FCC Test Report

Client Information:

Applicant: David Steele Enterprises Inc.

Applicant add.: 22 Palazzo Newport Beach,CA 92660 USA

EUT Information:

EUT Name: iBreath

Model No.: IB-1000

Brand Name: N/A

Prepared By:

Asia Institute Technology (Dongguan) Limited
Add. : No.6 Binhe Road, Tianxin Village, Huangjiang,
Dongguan, Guangdong, China.
Date of Receipt: Otc. 24, 2008 Date of Test: Otc.24. ~ Nov.11, 2008
Date of Issue: Nov. 12, 2008 Test Result: **Pass**

Test procedure used: FCC Part 15 Subpart C:2008

This device described above has been tested by Asia Institute Technology (Dongguan) Limited, 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.
*This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. government.

NVLAP Lab. Code: 200800-0

Reviewed by: _____ **Approved by:** _____

1 Contents

2 Test Summary

2.1 Compliance with FCC Part 15 subpart C

Test	Test Requirement	Stanadard Paragraph	Result
Conduction Emissions 150kHz to 30MHz	FCC Part 15 C:2008	Section 15.207	**N/A**
Radiated Emissions 30MHz to 1GHz	FCC Part 15 C:2008	Section 15.239	**PASS**
Occupied Bandwidth	FCC Part 15 C:2008	Section 15.215	**PASS**

2.2 Measurement Uncertainty

All measurements involve certain levels of uncertainties, The following measurements uncertainty Level have estimated based on ANSI C63.4:2003, the maximum value of the uncertainty as below

No.	Item	Uncertainty
1	Conducted Emission Test	±1.38dB
2	Radiated Emission Test	±3.57dB

3 Test Facility

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

.NVLAP- Lab Code: 200800-0

Asia Institute Technology (Dongguan) Limited has been accredited by NVLAP on April 29, 2008.

.FCC- Registration No: 248337

The 3m Semi-Anechoic Chamber, 3m/10m Open Area Test Site and Shielding Room of Asia Institute Technology (Dong guan) Limited have been registered by Federal Communications Commission (FCC) on Dec.07, 2006.

.Industry Canada(IC)-Registration No: IC6819A-1 & IC6819A-2

The 3m Semi-Anechoic Chamber and 3m/10m Open Area Test Site of Asia Institute Technology (Dongguan) Limited have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing on Nov.07, 2006.

.VCCI- Registration No: R-2482 & C-2730

The 3m/10m Open Area Test Site and Shielding Room of Asia Institute Technology (Dongguan) Limited have been registered by Voluntary Control Council for Interference on Jan.24, 2007.

.TUV Rhineland

Asia Institute Technology (Dongguan) Limited has been assessed on Jan.16, 2007 that it can carry out EMC tests by order and under supervision of TUV Rhineland.

.ITS- Registration No: TMPSHA031

Asia Institute Technology (Dongguan) Limited has been assessed and included in Intertek Shanghai TMP Program regarding Laboratory facilities and test equipment on Nov.10, 2006.

3.1 Deviation from standard

None

3.2 Abnormalities from standard conditions

None

4 General Information

4.1 General Description of EUT

Manufacturer:	XIAMEN MILESTONE ELECTRONICS CO.,LTD
Manufacturer Address:	North building2#,Chuangye Garden,Xiamen Torch Development Zone of High& New Technology 361009,Xiamen,China
EUT Name:	iBreath
Model No:	IB-1000
Operation frequency:	88.1 MHz to 107.9MHz with 100kHz channel space
Channel Number:	199
Modulation Technology:	FM
AntennaType:	a white wire with an extended wire lay on PCB
Brand Name:	N/A
Serial No:	N/A
Power Supply Range:	N/A
Power Supply:	DC 3.3V
Power Cord:	N/A
Signal Cable:	N/A

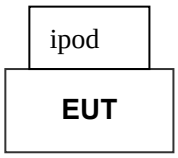
Key component's information:

No.	component name	Brand Name	Model No:	Serial No:
N/A	N/A	N/A	N/A	N/A

4.2 Description of Test conditions

(1) EUT was tested in normal configuration (Please See following Block diagram)

1. Block diagram of EUT configuration



(2) E.U.T. test conditions:

15.31(e) :For intentional radiators, measurements of the variation of the input power or the adiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% ofthe nominal rated supply voltage. For battery operated equipment, theequipment tests shall be performed using a new battery.

