

FCC REPORT

Applicant: FLYSKY RC MODEL TECHNOLOGY CO., LTD

Address of Applicant: West building3, Huangjianyuan Ind, Park QIAOLI North Gate
Changping Town Dongguan CN.

Equipment Under Test (EUT)

Product Name: 3CH Gun Radio

Model No.: FS-GT3C

FCC ID: N4ZFLYSKYGT3C

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.249:2010

Date of sample receipt: June 21, 2012

Date of Test: June 21-25, 2012

Date of report issued: June 25, 2012

Test Result : PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Robinson Lo
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the GTS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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2 Version

Version No.	Date	Description
00	June 25, 2012	Original

Prepared By:

Oscar. Li

Date:

June 25, 2012

Project Engineer

Check By:

Hans. Hu

Date:

June 25, 2012

Reviewer

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
AC Power Line Conducted Emission	15.207	Pass
Field strength of the fundamental signal	15.249 (a)	Pass
Spurious emissions	15.249 (a) (d)/15.209	Pass
Band edge	15.249 (d)/15.205	Pass
20dB Occupied Bandwidth	15.215 (c)	Pass

Pass: The EUT complies with the essential requirements in the standard.

N/A: not applicable.

5 General Information

5.1 Client Information

Applicant:	FLYSKY RC MODEL TECHNOLOGY CO., LTD
Address of Applicant:	West building3, Huangjianyuan Ind, Park QIAOLI North Gate Changping Town Dongguan CN.
Manufacturer:	FLYSKY RC MODEL TECHNOLOGY CO., LTD
Address of Manufacturer:	West building3, Huangjianyuan Ind, Park QIAOLI North Gate Changping Town Dongguan CN.
Factory:	FLYSKY RC MODEL TECHNOLOGY CO., LTD
Address of factory :	West building3, Huangjianyuan Ind, Park QIAOLI North Gate Changping Town Dongguan CN.

5.2 General Description of E.U.T.

Product Name:	3CH Gun Radio
Model No.:	FS-GT3C
Operation Frequency:	2405.5MHz~2475MHz
Channel numbers:	16
Modulation technology:	GFSK
Antenna Type:	Integral
Antenna gain:	2dBi
Power supply:	DC 3.7V Li-ion Battery

5.3 Test mode

Transmitting mode	Keep transmitting mode.
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Per-test mode.

We have verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	108.35	111.01	109.71

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”:
Y axis (see the test setup photo)

5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC approval
IBM	Notebook	T42	GTS209	DoC
IBM	AC Adapter	92P1024	N/A	VoC

5.5 Test Facility

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

- **FCC —Registration No.: 600491**

Global United Technology Services Co., Ltd., Shenzhen 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 600491, July 20, 2010.

- **Industry Canada (IC)**

The 3m Semi-anechoic chamber of Global United Technology Services Co., Ltd. Has been

Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 9079A-1.

5.6 Test Location

All tests were performed at:

Global United Technology Services Co., Ltd.

Address: 2nd Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China

Tel: 0755-27798480

Fax: 0755-27798960

5.7 Other Information Requested by the Customer

None.

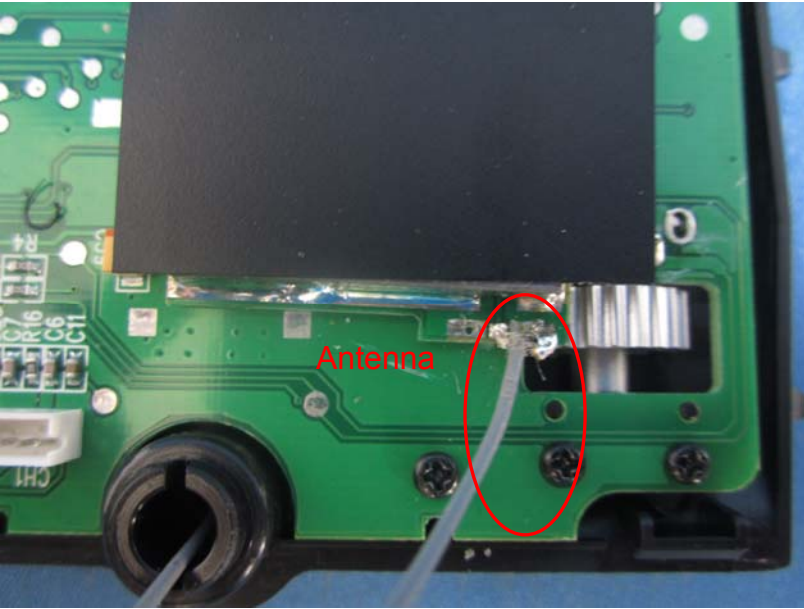
5.8 Test Instruments list

Radiated Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	3m Semi- Anechoic Chamber	ZhongYu Electron	9.2(L)*6.2(W)* 6.4(H)	GTS250	Mar. 30 2011	Mar. 29 2013
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	GTS251	N/A	N/A
3	EMI Test Receiver	Rohde & Schwarz	ESU26	GTS203	Jul. 04 2011	Jul. 03 2012
4	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	GTS214	Feb. 25 2012	Feb. 24 2013
5	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	9120D-829	GTS208	June 30 2011	June 29 2012
6	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2011	Mar. 29 2013
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A
8	Coaxial Cable	GTS	N/A	GTS213	Mar. 31 2012	Mar. 30 2013
9	Coaxial Cable	GTS	N/A	GTS211	Mar. 31 2012	Mar. 30 2013
10	Coaxial cable	GTS	N/A	GTS210	Mar. 31 2012	Mar. 30 2013
11	Coaxial Cable	GTS	N/A	GTS212	Mar. 31 2012	Mar. 30 2013
12	Amplifier(100kHz-3GHz)	HP	8347A	GTS204	Jul. 04 2011	Jul. 03 2012
13	Amplifier(2GHz-20GHz)	HP	8349B	GTS206	Jul. 04 2011	Jul. 03 2012
14	Amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	June 30 2011	June 29 2012
15	Band filter	Amindeon	82346	GTS219	Mar. 31 2012	Mar. 30 2013

