FCC RF EXPOSURE REPORT

CERTIFICATION TEST REPORT

For

WIFI+BT Module

MODEL NUMBER: DCT1AR2701

FCC ID: 2AC23-DCT1A

REPORT NUMBER: 4790645253.2-1-RF-5

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Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	January 30, 2023	Initial Issue	

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS 4

2. TEST METHODOLOGY 5

3. FACILITIES AND ACCREDITATION 5

4. REQUIREMENT 6

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Hui Zhou Gaoshengda Technology Co.,LTD
Address:	No.2, Jin-da Road, Huinan High-tech Industrial Park, Huizhou, Guangdong, China

Manufacturer Information

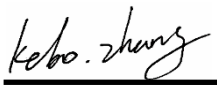
Company Name:	Hui Zhou Gaoshengda Technology Co.,LTD
Address:	No.2, Jin-da Road, Huinan High-tech Industrial Park, Huizhou, Guangdong, China

EUT Information

EUT Name:	WIFI+BT Module
Model:	DCT1AR2701
Brand:	GSD
Sample Received Date:	November 17,2022
Sample Status:	Normal
Sample ID:	5545378
Date of Tested:	November 17,2022 to January 30,2023

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47CFR§2.1091	PASS

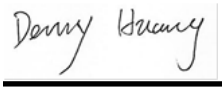
Prepared By:



Kebo Zhang

Senior Project Engineer

Checked By:



Denny Huang

Senior Project Engineer

Approved By:

Stephen Guo

Laboratory Manager

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 and KDB447498D01v06.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20019 and R-20004 Shielding Room B , the VCCI registration No. is C-20012 and T-20011

Note: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China.

4. REQUIREMENT

LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR 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.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

Limits for General Population/Uncontrolled Exposure

RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	$(180/f^2)$*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

CALCULATION METHOD

$S=PG/4\pi R^2$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

CALCULATED RESULTS

Worst Case					
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
BLE	8	1.72	0.00187	1.0	Complies

Worst Case					
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
BT	8	1.72	0.00187	1.0	Complies

Worst Case					
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 2.4G SISO	17	1.72	0.01482	1.0	Complies

Worst Case					
Mode	Max Tune Up Power	Antenna Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 5G SISO	16	2.57	0.01431	1.0	Complies

Worst Case					
Mode	Max Tune Up Power	Directional Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 2.4G MIMO	18	1.72	0.01865	1.0	Complies

Worst Case					
Mode	Max Tune Up Power	Directional Gain	Power Density	Power Density Limit	Test Result
	dBm	dBi	mW/cm2	mW/cm2	--
WIFI 5G MIMO	18	2.57	0.02268	1.0	Complies

Note:

1. The Power comes from report operation description.
2. BT and WIFI cannot support simultaneous emission.
3. The minimum separation distance of the device is greater than 20 cm, and 20cm separation distance was set for calculation.
4. Calculate by WORST-CASE mode.

END OF REPORT