(3) Test frequencies:

According to the 15.31(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and. if required. reported for each band in which the device can be operated with the device operating at the number of fequencies in each band specified in the following table:

Frequency range over which device operates	Number of frequencies	Location in the range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near top and 1 near bottom
More than 10 MHz	3	1 near top, 1 near middle and 1 near bottom

The EUT have 199 channels between the 88.1MHz & 107.9MHz with 100KHz channel space
Test EUT in transmitting mode with:
Lowest channel: 88.1MHz;Middle channel: 98.1MHz;Highest channel:107.9MHz.

(4) Frequency range of radiated measurements:

According to the 15.35,The test range will be upto the tenth harmonic of the highest fundamental frequency

4.3 Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	signal cable
1	iPod	Apple Inc.	A1285	YM838NYL3QS	N/A	N/A

5 Equipments List for All Test Items

No	Test Equipment	Manufacturer	Model No	Serial No	Cal. Date	Cal. Due Date
1	Spectrum Analyzer	ADVANTEST	R3182	150900201	2007.12.11	2008.12.10
2	Low Noise Pre Amplifier	Tsj	MLA-10K01-B01-27	1205323	2008.09.11	2009.03.10
3	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2008.09.11	2009.03.10
4	MXG analog signal generator	Agilent	N5181A	MY46240859	2008.01.29	2009.01.28
5	Power Meter	R&S	NRVS	101336	2008.04.9	2009.04.08
6	50Ω Fixed Attenuator	TME	UFA-01	No.1	2008.07.13	2009.07.12
7	TRILOG Super Broadband test Antenna	SCHWARZBECK	VULB9160	9160-3206	2008.07.04	2009.07.03
8	RF Cable	GUOHUA	SFX-50-2	No.8	2008.08.13	2009.08.12
9	RF Cable	GUOHUA	SFX-50-2	No.1	2008.08.13	2009.08.12
10	constant temperature and humidity machine	TOSSTAR	TOS-100	20071101	2008.04.09	2009.04.08

6 Test Result

6.1 Conduction Emissions Measurement

6.1.1 limit

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

Note:Decreases with the logarithm of the frequency.

6.1.2 Test result

Cause the EUT only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Measurements to demonstrate compliance with the conducted limits are not required for devices

6.2 Radiated Emissions Measurement

6.2.1 Limit

Fcc part15.239 (b) The field strength of any emissions within the permitted 200 kHz band shall not exceed 250 microvolts/meter at 3 meters. The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in Section 15.35 for limiting peak emissions apply.

Frequency of Emission (MHz)	Field Strength of fundamental (dBμV/m)	
88-108	Peak	Average
	68	48

Fcc part15.239 (c) The field strength of any emissions radiated on any frequency outside of the specified 200kHz band shall not exceed the general radiated emission limits in Section 15.209.