Conducted Emission:						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
1	Shielding Room	ZhongYu Electron	7.0(L)x3.0(W)x3.0(H)	GTS264	Sep. 08 2011	Sep. 07 2013
2	EMI Test Receiver	Rohde & Schwarz	ESCS30	GTS223	Jul. 04 2011	Jul. 03 2012
3	10dB Pulse Limita	Rohde & Schwarz	N/A	GTS224	Jul. 04 2011	Jul. 03 2012
4	Coaxial Switch	ANRITSU CORP	MP59B	GTS225	Jul. 04 2011	Jul. 03 2012
5	LISN	SCHWARZBECK MESS-ELEKTRONIK	NSLK 8127	GTS226	Jul. 04 2011	Jul. 03 2012
6	Coaxial Cable	GTS	N/A	GTS227	Jul. 04 2011	Jul. 03 2012
7	EMI Test Software	AUDIX	E3	N/A	N/A	N/A

6 Test results and Measurement Data

6.1 Antenna requirement:

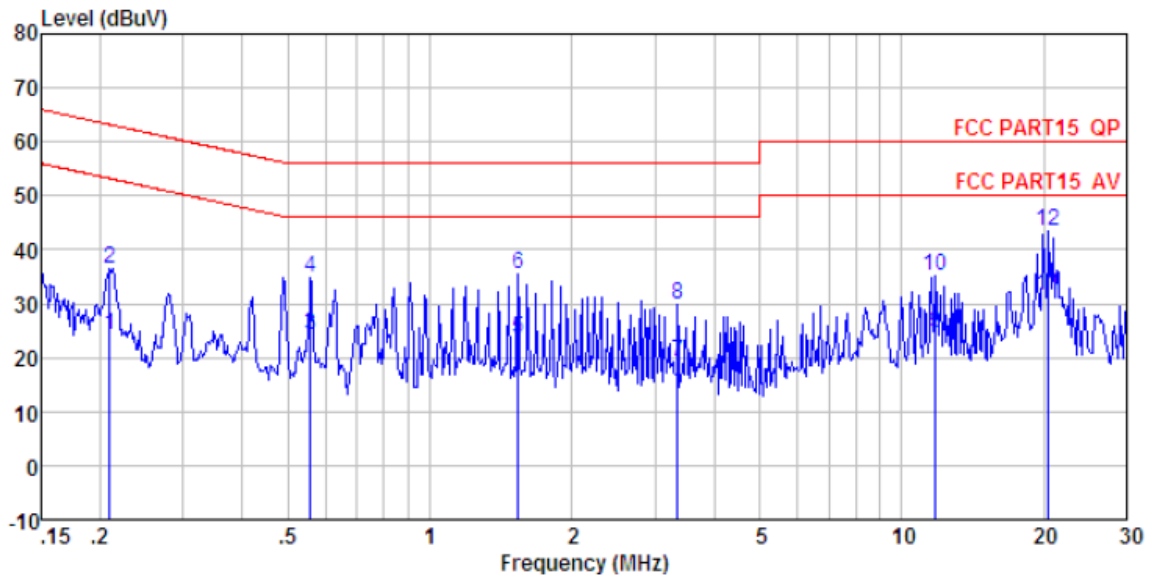
Standard requirement:	FCC Part15 C Section 15.203 /247(c)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna: <i>The antenna is Integral antenna, the best case gain of the antenna is 2dBi</i>	
	

6.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.4:2003														
Test Frequency Range:	150KHz to 30MHz														
Class / Severity:	Class B														
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto														
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> <p>* Decreases with the logarithm of the frequency.</p>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test setup:	<p><i>Remark</i> E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
Test procedure:	<ol style="list-style-type: none"> 1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement. 														
Test Instruments:	Refer to section 5.8 for details														
Test mode:	Transmitting mode														
Test results:	Pass														

Measurement data:

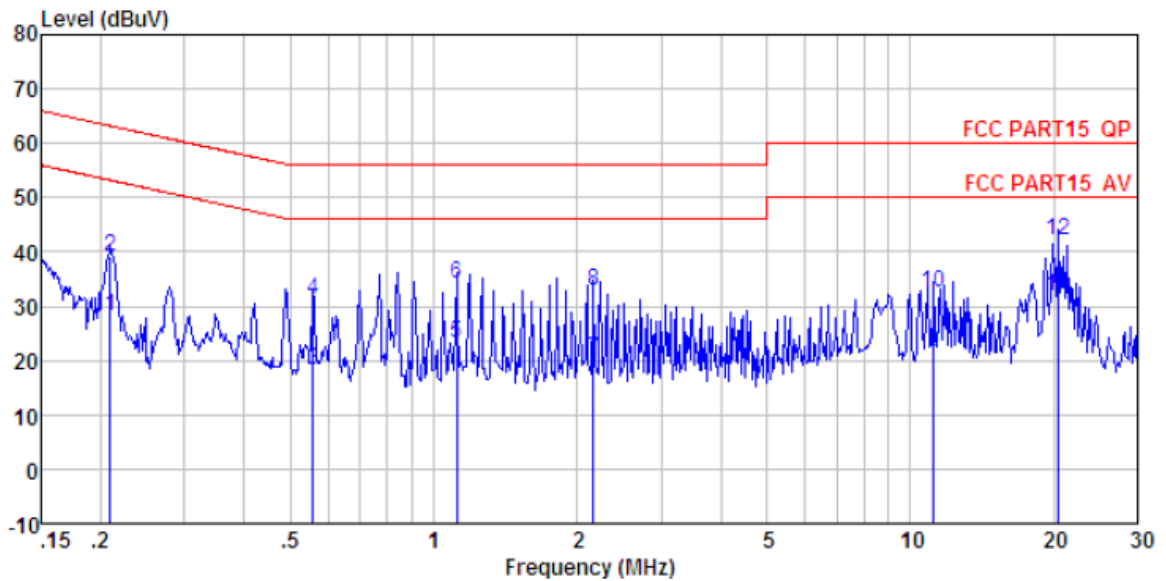
Line:



Condition : FCC PART15 QP LISN(2011) LINE
 Job No. : 669RF
 Test Mode : Transmitting mode
 Test Engineer: Blue

