Qiaotou Town, Dongguan City, Guangdong Province, China.

### 1.4 Details of EUT

Product Name	PETKIT YUMSHARE DUAL-HOPPER WITH CAMERA SMART PET FEEDER	
Brand Name	PETKIT	
Test Model Name	P591	
FCC ID	2A72N-P591	
Mode of Operation	WLAN 802.11b/g/n(HT20) for 2.4GHz Bluetooth BLE Version 5.0	
Frequency Range	Band	Frequency (MHz)
	802.11b/g/n(HT20)	2400~2483.5
	Bluetooth	2400~2483.5
Modulation Type	DSSS/OFDM for WLAN 2.4GHz	

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	GFSK for Bluetooth
<b>Antenna Type</b>	Internal Antenna
<b>Antenna Gain</b>	Bluetooth: 3.98dBi WLAN 2.4G:-5.45dBi
<b>Hardware version</b>	D4H_MAIN_V1.1
<b>Software version</b>	petkit_D4H_tlsr8258_1_39_202307071601

## 2 Maximum Permissible Exposure (MPE)

### 2.1 Limits

According to FCC Part 1.1307, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidelines.

**TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)**

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz \* = Plane-wave equivalent power density

### 2.2 Assessment methods

Calculation Formula from FCC OET 65:

$$S = \frac{P * G}{4 * \pi * R^2}$$

Where:

S = Power Density (mW/cm<sup>2</sup>)

P = Input Power of the Antenna (mW)

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G = Antenna Gain Relative to an Isotropic Antenna

R = Distance from the Antenna to the Point of Investigation (cm)

## 2.3 Test Result

Operation Mode	Frequency Range (MHz)	Max Conducted Power (dBm)	Antenna Gain (dBi)	Max EIRP (mW)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WLAN 2.4GHz	2400~2483.5	16.39	3.98	108.89	0.02166	1.0
BLE	2400~2483.5	-2.77	-5.45	0.15	0.00003	1.0

## 2.4 Results for transmit simultaneously

No.	Configurations	Maximum MPE Value			Limit
		WLAN 2.4GHz	BLE	Transmit Simultaneously	
1	WLAN 2.4GHz + BLE	0.02166	0.00003	0.02169	1.0

### Note(s):

1. For 300 – 1,500MHz: Power Density limit is  $f/1500$  mW/cm<sup>2</sup>
2. For 1,500 – 100,000MHz: Power Density limit is 1.0 mW/cm<sup>2</sup>
3. MPE Ratios are Calculated as  $[(MPE1/Limit) + (MPE2/Limit) + \dots] \leq 1$

## 2.5 Conclusion

The Power Density at the position which is 20 cm far from the EUT is smaller than the General Population/Uncontrolled Exposure limit.

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## 3 Appendixes

### 3.1 Sample Photograph



All of the sample



Front of the sample

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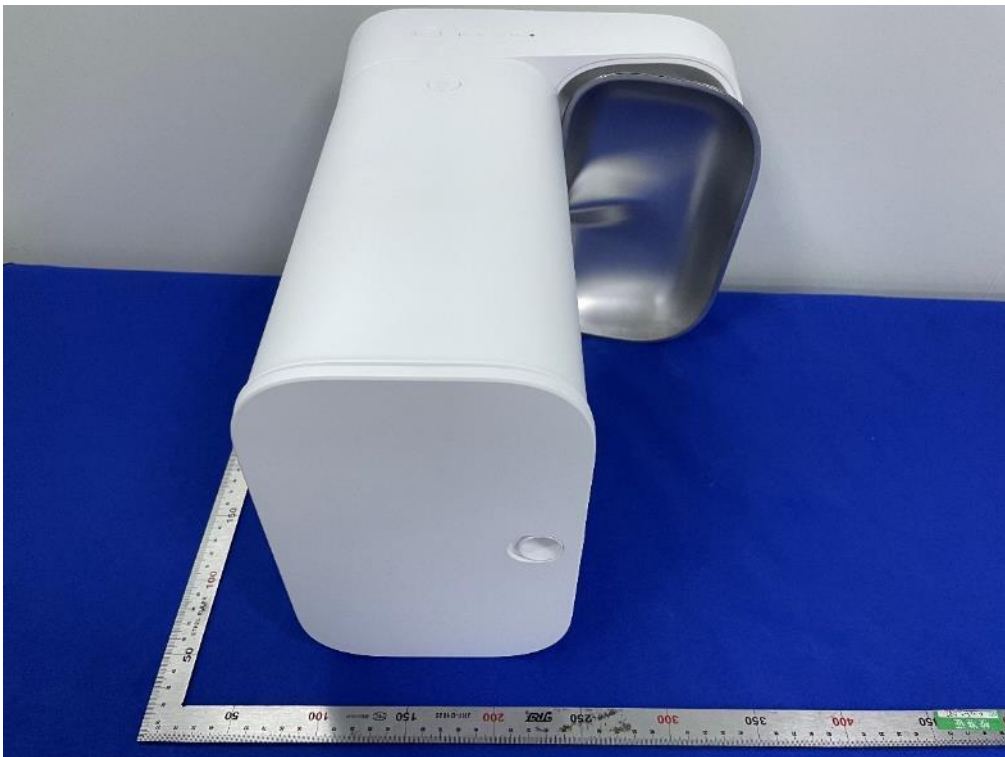
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Rear of the sample