Frequency of Emission (MHz)	Field Strength		Measurement Distance (meters)
	μV/m	dBμV/m	
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

6.2.2 Test procedure

EUT was placed upon a wooden test table which was placed on the turn table 0.8m above the horizontal metal ground plane, and operating in the mode as mentioned above. A receiving antenna was placed 3m away from the EUT. During testing, turn around the turn table and move the antenna from 1m to 4m to find the maximum field-strength reading. All peripherals were placed at a distance of 10cm between each other. Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

6.2.3 Test Result

Test Data: 2008-10-26

Frenqucy Range:30MHz to 1GHz

Measurement Distance: 3 m

Operating Environment: 28.3°C, 58% RH ,102 Kpa

Channel:the lowest channel,88.1MHz

(a) Antenna polarization: Horizontal

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
88.100	11.057	13.000	24.057	-23.943	48.000	AVERAGE
88.100	11.057	16.978	28.048	-39.949	68.000	PEAK
230.790	14.660	6.335	20.995	-25.005	46.000	QUASIPEAK
263.770	15.920	2.896	18.816	-27.184	46.000	QUASIPEAK
323.910	17.820	4.094	21.914	-24.086	46.000	QUASIPEAK
***705.120**	**26.590**	**11.438**	**38.028**	**-7.972**	**46.000**	**QUASIPEAK**
952.470	29.960	3.783	33.743	-12.257	46.000	QUASIPEAK

(b) Antenna polarization: vertical

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
36.790	13.750	4.166	17.916	-22.084	40.000	QUASIPEAK
88.100	11.057	8.200	19.257	-28.743	48.000	AVERAGE
88.100	11.057	8.587	19.657	-28.330	68.000	PEAK
255.040	15.630	5.064	20.694	-25.306	46.000	QUASIPEAK
***704.150**	**26.580**	**7.214**	**33.794**	**-12.206**	**46.000**	**QUASIPEAK**
940.830	30.070	2.324	32.394	-13.606	46.000	QUASIPEAK
952.470	29.960	2.627	32.587	-13.413	46.000	QUASIPEAK

Note: '*' means the worst case

Measurement Level = Reading Level + Factor

Factor=Ant Factor + Cable Loss

Test Data: 2008-10-26
Frenqucy Range:30MHz to 1GHz
Measurement Distance: 3 m
Operating Environment: 28.3°C, 58% RH ,102 Kpa
Channel: the middle channel,98.1MHz
(a) Antenna polarization: Horizontal

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
70.740	12.620	4.535	17.155	-22.845	40.000	QUASIPEAK
98.100	12.100	14.707	26.807	-21.216	68.000	PEAK
98.100	12.123	11.600	23.723	-24.277	48.000	AVERAGE
182.290	15.140	3.825	18.965	-24.535	43.500	QUASIPEAK
293.840	16.940	2.769	19.709	-26.291	46.000	QUASIPEAK
363.680	18.820	1.417	20.237	-25.763	46.000	QUASIPEAK
783.690	**28.280**	**12.103**	**40.383**	**-5.617**	**46.000**	**QUASIPEAK**

(b) Antenna polarization: vertical

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
36.790	13.750	4.033	17.783	-22.217	40.000	QUASIPEAK
98.100	12.123	8.949	21.049	-26.974	68.000	PEAK
98.100	12.123	8.300	20.423	-27.577	48.000	AVERAGE
251.160	15.510	4.024	19.534	-26.466	46.000	QUASIPEAK
286.080	16.740	5.345	22.085	-23.915	46.000	QUASIPEAK
363.680	18.820	4.135	22.955	-23.045	46.000	QUASIPEAK
***783.690**	**28.280**	**6.274**	**34.554**	**-11.446**	**46.000**	**QUASIPEAK**

Note: '*' means the worst case
Measurement Level = Reading Level + Factor
Factor=Ant Factor + Cable Loss

Test Data: 2008-10-26
Frenqucy Range:30MHz to 1GHz
Measurement Distance: 3 m
Operating Environment: 28.3°C, 58% RH ,102 Kpa
Channel: the highest channel,107.9MHz
(a) Antenna polarization: Horizontal