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.209	23.40	0.65	0.10	24.15	53.23	-29.08	Average
2	0.209	35.89	0.65	0.10	36.64	63.23	-26.59	QP
3	0.558	23.54	0.54	0.10	24.18	46.00	-21.82	Average
4	0.558	34.33	0.54	0.10	34.97	56.00	-21.03	QP
5	1.535	22.87	0.43	0.10	23.40	46.00	-22.60	Average
6	1.535	34.91	0.43	0.10	35.44	56.00	-20.56	QP
7	3.346	18.66	0.34	0.10	19.10	46.00	-26.90	Average
8	3.346	29.44	0.34	0.10	29.88	56.00	-26.12	QP
9	11.807	24.25	0.20	0.20	24.65	50.00	-25.35	Average
10	11.807	34.89	0.20	0.20	35.29	60.00	-24.71	QP
11	20.486	31.22	0.14	0.21	31.57	50.00	-18.43	Average
12	20.486	43.15	0.14	0.21	43.50	60.00	-16.50	QP

Neutral:



Condition : FCC PART15 QP LISN(2011) NEUTRAL
 Job No. : 669RF
 Test Mode : Transmitting mode
 Test Engineer: Blue

	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dB	dBuV	dBuV	dB	
1	0.209	27.36	0.65	0.10	28.11	53.23	-25.12	Average
2	0.209	38.25	0.65	0.10	39.00	63.23	-24.23	QP
3	0.558	17.55	0.54	0.10	18.19	46.00	-27.81	Average
4	0.558	30.64	0.54	0.10	31.28	56.00	-24.72	QP
5	1.117	22.55	0.47	0.10	23.12	46.00	-22.88	Average
6	1.117	33.60	0.47	0.10	34.17	56.00	-21.83	QP
7	2.167	19.78	0.39	0.10	20.27	46.00	-25.73	Average
8	2.167	32.46	0.39	0.10	32.95	56.00	-23.05	QP
9	11.198	21.08	0.21	0.20	21.49	50.00	-28.51	Average
10	11.198	32.17	0.21	0.20	32.58	60.00	-27.42	QP
11	20.486	31.65	0.14	0.21	32.00	50.00	-18.00	Average
12	20.486	41.89	0.14	0.21	42.24	60.00	-17.76	QP

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Cable Loss

6.3 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.4:2003				
Test Frequency Range:	30MHz to 25GHz				
Test site:	Measurement Distance: 3m				
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
Peak		1MHz	10Hz	Average Value	
Limit: (Field strength of the fundamental signal)	Frequency		Limit (dBuV/m @3m)		Remark
	2400MHz-2483.5MHz		94.00		Average Value
			114.00		Peak Value
Limit: (Spurious Emissions)	Frequency		Limit (dBuV/m @3m)		Remark
	30MHz-88MHz		40.00		Quasi-peak Value
	88MHz-216MHz		43.50		Quasi-peak Value
	216MHz-960MHz		46.00		Quasi-peak Value
	960MHz-1GHz		54.00		Quasi-peak Value
	Above 1GHz		54.00		Average Value
74.00			Peak Value		
Limit: (band edge)	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.				
Test setup:	<p>Below 1GHz</p> <p>Above 1GHz</p>				

	<p>The diagram illustrates the test setup. An EUT (Equipment Under Test) is placed on a turn table that is 0.8m above the ground. The turn table is rotated 360 degrees. The EUT is positioned 3m away from the antenna. The antenna is a horn antenna mounted on an antenna tower. The antenna height is varied from 1m to 4m above the ground. The antenna is connected to a spectrum analyzer and an amplifier.</p>
<p>Test Procedure:</p>	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
<p>Test Instruments:</p>	<p>Refer to section 5.8 for details</p>
<p>Test mode:</p>	<p>Transmitting mode</p>
<p>Test results:</p>	<p>Pass</p>

Measurement data:

6.3.1 Field Strength of The Fundamental Signal

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2405.50	69.99	27.57	5.40	0.00	102.96	114.00	-11.04	Horizontal
2405.50	77.04	27.57	5.40	0.00	111.01	114.00	-2.99	Vertical
2442.50	70.01	27.48	5.43	0.00	102.92	114.00	-11.08	Horizontal
2442.50	77.00	27.48	5.43	0.00	109.91	114.00	-4.09	Vertical
2475.00	70.56	27.52	5.47	0.00	103.55	114.00	-10.45	Horizontal
2475.00	77.33	27.52	5.47	0.00	110.32	114.00	-3.68	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
2405.50	49.26	27.57	5.40	0.00	82.23	94.00	-11.77	Horizontal
2405.50	57.25	27.57	5.40	0.00	90.22	94.00	-3.78	Vertical
2442.50	51.65	27.48	5.43	0.00	84.56	94.00	-9.44	Horizontal
2442.50	58.05	27.48	5.43	0.00	90.96	94.00	-3.04	Vertical
2475.00	50.72	27.52	5.47	0.00	83.71	94.00	-10.29	Horizontal
2475.00	58.58	27.52	5.47	0.00	91.57	94.00	-2.43	Vertical

According to the follow transmitter output power (P_t) formula:

$$P_t = (E \times d)^2 / (30 \times g_t)$$

P_t =transmitter output power in watts

g_t =numeric gain of the transmitting antenna (unitless)

E=electric field strength in V/m

d= measurement distance in meters (m).

