FCC ID TEST REPORT

According to

FCC Part 15 Subpart C, Intentional Radiators

EUT Type	**Wireless Dual Mouse (TX)** **Dual Mouse Receiver (RX)**
Transmitter (TX)	**1) Model No.: DM-001**
	2) FCC ID: RKJB70
	3) Power Supply: DC 3V, battery Type AAA, 1.5Vdc x 2
Receiver (RX)	**1) Model No.: DMR-001**
	2) FCC ID: N/A, (under DoC)
	3) Power Supply: DC 5V from USB Port of PC
Applicant Name:	**PERIFIC AB.**
Address	See the General Information for details.

Test Date : 2003-09-18 Issued Date : NOV. 26, 2003

Test Engineer : HADES HUANG NVLAP Signature : Peter Kao

Peter Kao / Director

- The test report shall not be reproduced except in full, without the written approval of the "PEP"
- The report must not be used by the client to claim product endorsement by NVLAP or any agency of the United States government.
- This report is applicable only for EUT Model which described in page 4 .
- The testing result in this report are traceable to national or international standard .

PEP TESTING LABORATORY

12-3Fl, No. 27-1, Lane 169, Kang-Ning St., Hsi-Chih,
Taipei Hsien, Taiwan, R. O. C.
Tel : 8862-26922097 Fax : 8862-26956236

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1. General Information

Measurement of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission under FCC Part 2 and 15.

a) EUT Transmitter (TX):
Model No.: DM-001 **FCC ID: RKJB70**
b) EUT Receiver (RX):
Model No.: DMR-001 **FCC ID: N/A, (under DoC)**

c) Applicant Name/Address: PERIFIC AB.
PRASTGARDSGATAN 14, SE 112, 32 SUNDBYBERG, SWEDEN
Contact Person: TOMAS OQUIST / VP RESEARCH
Phone No.: +46-8-56-48-6060 Fax No.: +46-8-56-48-6671

d) Manufacturer Name/Address: ARESTECH INT'L CORP.
SHA-WU, TANG-XIA, DONG-GUAN, GUAN-DONG, CHINA

- ✧ Regulation: FCC Part 2 and 15
- ✧ Limitation: Part 15, Section 15.227, 15.207 and 15.209
- ✧ Test Procedure: ANSI C63.4-1992
- ✧ Place of Test: PEP Testing Laboratory

  12-3Fl, No. 27-1, Lane 169, Kang-Ning St., Hsi-Chih,
  Taipei Hsien, Taiwan, R. O. C.
  TEL : 8862-26922097 FAX : 8862-26956236

Measurement Uncertainty :

The uncertainty of the testing result is given as below . The method of uncertainty Calculation is based on NIST Technical Note 1297 .

Frequency (MHz)	0.15 ～ 30	30 ～ 1000
Combined Uncertainty μ_c	1.77 (dB)	2.08 (dB)

2. Product Information

a. EUT Type: Wireless Dual Mouse (TX)
Dual Mouse Receiver (RX)

b. Transmitter Model: DM-001 **Receiver Model: DMR-001**

c. TX FCC ID: RKJB70 **RX FCC ID: N/A, (under DoC)**

d. TX Channel No.： One **RX Channel No.： One**

e. TX Working Freq. : 27 MHz **RX Working Freq.: 27 MHz**

f. TX Modulation： FSK **RX Modulation： FSK**

g. TX Crystal / Osc.： 4 MHz, 18.432 MHz 27.045MHz **RX Crystal / Osc.：6 MHz, 26.590 MHz**

h. TX Port(s) ： N/A **RX Port(s) ： USB Port * 1**

i. TX Transmitting Power：DC 3V (1.5V × 2) **RX Receiver Power：DC 5V**

j TX Power Supply：Battery(Type AAA) **RX Power Supply：USB Port of PC**

j. TX Case： ABS **RX Case： ABS**

k. EUT Condition : ☐ **Prototype** ☑ **Engineering** ☐ **Production**

l. EUT Received Date : SEP. 17, 2003

3. EUT Description and Test Methods

(A) The EUT is Wireless Dual Mouse, FCC ID: RKJB70, model DM-001. The EUT that comes with a scroll wheel, two buttons and an additional trackball is optical wireless mouse. DC 3V from two batteries (size AAA) are required to operate EUT. One receiver unit: Dual Mouse Receiver model DMR-001 that is compatible with USB interface to PC and comes with power charger function to EUT was used as corresponding peripheral device for the test. The EUT radio frequency is 27MHz. The effective transmitting distance of EUT system is approximate 1.5 meter. Both EUT and Dual Mouse Receiver have respective radio synchronization buttons for the use to set up synchronization of the radio connection between EUT and Dual Mouse Receiver. We managed both EUT and Dual Mouse Receiver placement on turntable under test. For more detail information about the EUT, please refer to the user's manual.