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
107.900	13.098	8.915	21.985	-26.043	68.000	PEAK
107.900	13.098	8.600	21.698	-26.302	48.000	AVERAGE
198.780	13.570	1.360	14.930	-28.570	43.500	QUASIPEAK
227.880	14.490	6.042	20.532	-25.468	46.000	QUASIPEAK
322.940	17.780	1.706	19.486	-26.514	46.000	QUASIPEAK
483.960	22.020	4.939	26.959	-19.041	46.000	QUASIPEAK
***863.230**	**29.100**	**9.234**	**38.334**	**-7.666**	**46.000**	**QUASIPEAK**

(b) Antenna polarization: vertical

Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
36.790	13.750	4.986	18.736	-21.264	40.000	QUASIPEAK
107.900	13.098	8.040	21.110	-26.918	68.000	PEAK
107.900	13.098	8.000	21.098	-26.902	48.000	AVERAGE
253.100	15.570	5.047	20.617	-25.383	46.000	QUASIPEAK
263.770	15.920	4.476	20.396	-25.604	46.000	QUASIPEAK
274.440	16.350	3.570	19.920	-26.080	46.000	QUASIPEAK
***863.230**	**29.100**	**4.242**	**33.342**	**-12.658**	**46.000**	**QUASIPEAK**

Note: '*' means the worst case
Measurement Level = Reading Level + Factor
Factor=Ant Factor + Cable Loss

6.3 Occupied Bandwidth

6.3.1 Limit

(a) Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the frequency range of 88-108 MHz.

6.3.2 Test procedure:

(1)connect the EUT's anterna port to the Spectrum Analyzer
(2)Play a typical song as the audio input source,
(3)Set the RBW=10KHz, VBW=30KHz,Sweep time= Auto for the Spectrum Analyzer setting.
(4)Record and report the plot as below:

6.3.3 Test Result

channel	Channel frenqucy (MHz)	20dB bandwidth (KHz)	Limit (KHz)	Conclusion
1	88.1	136	200	Pass
101	98.1	112	200	Pass
199	107.9	159	200	Pass

(1) The Lowest Channel:88.1MHz

Low Frenqucy is 88.0405 MHz High Frenqucy is 88.1765 MHz
The 20dB bandwidth is 136kHz