According to the above test data, $E_{max}=111.01\text{dBuV/m}=0.355\text{V/m}$, $d=3\text{m}$, $g_t=1.58$

$$P_t = (E \times d)^2 / (30 \times g_t) = (0.355 \times 3)^2 / (30 \times 1.58) = 0.0239\text{W}$$

6.3.2 Spurious emissions

■ Below 1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
46.18	44.13	16.55	0.73	32.00	29.41	40.00	-10.59	Vertical
97.12	37.88	16.05	1.17	31.75	23.35	43.50	-20.15	Vertical
143.83	51.95	11.23	1.53	31.96	32.75	43.50	-10.75	Vertical
233.35	42.96	14.83	2.04	32.16	27.67	46.00	-18.33	Vertical
432.55	46.99	17.54	3.01	31.78	35.76	46.00	-10.24	Vertical
771.45	39.25	22.72	4.36	31.29	35.04	46.00	-10.96	Vertical
52.76	38.93	16.21	0.80	31.95	23.99	40.00	-16.01	Horizontal
99.88	37.25	16.11	1.19	31.76	22.79	43.50	-20.71	Horizontal
143.83	48.86	11.23	1.53	31.96	29.66	43.50	-13.84	Horizontal
232.53	46.04	14.78	2.03	32.16	30.69	46.00	-15.31	Horizontal
432.55	39.00	17.54	3.01	31.78	27.77	46.00	-18.23	Horizontal
804.60	37.93	23.10	4.48	31.31	34.20	46.00	-11.80	Horizontal

■ Above 1GHz

Test channel:	Lowest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4810.00	45.48	31.78	8.60	24.17	61.69	74.00	-12.31	Vertical
7215.00	30.46	38.01	14.14	25.45	57.16	74.00	-16.84	Vertical
9620.00	30.64	36.15	11.66	26.46	51.99	74.00	-22.01	Vertical
12025.00	*					74.00		Vertical
14430.00	*					74.00		Vertical
4810.00	40.98	31.78	8.60	24.17	57.19	74.00	-16.81	Horizontal
7215.00	29.50	38.01	14.14	25.45	56.20	74.00	-17.80	Horizontal
9620.00	28.20	36.15	11.66	26.46	49.55	74.00	-24.45	Horizontal
12025.00	*					74.00		Horizontal
14430.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4810.00	32.61	31.78	8.60	24.17	48.82	54.00	-5.18	Vertical
7215.00	18.94	38.01	14.14	25.45	45.64	54.00	-8.36	Vertical
9620.00	20.52	36.15	11.66	26.46	41.87	54.00	-12.13	Vertical
12025.00	*					54.00		Vertical
14430.00	*					54.00		Vertical
4810.00	30.50	31.78	8.60	24.17	46.71	54.00	-7.29	Horizontal
7215.00	16.85	38.01	14.14	25.45	43.55	54.00	-10.45	Horizontal
9620.00	18.43	36.15	11.66	26.46	39.78	54.00	-14.22	Horizontal
12025.00	*					54.00		Horizontal
14430.00	*					54.00		Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *“**”, means this data is the too weak instrument of signal is unable to test.*

Test channel:	Middle channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4884.00	30.08	38.35	14.27	25.36	57.34	74.00	-16.66	Vertical
7326.00	30.97	36.41	11.72	26.78	52.32	74.00	-21.68	Vertical
9768.00	30.41	31.86	8.67	24.10	46.84	74.00	-27.16	Vertical
12210.00	*					74.00		Vertical
14652.00	*					74.00		Vertical
4884.00	28.86	38.35	14.27	25.36	56.12	74.00	-17.88	Horizontal
7326.00	29.94	36.41	11.72	26.78	51.29	74.00	-22.71	Horizontal
9768.00	28.35	31.86	8.67	24.10	44.78	74.00	-29.22	Horizontal
12210.00	*					74.00		Horizontal
14652.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4884.00	18.53	38.35	14.27	25.36	45.79	54.00	-8.21	Vertical
7326.00	19.86	36.41	11.72	26.78	41.21	54.00	-12.79	Vertical
9768.00	21.41	31.86	8.67	24.10	37.84	54.00	-16.16	Vertical
12210.00	*					54.00		Vertical
14652.00	*					54.00		Vertical
4884.00	17.60	38.35	14.27	25.36	44.86	54.00	-9.14	Horizontal
7326.00	19.42	36.41	11.72	26.78	40.77	54.00	-13.23	Horizontal
9768.00	17.55	31.86	8.67	24.10	33.98	54.00	-20.02	Horizontal
12210.00	*					54.00		Horizontal
14652.00	*					54.00		Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *“**”, means this data is the too weak instrument of signal is unable to test.*

Test channel:	Highest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4950.00	27.88	39.05	14.42	25.21	56.14	74.00	-17.86	Vertical
7425.00	29.51	36.56	11.79	27.03	50.83	74.00	-23.17	Vertical
9900.00	29.88	31.91	8.71	24.03	46.47	74.00	-27.53	Vertical
12375.00	*					74.00		Vertical
14850.00	*					74.00		Vertical
4950.00	26.09	39.05	14.42	25.21	54.35	74.00	-19.65	Horizontal
7425.00	28.69	36.56	11.79	27.03	50.01	74.00	-23.99	Horizontal
9900.00	28.67	31.91	8.71	24.03	45.26	74.00	-28.74	Horizontal
12375.00	*					74.00		Horizontal
14850.00	*					74.00		Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4950.00	16.84	39.05	14.42	25.21	45.10	54.00	-8.90	Vertical
7425.00	18.81	36.56	11.79	27.03	40.13	54.00	-13.87	Vertical
9900.00	18.65	31.91	8.71	24.03	35.24	54.00	-18.76	Vertical
12375.00	*					54.00		Vertical
14850.00	*					54.00		Vertical
4950.00	16.70	39.05	14.42	25.21	44.96	54.00	-9.04	Horizontal
7425.00	17.84	36.56	11.79	27.03	39.16	54.00	-14.84	Horizontal
9900.00	18.52	31.91	8.71	24.03	35.11	54.00	-18.89	Horizontal
12375.00	*					54.00		Horizontal
14850.00	*					54.00		Horizontal

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*
3. *“**”, means this data is the too weak instrument of signal is unable to test.*

6.3.3 Bandedge emissions

Test channel:	Lowest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	25.48	27.91	5.30	0.00	58.69	74.00	-15.31	Horizontal
2390.00	27.24	27.59	5.38	0.00	60.21	74.00	-13.79	Horizontal
2310.00	25.46	27.91	5.30	0.00	58.67	74.00	-15.33	Vertical
2390.00	29.26	27.59	5.38	0.00	62.23	74.00	-11.77	Vertical

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310.00	5.06	27.91	5.30	0.00	38.27	54.00	-15.73	Horizontal
2390.00	6.92	27.59	5.38	0.00	39.89	54.00	-14.11	Horizontal
2310.00	5.18	27.91	5.30	0.00	38.39	54.00	-15.61	Vertical
2390.00	9.02	27.59	5.38	0.00	41.99	54.00	-12.01	Vertical