(B) Test Method: Including EUT and corresponding peripheral, Dual Mouse Receiver, link with PC system were set up as a complete test system on turntable. Dual Mouse Receiver is connected to USB port of PC system and the PC operating system was set to detect and drive every peripheral devices including EUT. The test was respectively carried out on EUT operational conditions, Tx-On mode and Tx-Off mode, and the worst-case test data as ANSI C63.4 requirement was recorded and provided in this report.

(C) Test Mode: (1) For Conducted EMI---"Tx-On" and "Tx-Off" Mode
(2) For Radiated EMI---"Tx-On" and "Tx-Off" Mode

(D) At the frequencies where the peak values of the emission exceeded the quasi-peak limit, the emissions were also measured with the quasi-peak detectors. The average detector also measured the emission either (A) quasi-peak values were under quasi-peak limit but exceeded average limit, or (B) peak values were under quasi-peak limit but exceeded average limit.

4. Modification(s):

N/A

5. Test Software Used

(A) EMITEST program that continuously generates a complete line of repeating “H” letter was the software used during test.

6. Support Equipment Used

1. Personal Computer (PC3)	**CPU :** Intel P4 Socket 478 1.6GHz **FCC ID**：Declaration of Conformity(DoC) **Manufacturer**：LEMEL **Model Number**：LMIH1A2 **Power Supply**：Switching **Power Cord**：Non-Shielded, Detachable, 1.8m **Data Cable**： N/A
2. Monitor (MON1 15")	**FCC ID**：Declaration of Conformity(DoC) **Manufacturer**：SAMSUNG **Model Number**：550S **Power Supply**：Switching **Power Cord**：Non-Shielded, Detachable, 1.8m **Data Cable**：**1 >** Shielded , Non-detachable,1.2m **2 >** Back Shell : Metal
3. Printer (PRN1)	**FCC ID**：B94C2642X **Manufacturer**：Hewlett-Packard **Model Number**：C2642E **Power Supply**：Linear, 30Vdc O/P **Power Cable**：Non-Shielded , Detachable,1.8m **Data Cable**：**1 >** Shielded , Detachable,1.2m **2 >** Back Shell : Metal
4. Modem (MOD1) ×2	**FCC ID**：IFAXDM1414 **Manufacturer**：ACEEX **Model Number**：1414 **Power Supply**：Linear, 9Vac O/P **Power Cable**：Non-Shielded , Detachable,1.7m **Data Cable**：**1 >** Shielded , Detachable,1m **2 >** Back Shell : Metal

5. Mouse (MOUS/1 PS/2)

FCC ID：DZL211106
Manufacturer：LOGITECH
Model Number：M-S43
Power Supply：+5Vdc from PS2 of PC
Power Cord：N/A
Data Cable：**1 >** Shielded , Non-detachable,1.8m
2 > Back Shell : Metal

6. Dual Mouse Receiver

FCC ID：Declaration of Conformity(DoC)
Manufacturer：ARESTECH INT'L CORP.
Model Number：DMR-001
Power Supply：+5Vdc from USB of PC
Power Cord：N/A
Data Cable：**1 >** Shielded , Non-detachable,1.5m
2 > Back Shell : N/A

7. Description of Conducted Emissions Test

7.1 Conducted Emissions Limits

Frequency Rang	Limits dB(uV)			
	Class A ITE		Class B ITE	
MHz	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.50	79	66	66-56	56-46
0.50 - 5.0	73	60	56	46
5.0 - 30	73	60	60	50

Remarks: - If the average limit is met when a quasi-peak detector is used, the EUT shall be deemed to meet both limits and measurement with the average detector is unnecessary.
- The lower limit shall apply at the transition frequency
- The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50 MHz.

