



MPE REPORT

According to
CFR47 §1.1307(b)(1)& §2.1091& RSS-102 issue 5

Applicant : Mitac Digital Technology Corporation
Address : No. 200, Wen Hwa 2nd Rd., Kuei Shan Dist. 33383 Taoyuan City, TAIWAN
Manufacturer : Mitac Computer (Kunshan) Co., Ltd.
Address : No. 269, 2nd Avenue, District A, Comprehensive Free Trade Zone, 215300
Kunshan, Jiangsu, PEOPLES REPUBLIC OF CHINA
Equipment : Tablet
Model No. : N642
FCC ID : P4Q-N642-M1000
IC : 2420C-N642-M1000

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of *Cerpass Technology (Suzhou) Co., Ltd.*, the test report shall not be reproduced except in full.
- The test report must not be used by the clients to claim product certification approval by any agency of the Government.

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.10 – 2013&FCC Part 1.1307(b)(1)&FCC Part 2.1091&RSS-Gen issue 5&RSS-102 issue 5** and the energy emitted by this equipment was **passed**.

Approved by:

Miro Chueh
EMC/RF Manager

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory



TAF LAB Code: 1439

Cerpass Technology (SuZhou) Co., Ltd.



A2LA LAB Code: 4981.01



MAXIMUM PERMISSIBLE EXPOSURE (MPE)

LIMIT

According to subpart 15.247 (i) , subpart 1.1307 (b)(1) and subpart 2.1091, systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (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

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



CALCULATED FORMULARY

Calculation

Predication of MPE limit at a given distance

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

S = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

**TEST RESULTS**

Modulation Mode	Frequency band (MHz)	Max. Conducted output power(dBm)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm ²)	Limit (mW/cm ²)	Result
DH5	2400-2483.5	0.52	4.35	20	0.0010	1	Pass
2DH5	2400-2483.5	0.39	4.35	20	0.0009	1	Pass
3DH5	2400-2483.5	1.58	4.35	20	0.0012	1	Pass
BLE	2400-2483.5	0.22	4.35	20	0.0009	1	Pass

Modulation Mode	Frequency band (MHz)	Max. Conducted output power(dBm)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm ²)	Limit (mW/cm ²)	Result
802.11b	2400-2483.5	18.86	4.35	20	0.07	1	Pass
802.11g	2400-2483.5	25.28	4.35	20	0.29	1	Pass
802.11n HT20	2400-2483.5	24.85	4.35	20	0.26	1	Pass
802.11n HT40	2400-2483.5	25.09	4.35	20	0.28	1	Pass

Modulation Mode	Frequency band (MHz)	Max. Conducted output power(dBm)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm ²)	Limit (mW/cm ²)	Result
802.11a	5150-5350	18.50	2.91	20	0.04	1	Pass
	5470-5725	16.56	4.33	20	0.04	1	Pass
	5725-5850	14.25	5.41	20	0.03	1	Pass
802.11n HT20	5150-5350	18.43	2.91	20	0.04	1	Pass
	5470-5725	16.76	4.33	20	0.04	1	Pass
	5725-5850	14.34	5.41	20	0.03	1	Pass
802.11n HT40	5150-5350	18.01	2.91	20	0.04	1	Pass
	5470-5725	16.78	4.33	20	0.04	1	Pass
	5725-5850	13.43	5.41	20	0.02	1	Pass

***** END OF REPORT *****