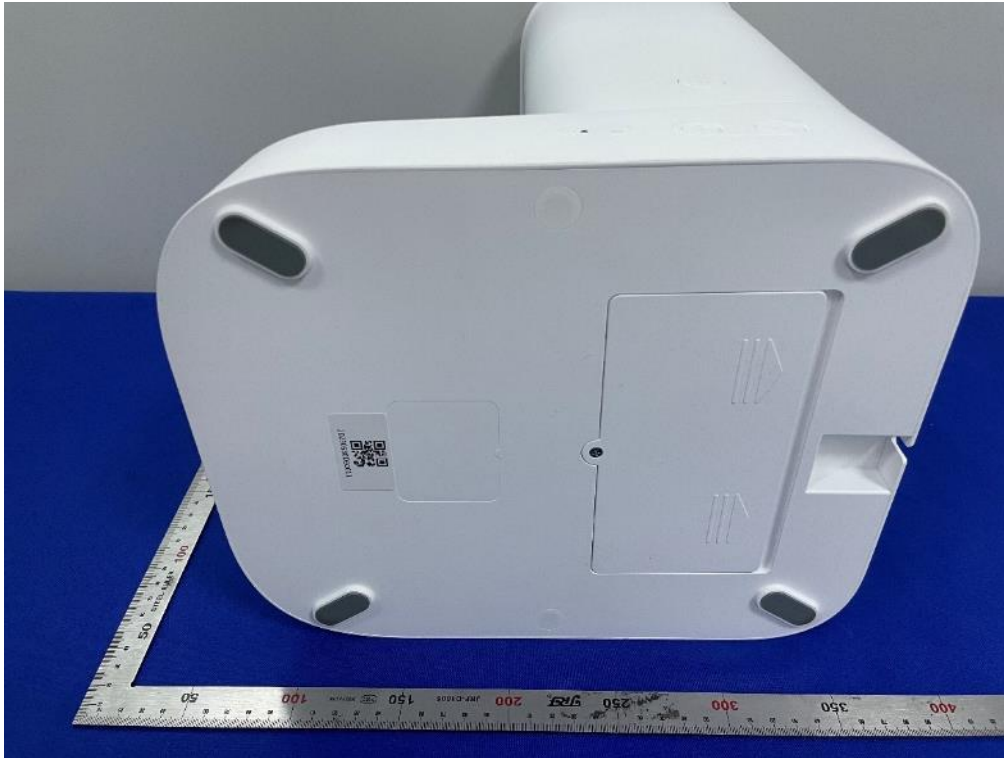
Top of the sample

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Bottom of the sample



Left of the sample



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Right of the sample