8. Description of Radiated Emissions Test

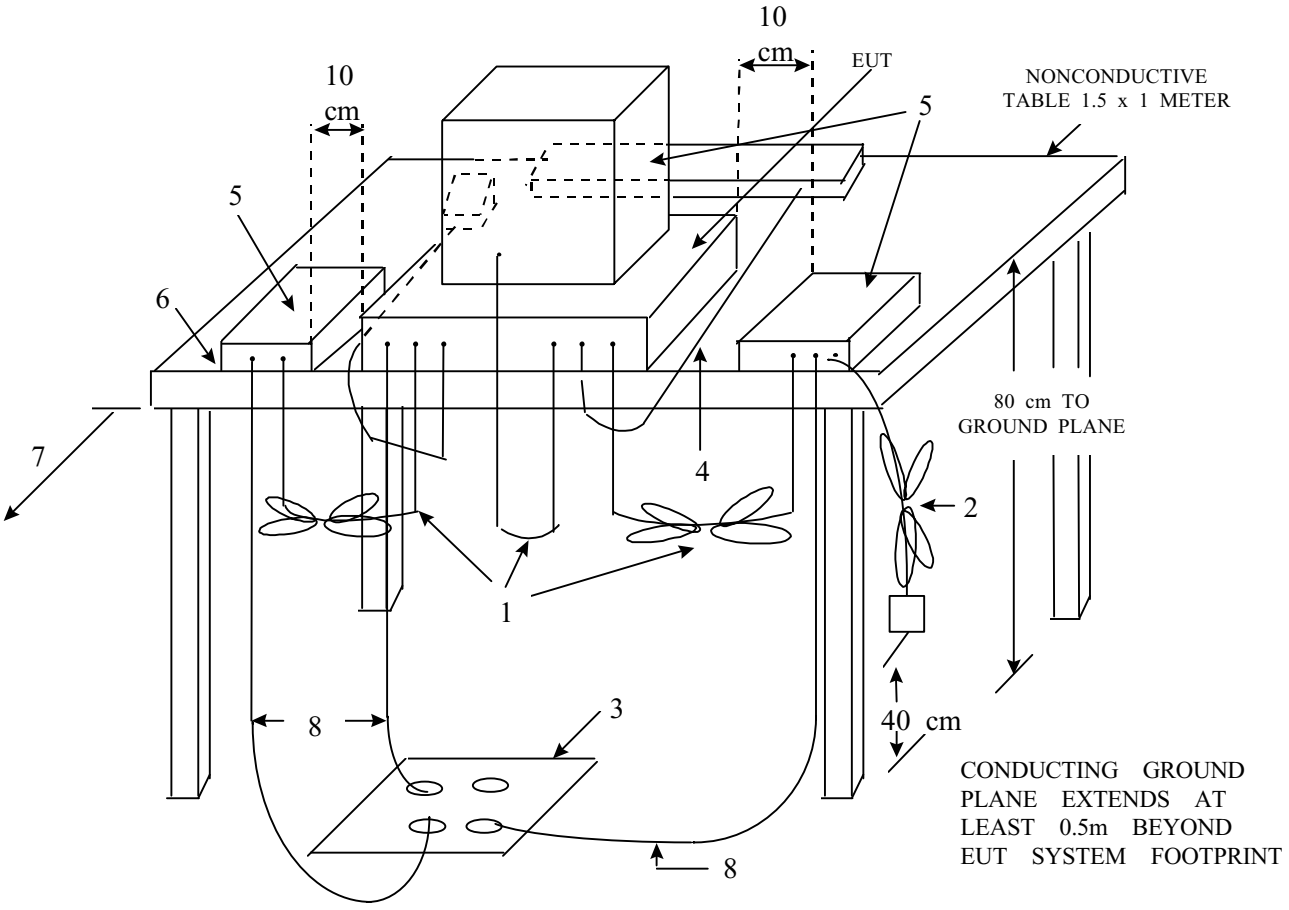
8.1 Radiated Emissions

Preliminary measurements were made indoors chamber at 3 meter using broadband antennas, broadband amplifier, and spectrum analyzer to determine the frequency producing the maximum EME. Appropriate precaution was taken to ensure that all EME from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, turntable azimuth with respect to the antenna were noted for each frequency found. The spectrum was scanned from 30 to 1000 MHz using logbicon antenna. Above 1GHz, linearly polarized double ridge horn antenna was used.

Final measurements were made outdoors at 3-meter test range using logbicon antenna and horn antenna. The test equipment was placed on a wooden bench situated on a 1.5x1 meter area adjacent to the measurement area. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. Each frequency found during pre-scan measurements was re-examined and investigated using Quasi-Peak Adapter. The detector function was set to CISPR quasi-peak mode and the bandwidth of the receiver was set to 120kHz.

