



FCC TEST REPORT

FCC ID: 2BFJT-CORE5

Product	:	MINI PC
Model Name	:	CORE 5,AERO 5,AERO 5pro,AERO 5plus,CORE 5, CORE 5pro,CORE 5plus
Brand	:	N/A
Report No.	:	PTC24022004702E-FC05
Prepared for		
Shenzhen Dongfang Box Core Information Technology Co., Ltd		
3rd Floor, Factory 01, New World Industrial City, Wanke City Community, Bantian Street, Longgang District, Shenzhen		
Prepared by		
Precise Testing & Certification Co., Ltd.		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.		



TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Dongfang Box Core Information Technology Co., Ltd
Address : 3rd Floor, Factory 01, New World Industrial City, Wanke City Community, Bantian Street, Longgang District, Shenzhen
Manufacture's name : Shenzhen Dongfang Box Core Information Technology Co., Ltd
Address : 3rd Floor, Factory 01, New World Industrial City, Wanke City Community, Bantian Street, Longgang District, Shenzhen
Product name : MINI PC
Model name : CORE 5,AERO 5,AERO 5pro,AERO 5plus,CORE 5,CORE 5pro,CORE 5plus
Test procedure : FCC CFR47 Part 1.1307(b)(1)
Test Date : Feb. 26, 2024 to Apr. 02, 2024
Date of Issue : Apr. 02, 2024
Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink that reads 'Jack Zhou'.

Jack Zhou / Engineer

Technical Manager:

A handwritten signature in black ink that reads 'Simon Pu'.

Simon Pu / Manager



Contents

	Page
2 TEST SUMMARY	4
3 GENERAL INFORMATION	5
3.1 GENERAL DESCRIPTION OF E.U.T.....	5
4 RF EXPOSURE	6
4.1 REQUIREMENTS.....	6
4.2 THE PROCEDURES / LIMIT	6
4.3 MPE CALCULATION METHOD	7
4.4 TEST RESULT	7



2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	15.247 (i)	PASS
Remark:		
N/A: Not Applicable		



3 General Information

3.1 General Description of E.U.T.

Product Name	:	MINI PC
Model Name	:	CORE 5
Additional model	:	AERO 5,AERO 5pro,AERO 5plus,CORE 5,CORE 5pro,CORE 5plus
Specification	:	Bluetooth BDR+EDR Bluetooth BLE 802.11b/g/n HT20/HT40 802.11a/n HT20/HT40/ac20/ac40/ac80
Operation Frequency	:	2400-2480MHz for BT 2412-2462MHz for 802.11b/g/ n(HT20) 2422-2452MHz for 802.11 n(HT40) 5G Wifi: 5180-5240 MHz 5.8G Wifi:5745MHz~5825MHz
Number of Channel	:	79 channels for BDR+EDR 40 channels For DTS 11 channels for 802.11b/g/ n(HT20) 7 channels for 802.11n(HT40) 4 channels for 802.11a/n20/ac20 5180-5240 MHz 5 channels for 802.11a/n20/ac20 5745MHz~5825MHz 2 channels for 802.11n40/ac40 5180-5240 MHz 2 channels for 802.11n40/ac40 5745MHz~5825MHz 1 channels for 802.11 ac80
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n/a/ac;
Antenna installation	:	FPC antenna
Antenna Gain	:	BT/2.4GWiFi:0.9 dBi 5.2G WiFi: 2.71dBi 5.8G WiFi: 3.07 dBi
Power supply	:	Adapter: CW1203000CH Input: AC 100-240V~50/60Hz 1.2A MAX Output: DC 12V 3000mA
Hardware Version	:	N/A
Software Version	:	N/A



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

4.1 Requirements

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 levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2} \theta\phi$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Test Mode	Frequency(MHz)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result
BR+EDR	2441	1.23	11.68	11.68±1	18.535316	0.004537	1	Pass
BLE_1M	2480	1.23	7.15	7.15±1	6.531306	0.001599	1	Pass
802.11g	2437	1.23	23.35	23.35±1	272.270131	0.066639	1	Pass
11N40SISO	5230	1.87	19.02	19.02±1	100.461579	0.037302	1	Pass
11AC20SISO	5825	2.03	16.60	16.60±1	57.543994	0.023213	1	Pass

*******THE END REPORT*******