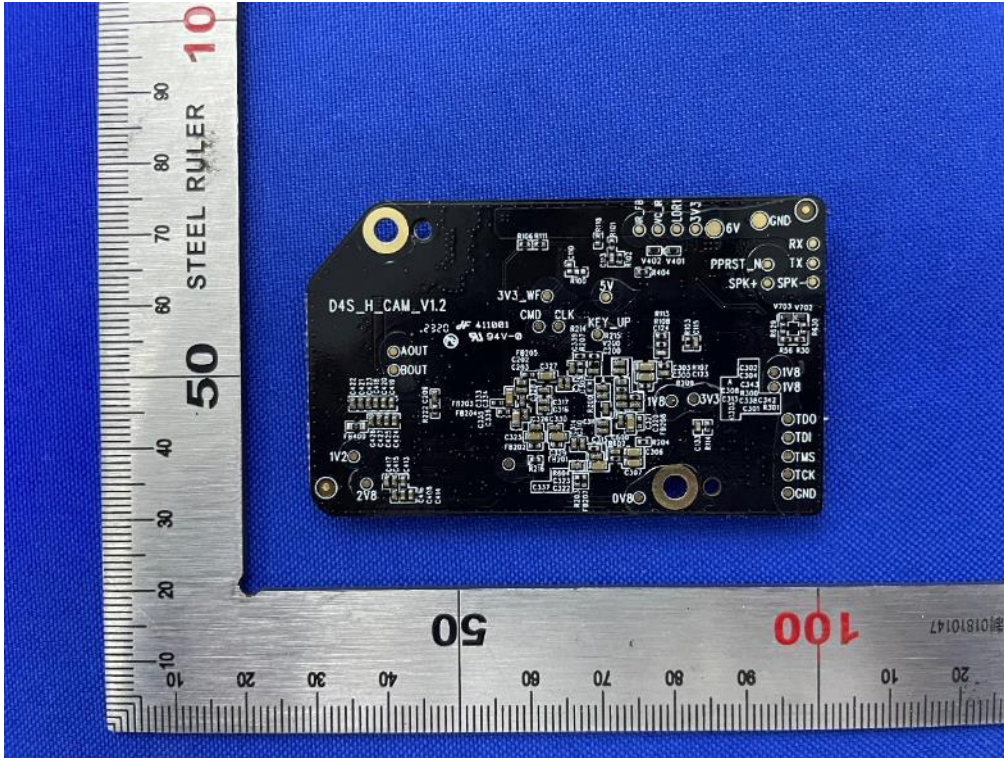
Open of the sample

# MPE TEST REPORT

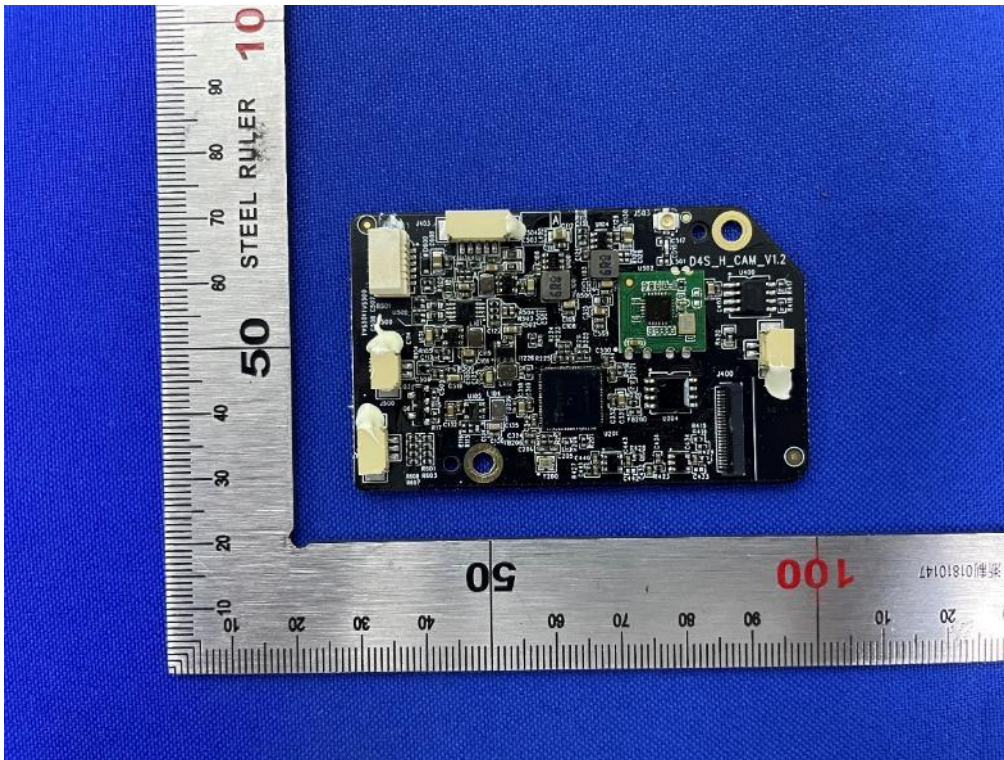
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Internal-1 of the sample