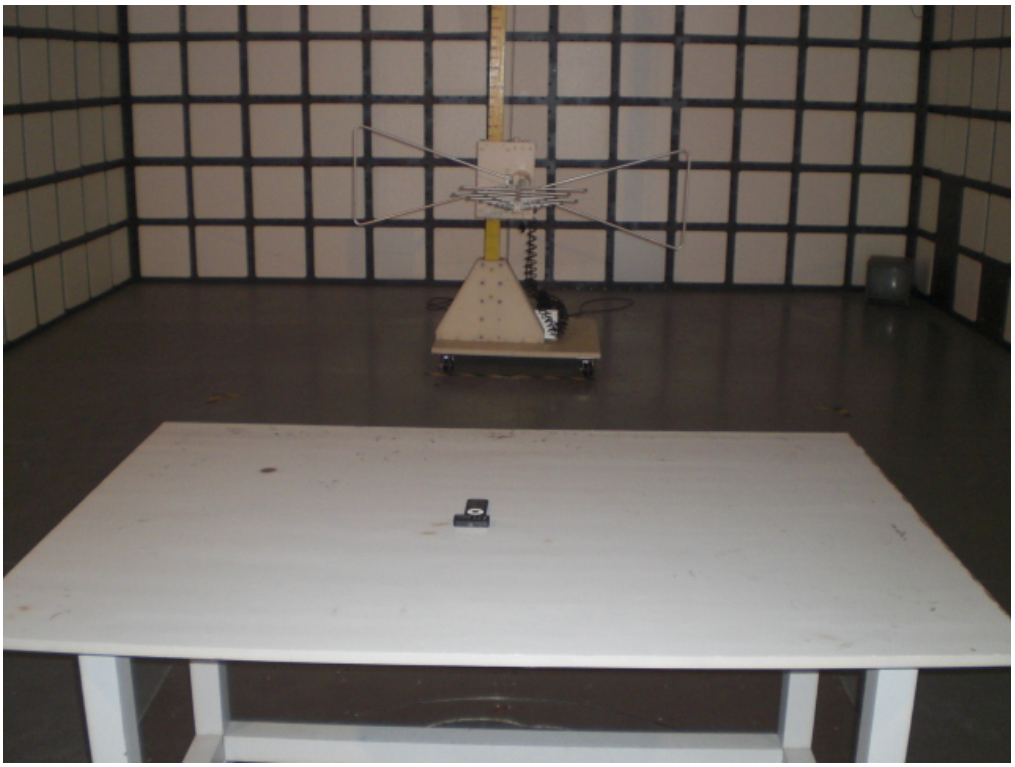
(2) The Middle Channel:98.1MHz

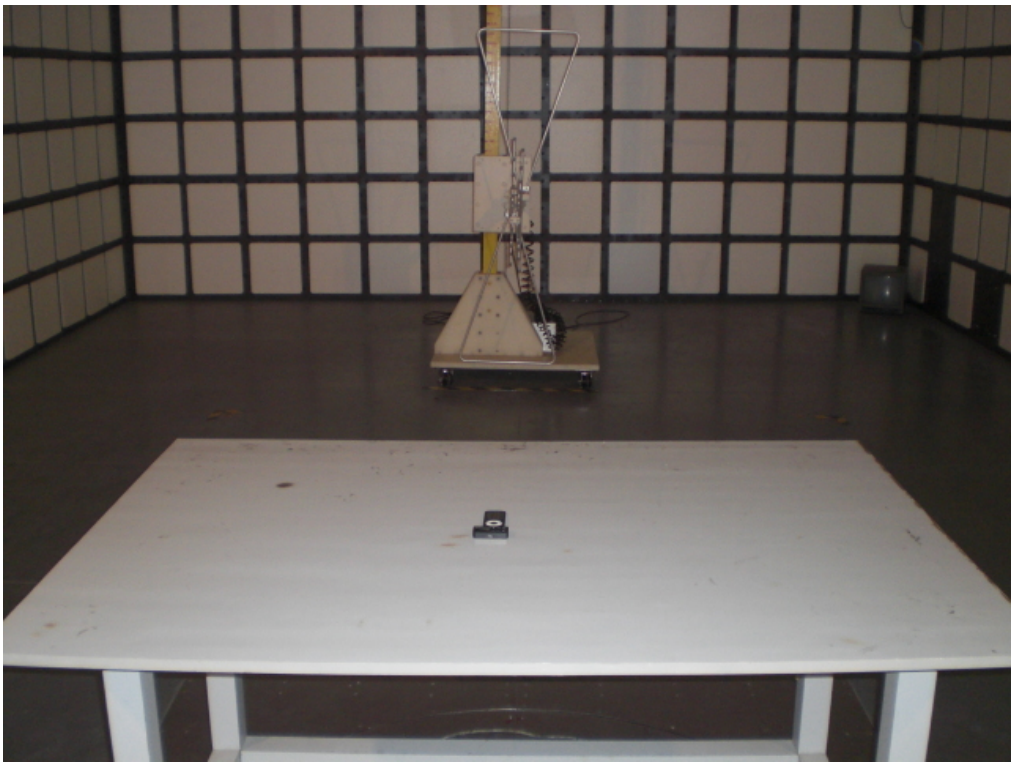
Low Frenqucy is 98.056MHz High Frenqucy is 98.168 MHz
The 20dB bandwidth is 112kHz

(3) The highest Channel:107.9MHz

Low Frenqucy is 107.83 MHz High Frenqucy is 107.989 MHz
The 20dB bandwidth is 159kHz