Test channel:	Highest channel
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Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	29.37	27.53	5.47	0.00	62.37	74.00	-11.63	Horizontal
2500.00	27.51	27.55	5.49	0.00	60.55	74.00	-13.45	Horizontal
2483.50	35.92	27.53	5.47	0.00	68.92	74.00	-5.08	Vertical
2500.00	28.04	27.55	5.49	0.00	61.08	74.00	-12.92	Vertical

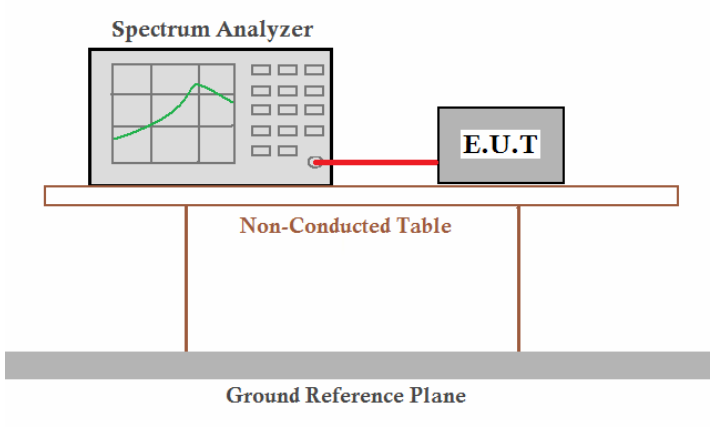
Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.50	9.26	27.53	5.47	0.00	42.26	54.00	-11.74	Horizontal
2500.00	6.91	27.55	5.49	0.00	39.95	54.00	-14.05	Horizontal
2483.50	15.85	27.53	5.47	0.00	48.85	54.00	-5.15	Vertical
2500.00	7.12	27.55	5.49	0.00	40.16	54.00	-13.84	Vertical

Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

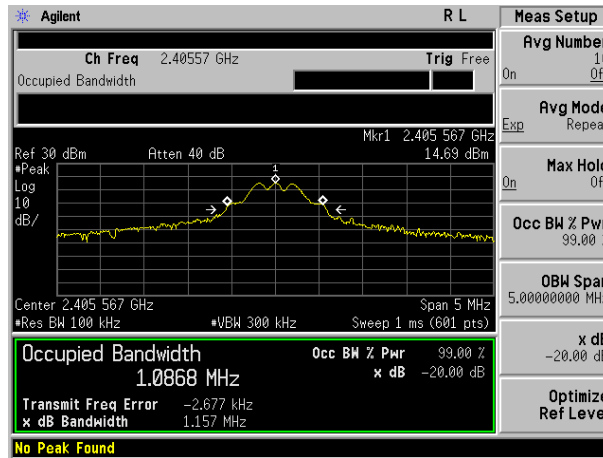
6.4 20dB Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.249/15.215
Test Method:	ANSI C63.4:2003
Limit:	Operation Frequency range 2400MHz~2483.5MHz
Test setup:	 <p>The diagram shows a Spectrum Analyzer on the left and an E.U.T. on the right, connected by a red cable. They are both on a table labeled 'Non-Conducted Table'. Below the table is a 'Ground Reference Plane'.</p>
Test Instruments:	Refer to section 5.8 for details
Test mode:	Transmitting mode
Test results:	Pass

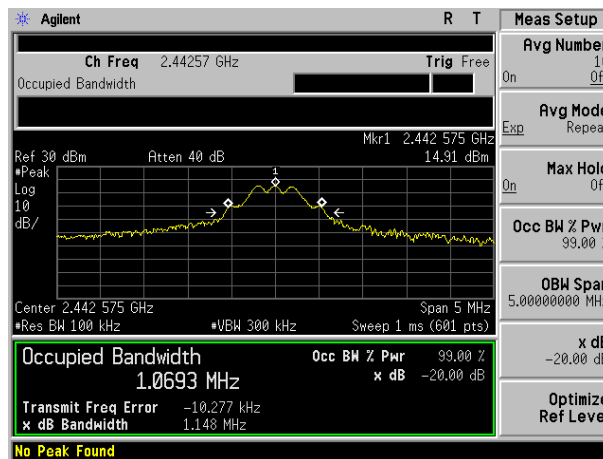
Measurement Data

Test channel	20dB bandwidth(MHz)	Result
Lowest	1.157	Pass
Middle	1.148	Pass
Highest	1.148	Pass

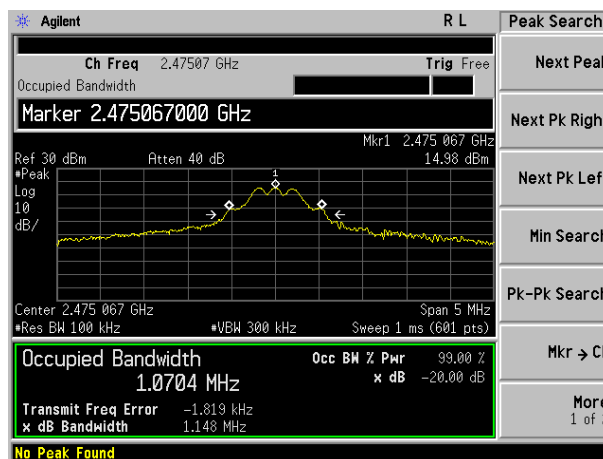
Test plot as follows:



Lowest channel



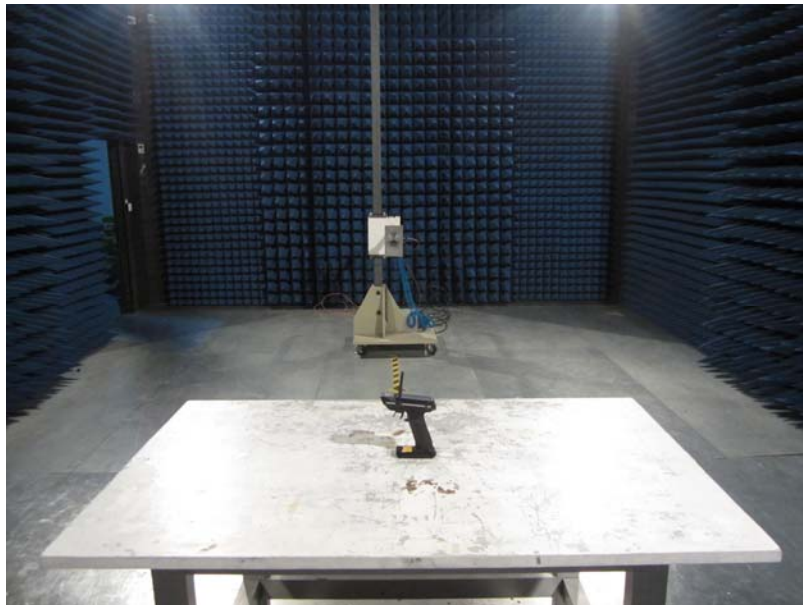
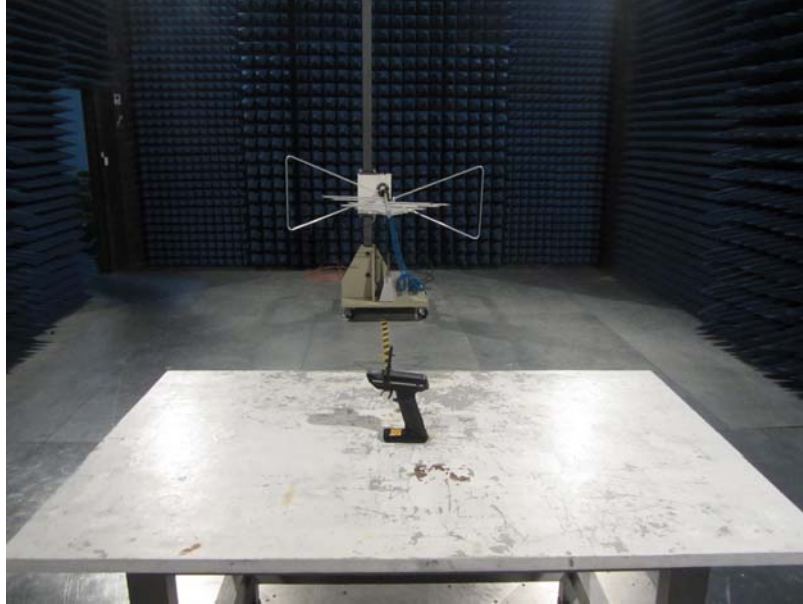
Middle channel



