



# FCC TEST REPORT FCC ID: 2BFJT-CORE2PRO

Product	:	MINI PC
Model Name	:	CORE 2 pro,AERO 2,AERO 2pro,AERO 2plus,CORE 2,CORE 2pro,CORE 2plus
Brand	:	N/A
Report No.	:	PTC24022004701E-FC05

## **Prepared for**

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## **Prepared by**

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#### **TEST RESULT CERTIFICATION**

Shenzhen Dongfang Box Core Information Technology Co., Ltd. Applicant's name

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Community, Bantian Street, Longgang District, Shenzhen

Shenzhen Dongfang Box Core Information Technology Co., Ltd Manufacture's name

3rd Floor, Factory 01, New World Industrial City, Wanke City Address

Community, Bantian Street, Longgang District, Shenzhen

MINI PC

Product name

Model name

CORE 2 pro,AERO 2,AERO 2pro,AERO 2plus,CORE 2,CORE

2pro,CORE 2plus

Test procedure FCC CFR47 Part 1.1307(b)(1)

Test Date Feb. 26, 2024 to Mar. 29, 2024

Date of Issue Mar. 29, 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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# 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 2 pro
Additional model	: AERO 2,AERO 2pro,AERO 2plus,CORE 2,CORE 2pro,CORE 2plus
Specification	BT 4.2 BDR+EDR+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 5180-5250 MHz 2 channels for 802.11n40/ac40 5745MHz~5825MHz 1 channels for 802.11 ac80
Type of Modulation	GFSK, Π/4-DQPSK,8DPSK For DSS GFSK, For DTS : DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11n/a/ac
Antenna installation	: FPC antenna
Antenna Gain	ANT1:2.4G:-0.71 dBi;5.2G:2.5 dBi; 5.8G:1.88 dBi ANT2: 2.4G:2.32 dBi;5.2G:-1.11 dBi; 5.8G:1.83 dBi
Rated Power Supply	: Input:100-240VAC 0.65A 24W
Test Power Supply	Adapter:CQ24-120200-DU Input: AC 100-240V~50/60Hz 1.0A Output: DC 12V===2.0A
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	27.10	0.010	F/1500	30
300-1300			171300	30
1500-100,000			1.0	30

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



### 4.3 MPE Calculation Method

 $E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$  Power Density: Pd (W/m²) =  $\frac{E^2}{377}$ 

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

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

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	Frequenc y(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 (Ant1)	2402	0.85	6.88	6.88±1	6.137620	0.001037	1	Pass
BLE_1M (Ant1)	2402	0.85	5.32	5.32±1	4.285485	0.000724	1	Pass
802.11g (Ant2)	2437	1.71	20.34	20.34±1	136.144468	0.046209	1	Pass
11N40SISO (Ant2)	5230	0.77	16.57	16.57±1	57.147864	0.008805	1	Pass
11N40SISO (Ant2)	5795	2.03	14.51	14.51±1	35.563132	0.010783	1	Pass

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