6.4 Test Setup photograph





7 APPENDIX-Photographs of EUT Constructional Details

Photo 1

Photo 2

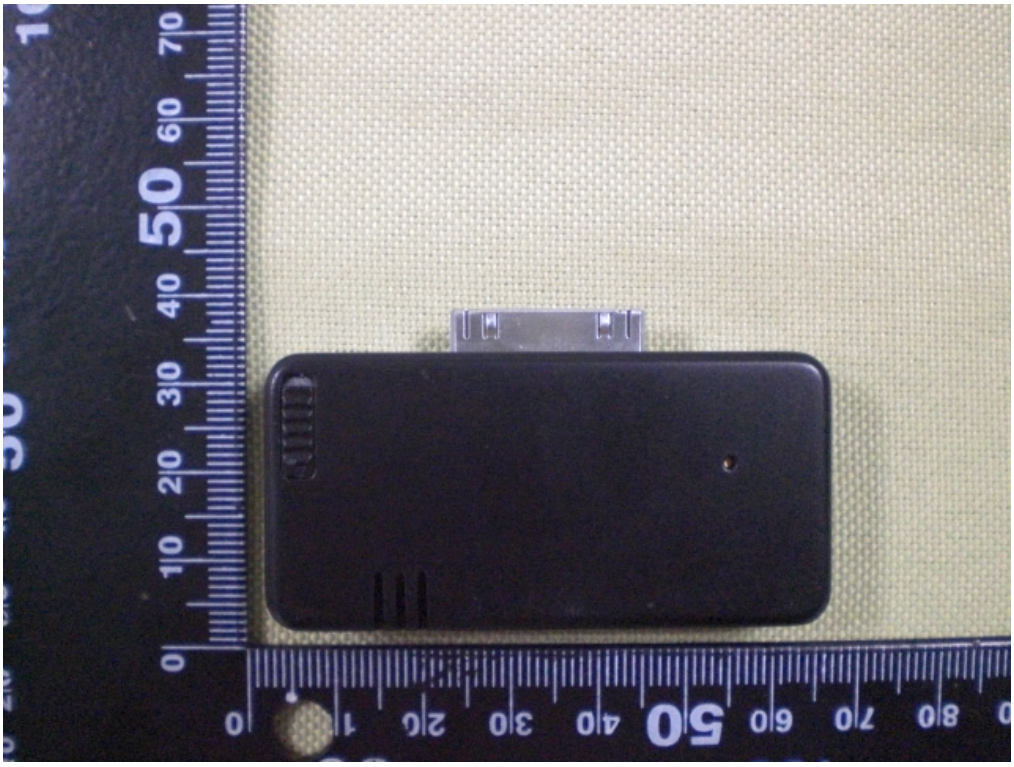