Internal-2 of the sample



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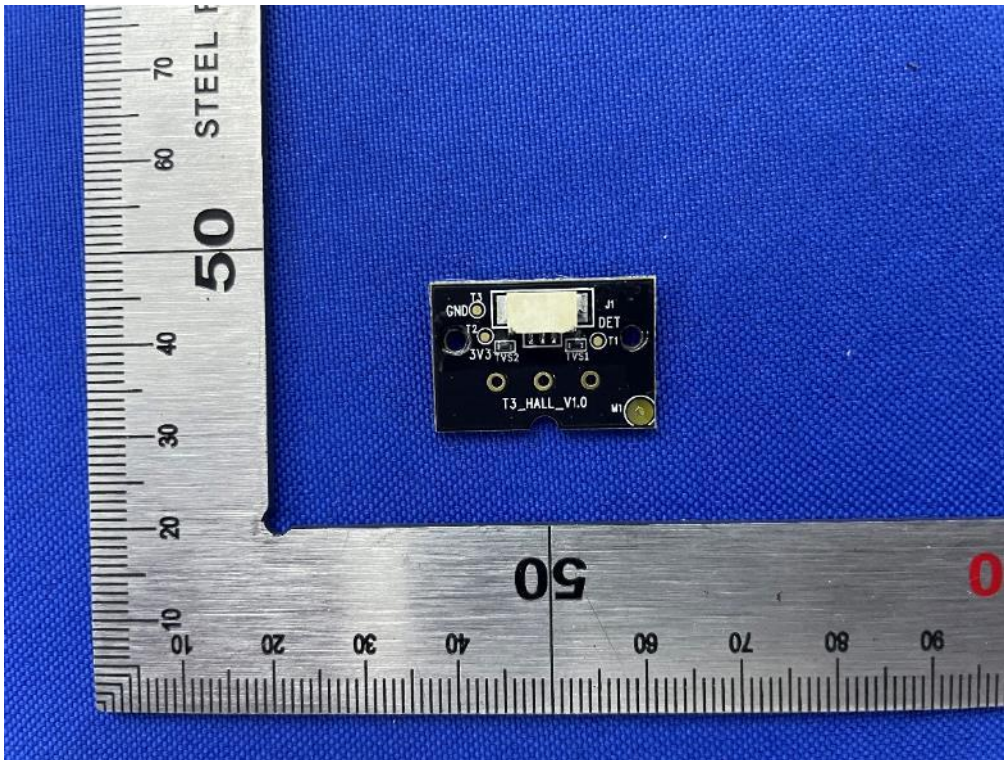
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WIFI Antenna position