Highest channel

7 Test Setup Photo

Radiated Emission



Conducted Emission

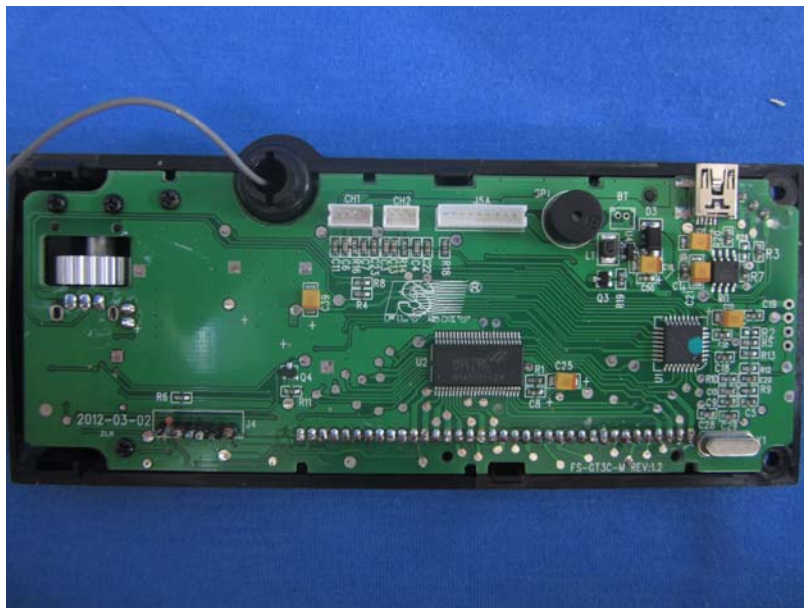


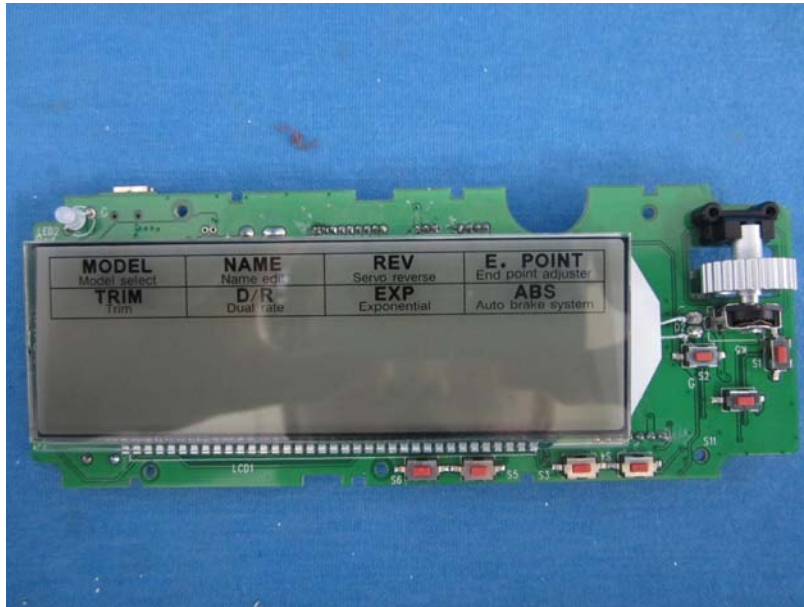
8 EUT Constructional Details

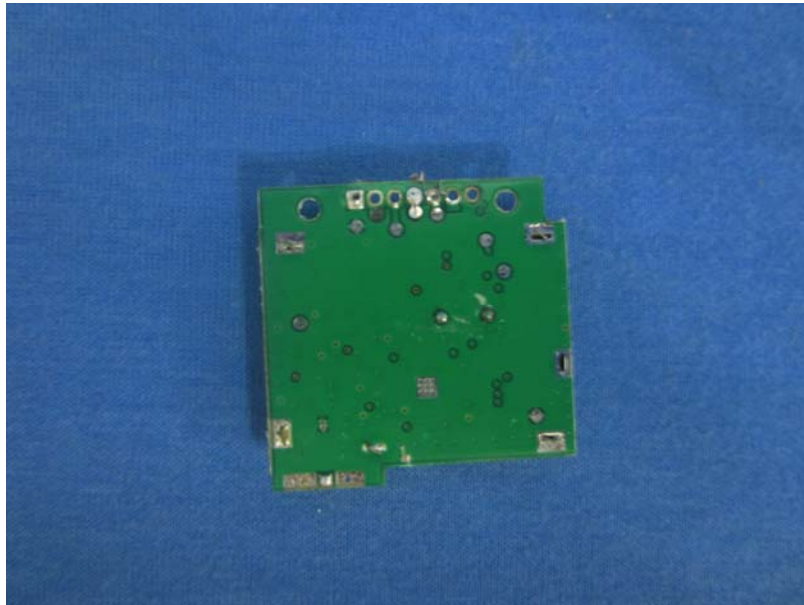


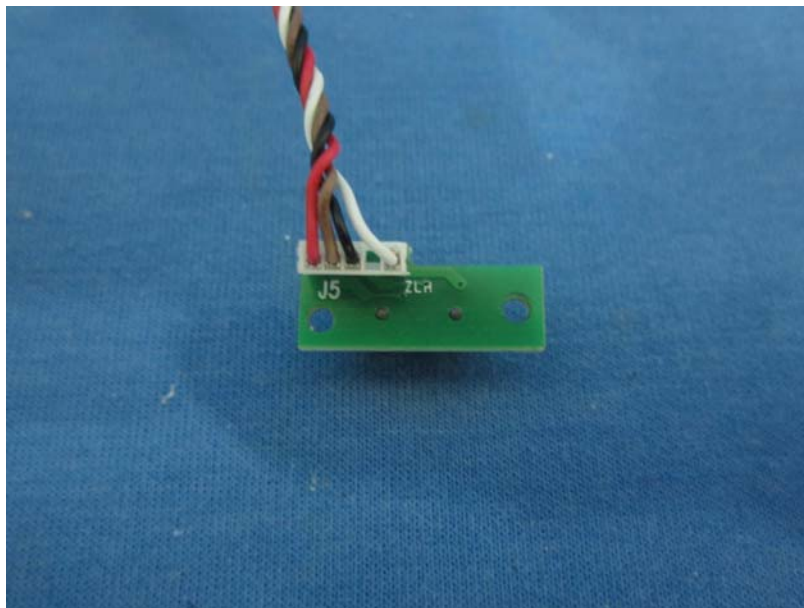
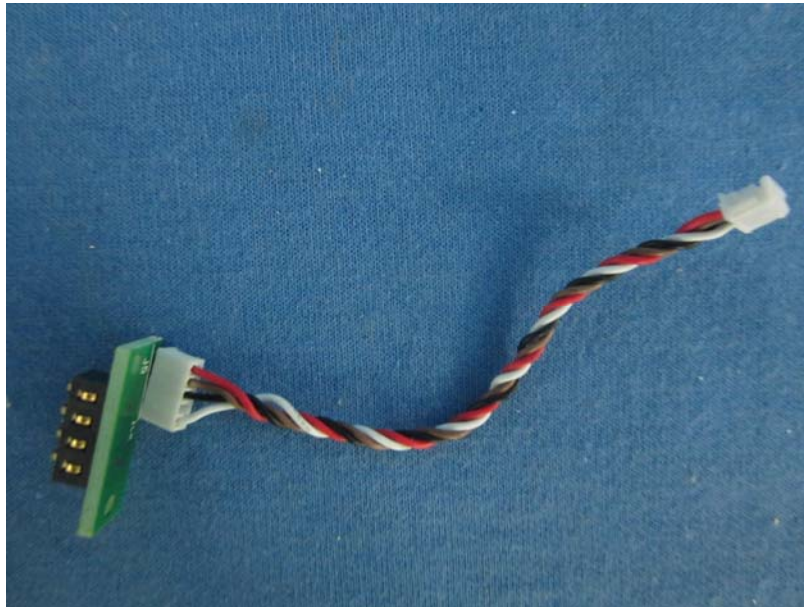


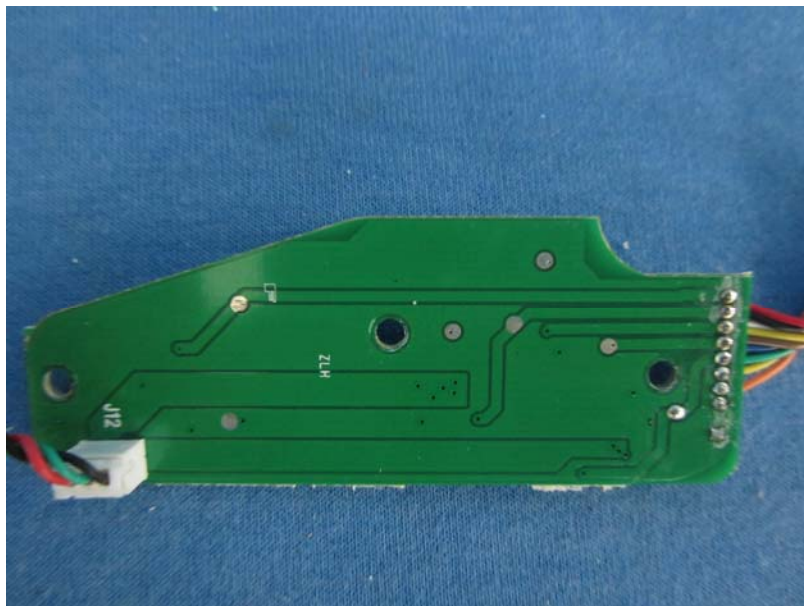
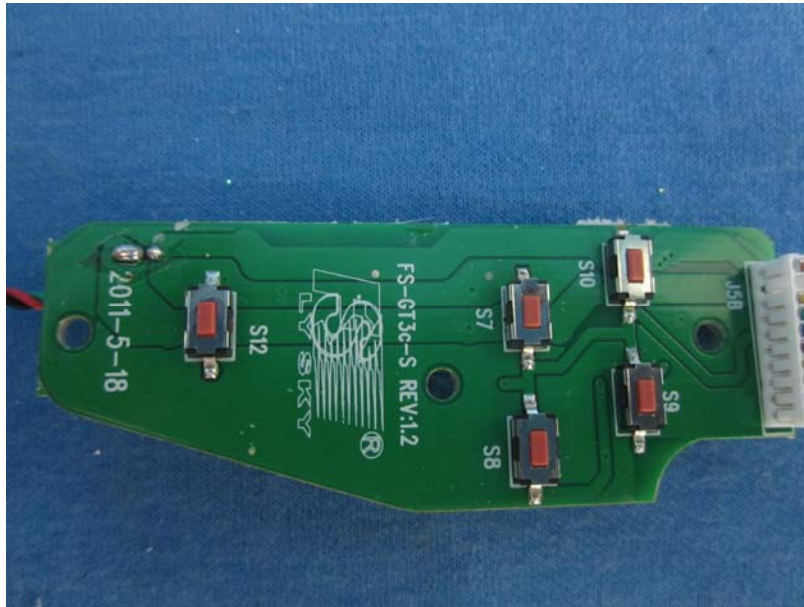