Photo 3

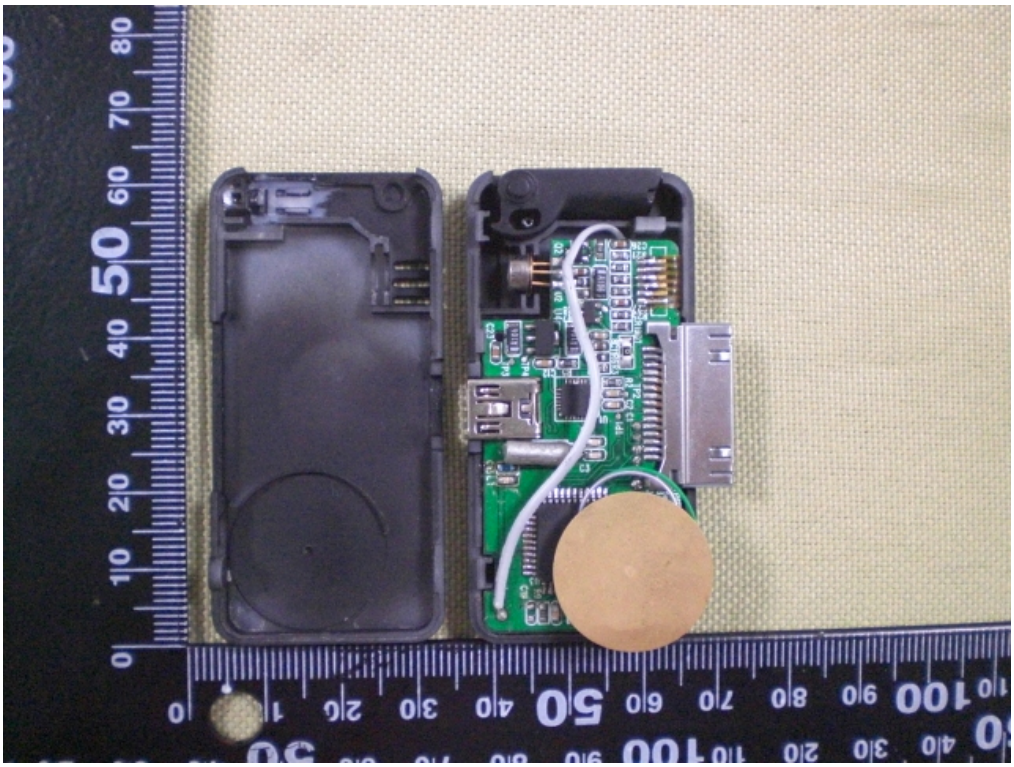


Photo 4

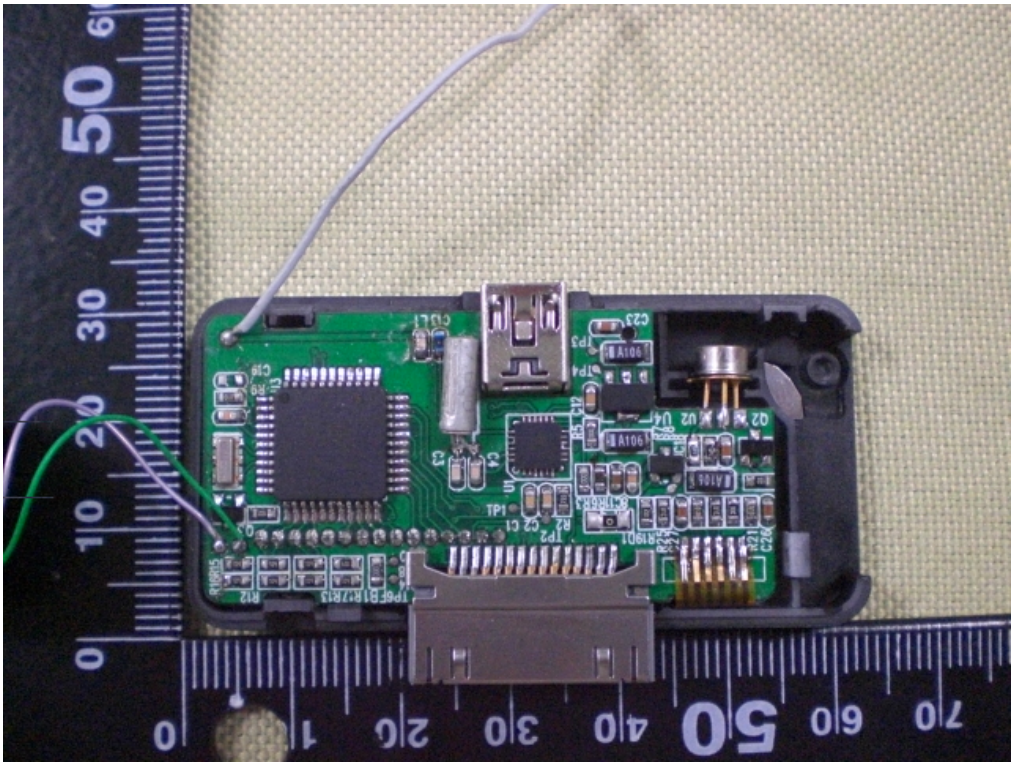


Photo 5