Internal-3 of the sample

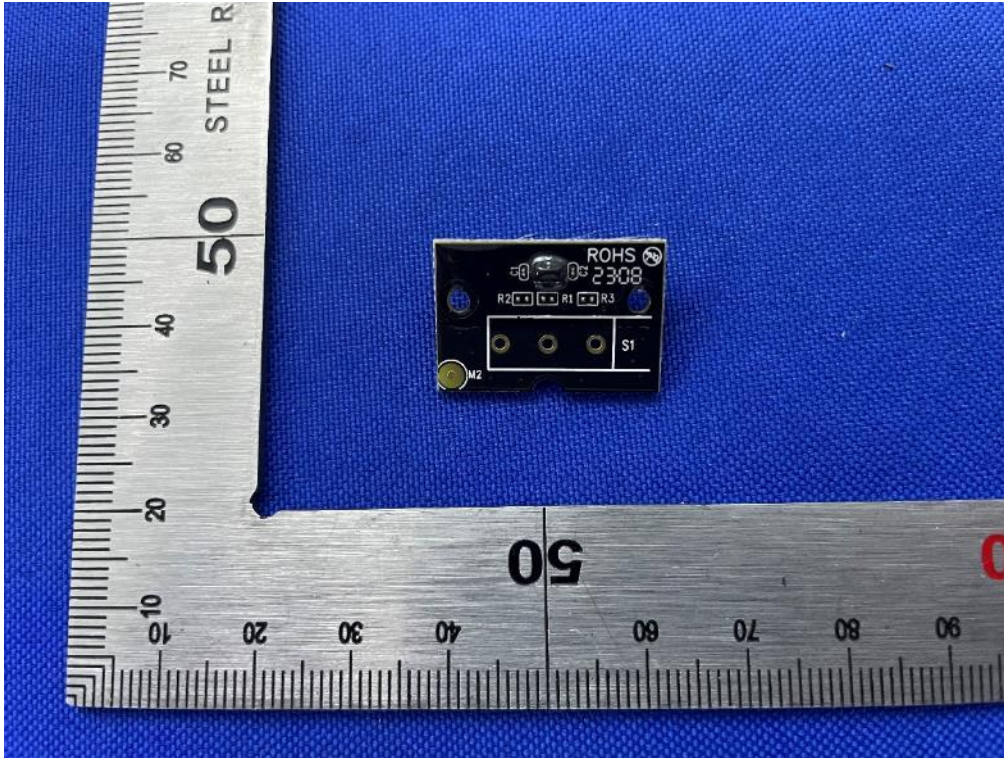


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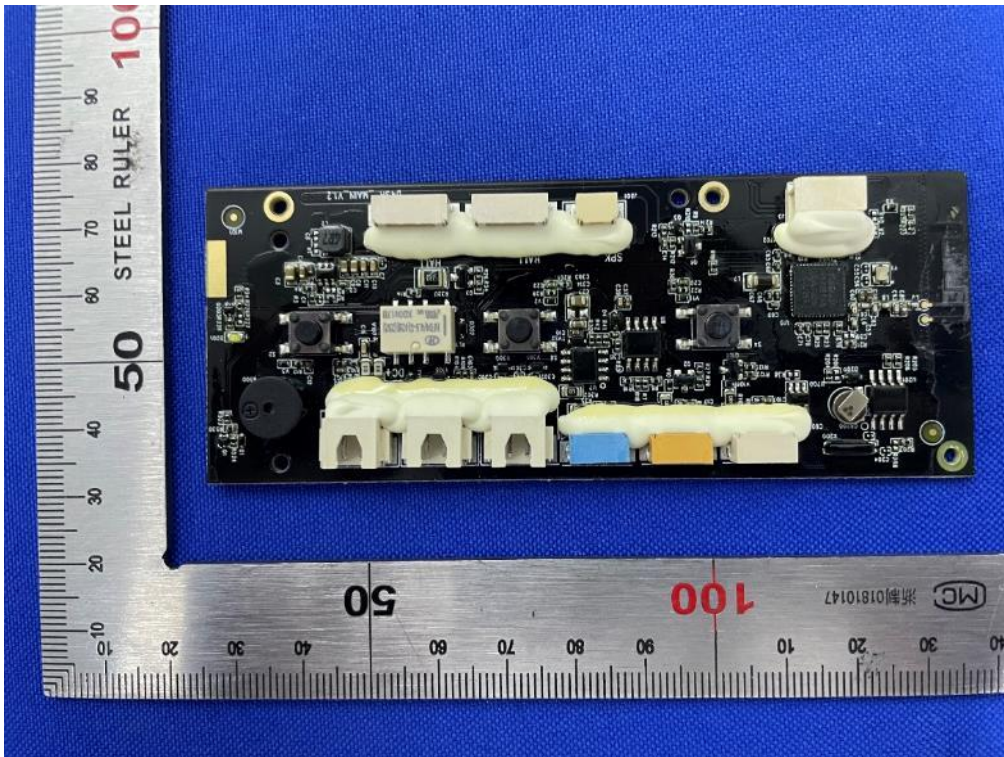
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Internal-4 of the sample