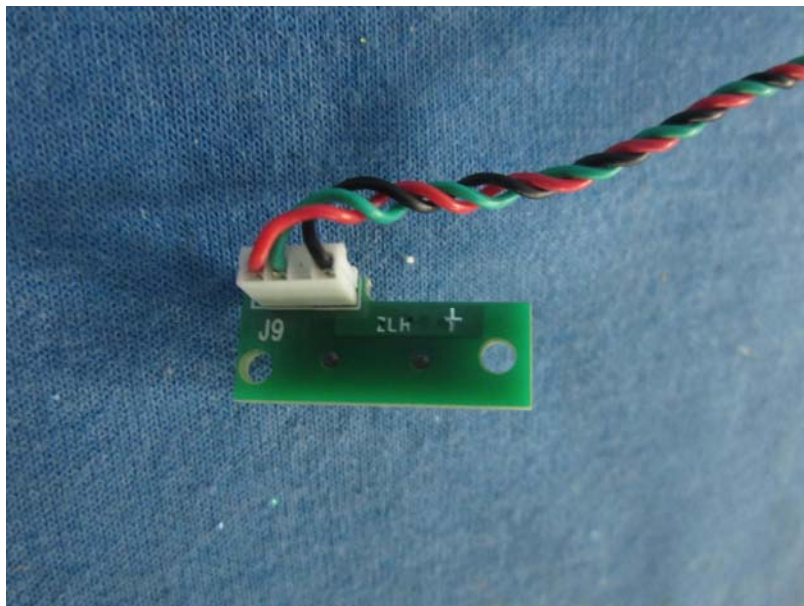
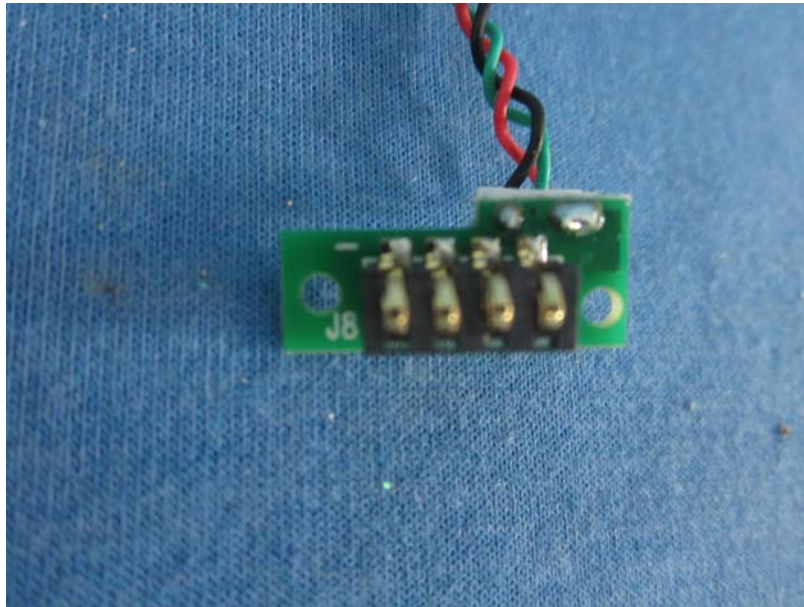


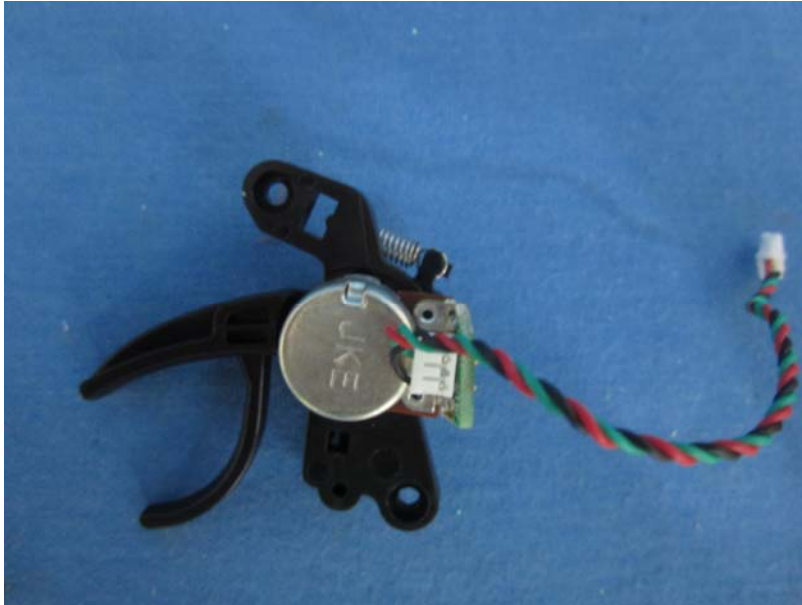












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