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EMC TEST REPORT

FCC ID.....:	**2ACBCQ6**
Product name.....:	**Android touchscreen all in one pc**
Trademark .....:	BOCT
Model no......:	**A1、A2、A3、A4、A5、A6、A7、A8、A9、A10、B1、B2、B3、B4、B5、B6、B7、B8、B9、B10、K1、K2、K3、K4、K5、K6、K7、K8、K9、K10、G1、G2、G3、G4、G5、G6、G7、G8、G9、G10、Q1、Q2、Q3、Q4、Q5、Q6、Q7、Q8、Q9、Q10**
Test Standards .....:	**FCC Per 47 CFR 2.1093(d)**
Applicant .....:	**ShenZhen BOCT Technology Co., Ltd.**
Address of applicant.....:	5-6/F, 3rd Building, Hedong Hangcheng Industrial Area, Xixiang Street,Bao'an District,Shenzhen，Guangdong,China
Date of Receipt .....:	April 02, 2014
Date of Test Date.....:	April 15, 2014 to April 27, 2014
Data of issue. .....:	April 28, 2014
Test result.....:	Pass *

Testing Engineer : Mark Xiong
(Mart Xiong)

Reviewed By: : Tony Wang
(Tony Wang)

Approved Signatory : Walter Chen
(Walter Chen)

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1. TEST SUMMARY

The assessment were performed according to following standards:

According to §1.1307(b)(1), 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.

According to §RSS-102, Devices that have a radiating element normally operating at separation distances greater than 20 cm between the user and the device shall undergo an RF exposure evaluation. SAR evaluation may be performed in lieu of an RF exposure evaluation for devices operating below 6 GHz with a separation distance of greater than 20 cm between the user and the device.

According to §1.1310,KDB447498 and §2.1093 RF exposure is required.

OET Bulletin 65 Supplement C [June 2001]: Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields

447498 D01 General RF Exposure Guidance v05r01: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

Test Result:

FCC rules	Test Item	Result	Remark
FCC Per 47 CFR 2.1093(d)	RF exposure assessment	PASS	---

1.1 TEST FACILITY

1.1.1 Address of the test laboratory

Shenzhen GTI Technology Co., Ltd
1F, 2 Block, Jiaquan Building, Guanlan High-tech Park Baoan District, Shenzhen, Guangdong, China

1.1.2 Laboratory accreditation

The test facility is recognized, certified, or accredited by the following organizations:

IC Registration No.: 9783A

The 3m alternate test site of DTT Services Co.,Ltd.EMC Laboratory has been registered by Certification and Engineer Bureau of Industry Canada for the performance of with Registration NO.: 9783A on Aug, 2011.

FCC-Registration No.: 214666

DTT Services Co.,Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 214666, Sep 19, 2011

1.1.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
Atmospheric pressure:	950-1050mbar

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Name of EUT	**Android touchscreen all in one pc**
Model Number	**Q6**
Adding Model(s):	**A1、A2、A3、A4、A5、A6、A7、A8、A9、A10、B1、B2、B3、B4、B5、B6、B7、B8、B9、B10、K1、K2、K3、K4、K5、K6、K7、K8、K9、K10、G1、G2、G3、G4、G5、G6、G7、G8、G9、G10、Q1、Q2、Q3、Q4、Q5、Q7、Q8、Q9、Q10**
Model Difference	All the models are simillar except for model name,the model **Q6** is selected by test
Antenna Type	Internal
WLAN FCC Operation frequency	IEEE 802.11b:2412-2462MHz IEEE 802.119:2412-2462MHz IEEE 802.11n HT20:2412-2462MHz IEEE 802.11n HT40:2422-2452MHz
BT Operation frequency	2402MHz-2480MHz
WLAN FCC Modulation Type	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
BT Modulation Type	GFSK,8DPSK,π/4DQPSK(BT v2.1+EDR)
Hardware version	PA1336 VER:1.2
Software version	Q6_V200_20140321
Android version	Andriod 4.4.2
WLAN	Supported 802.11b/802.11g/802.11n
Bluetooth	Supported BT v2.1+EDR

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.2 DESCRIPTION OF TEST MODES

Bluetooth v2.1+EDR: 79 channels are provided to the EUT.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
00	**2402**	40	2442
01	2403	41	2443
02	2404	42	2444
03	2405	43	2445
04	2406	44	2446