Internal-5 of the sample

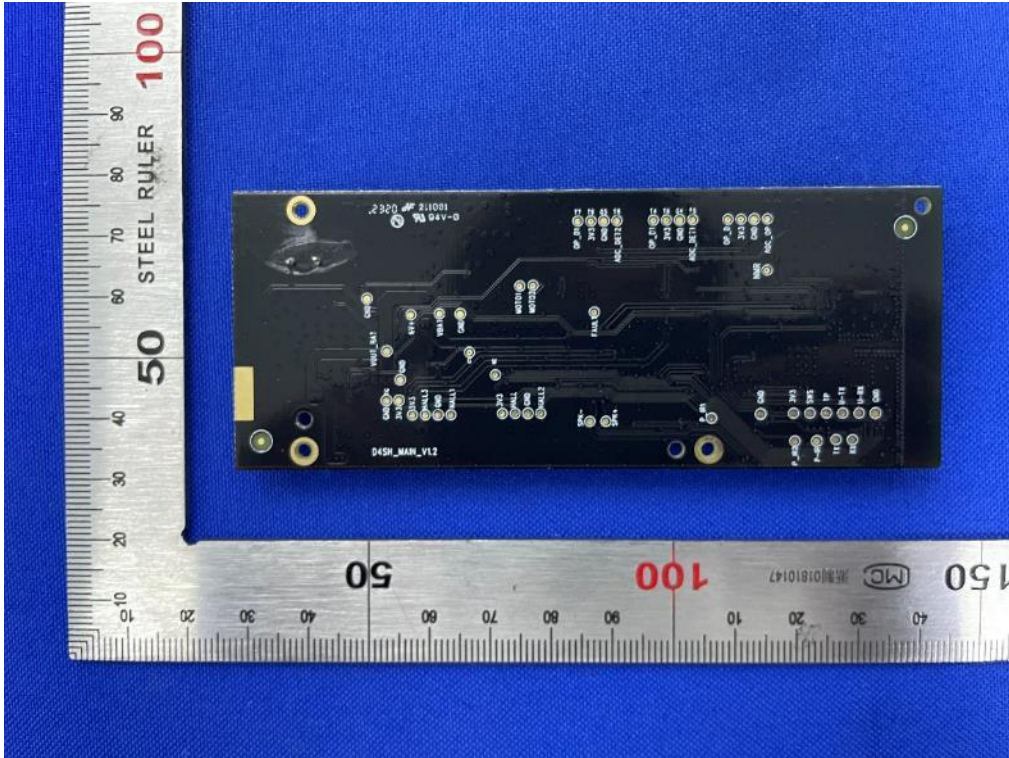


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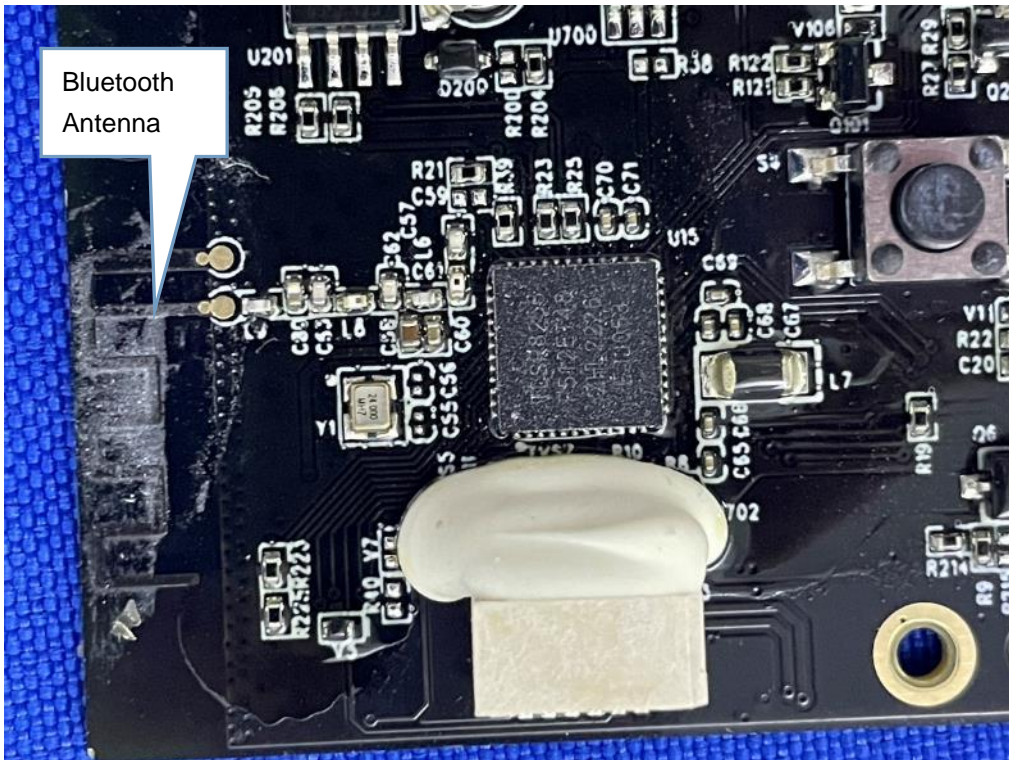
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Internal-6 of the sample



Bluetooth Antenna position

\*\*\*End of the report\*\*\*