05	2407	45	2447
06	2408	46	2448
07	2409	47	2449
08	2410	48	2450
09	2411	49	2451
10	2412	50	2452
11	2413	51	2453
12	2414	52	2454
13	2415	53	2455
14	2416	54	2456
15	2417	55	2457
16	2418	56	2458
17	2419	57	2459
18	2420	58	2460
19	2421	59	2461
20	2422	60	2462
21	2423	61	2463
22	2424	62	2464
23	2425	63	2465
24	2426	64	2466
25	2427	65	2467
26	2428	66	2468
27	2429	67	2469
28	2430	68	2470
29	2431	69	2471
30	2432	70	2472
31	2433	71	2473
32	2434	72	2474
33	2435	73	2475
34	2436	74	2476
35	2437	75	2477
36	2438	76	2478
37	2439	77	2479
38	2440	**78**	**2480**
39	**2441**		

For IEEE 802.11b/g/n20: **Channel1/6/11 were selected as Low/Middle/High channel.**
For IEEE 802.11b/g/n20: **Channel3/6/9 were selected as Low/Middle/High channel**.

3 METHOD OF MEASUREMENT

3.1 Applicable Standard

According to §1.1307(b)(1), 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.

According to §RSS-102, Devices that have a radiating element normally operating at separation distances greater than 20 cm between the user and the device shall undergo an RF exposure evaluation. SAR evaluation may be performed in lieu of an RF exposure evaluation for devices operating below 6 GHz with a separation distance of greater than 20 cm between the user and the device.

According to §1.1310,KDB447498 and §2.1093 RF exposure is required.

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447498 D01 General RF Exposure Guidance v05r01: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

3.2 Limit

According to KDB447498 D01 General RF Exposure Guidance v05r01Section 4.3.1 Standalone SAR test exclusion considerations:" Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.22 The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.23 "
1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[24] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

According to KDB447498 D01 General RF Exposure Guidance v05r01 Appendix A:SAR Test Exclusion Thresholds for 100 MHz-6 GHz and ≤ 50 mm, Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

3.3 RF Exposure

TEST RESULTS

From the EUT RF average output power and power drift from Tune-up Procedure provide by manufacturer as following states:

For IEEE 802.11b/g/n

	Test Frequency (MHz)	Output Power (dBm)	Output Power including Power Drift (dBm)	Output Power including Power Drift (mW)	Evaluated SAR test exclusion	SAR test exclusion thresholds	Verdict
802.11b	2412	9.13	9.50	8.91	2.78	3.00	PASS
	2437	8.92	9.50	8.91	2.78	3.00	PASS
	2462	8.87	9.50	8.91	2.78	3.00	PASS
802.11g	2412	7.31	8.00	6.31	1.97	3.00	PASS
	2437	7.32	8.00	6.31	1.97	3.00	PASS
	2462	7.40	8.00	6.31	1.97	3.00	PASS
802.11n (20MHz)	2412	7.11	8.00	6.31	1.97	3.00	PASS
	2437	7.16	8.00	6.31	1.97	3.00	PASS
	2462	7.20	8.00	6.31	1.97	3.00	PASS
802.11n (40MHz)	2422	6.27	7.00	5.01	1.57	3.00	PASS
	2437	6.22	7.00	5.01	1.57	3.00	PASS
	2452	6.21	7.00	5.01	1.57	3.00	PASS

For Bluetooth v2.1+EDR:

	Test Frequency (MHz)	Output Power (dBm)	Output Power including Power Drift (dBm)	Output Power including Power Drift (mW)	Evaluated SAR test exclusion	SAR test exclusion thresholds	Verdict
GFSK	2402	**8.55**	9.00	7.94	2.48	3.00	PASS
	2441	**8.90**	9.00	7.94	2.48	3.00	PASS
	2480	**8.90**	9.00	7.94	2.48	3.00	PASS
8DPSK	2402	**7.95**	9.00	7.94	2.48	3.00	PASS
	2441	**8.29**	9.00	7.94	2.48	3.00	PASS
	2480	**8.21**	9.00	7.94	2.48	3.00	PASS
π/4DQPSK	2402	**7.85**	9.00	7.94	2.48	3.00	PASS
	2441	**8.19**	9.00	7.94	2.48	3.00	PASS
	2480	**8.28**	9.00	7.94	2.48	3.00	PASS

Simultaneous SAR reqirement

As WIFI and BT share the same antenna,no Simultaneous SAR evaluation is needed.

4 CONCLUSION

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v05r01.

.....End of Report.....