The turntable containing the system was rotated; the antenna height was varied 1 to 4 meters and stopped at the azimuth or height producing the maximum emission. Each emission was maximized by: varying mode of operation or resolution; clock or data exchange speed; scrolling H pattern to the EUT and/or support equipment, and powering the monitor from the floor mounted outlet box and the computer aux AC outlet , if applicable; and changing the polarity of the antenna, whichever determined the worst-case emission. Photographs of the worst-case emission can be seen in radiated emission test photo.

8.2 Test Configuration



LEGEND

1. Interconnecting cables which hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 to 40 cm long. hanging approximately in the middle between ground plane and table.
2. I/O cables which are connected to a peripheral hall be bundled in center. The end of the cable may b terminated if required using correct terminating impedance. The total length shall not exceed 1 m.
3. If LISN are kept in the test setup for radiated emissions, it is preferred that they be installed under the ground if requires receptacle flush with the ground plane.
4. Cables of hand-operated devices, such as keyboards, KEYPADs, etc., have to be placed as close as possible to the controller.
5. Non-EUT components of EUT system being tested.
6. The rear of all components of the system under test shall be located flush with the rear of the table.
7. No vertical conducting wall used.
8. Power cords drape to the floor and are routed over to receptacle.

8.3 Radiated Emission Limits

Limits for radiated disturbance of
Class B ITE or Intentional Radiator
At a measuring distance of 3 m

Frequency MHz	Field Strength dB(μV/m) or uV/m	
30 to 88	40	100
88 to 216	43.5	150
216 to 960	46	200
Above 960	56	500

NOTES
1 The lower limit shall apply at the transition frequency.
2 Additional provisions may be required for cases where interference occurs.

9. Conducted Emissions Test Setup Photos

< Front View >

<Rear View >

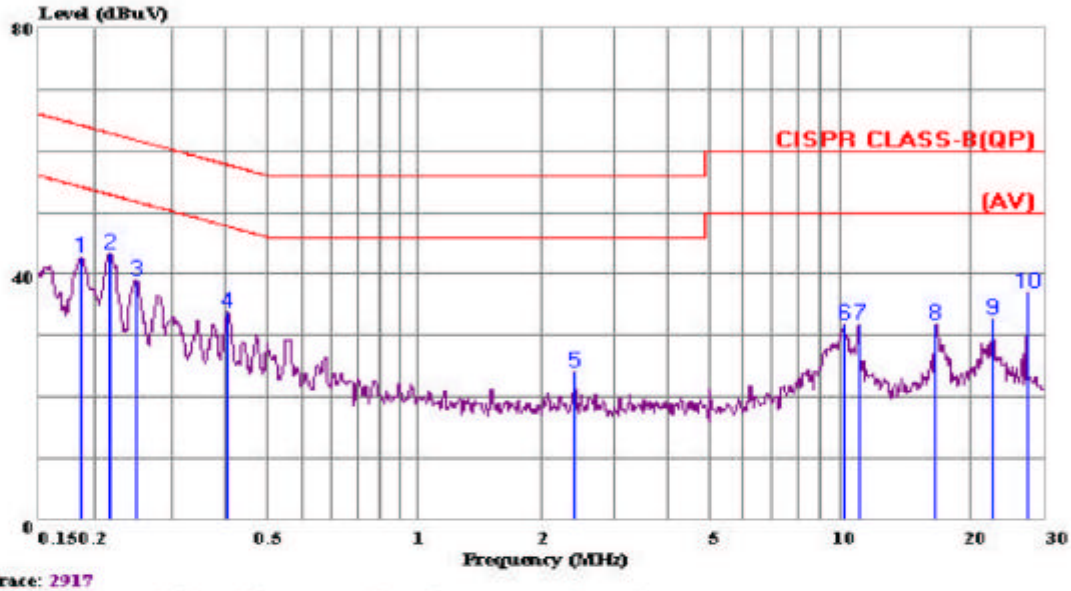
10. Conducted Emissions Test Data

Model No.	**: DM-001**
Frequency range	**: 150KHz to 30MHz**
Detector	**: Quasi-peak Value**
Temperature	**: 27 ℃**
Humidity	**: 43 %**
Memo	**: TX ON MODE**

Test Data : # **2918** < LINE >
1085 < NEUTRAL >

Note 1. Level = Read Level + Cable Loss + Probe (LISN)
2. Over Limit = Level – Limit = Margin

Data#: 2918 File#: EN55022-B(QP).EMI Date: 2003-09-18 Time: 11:35:10



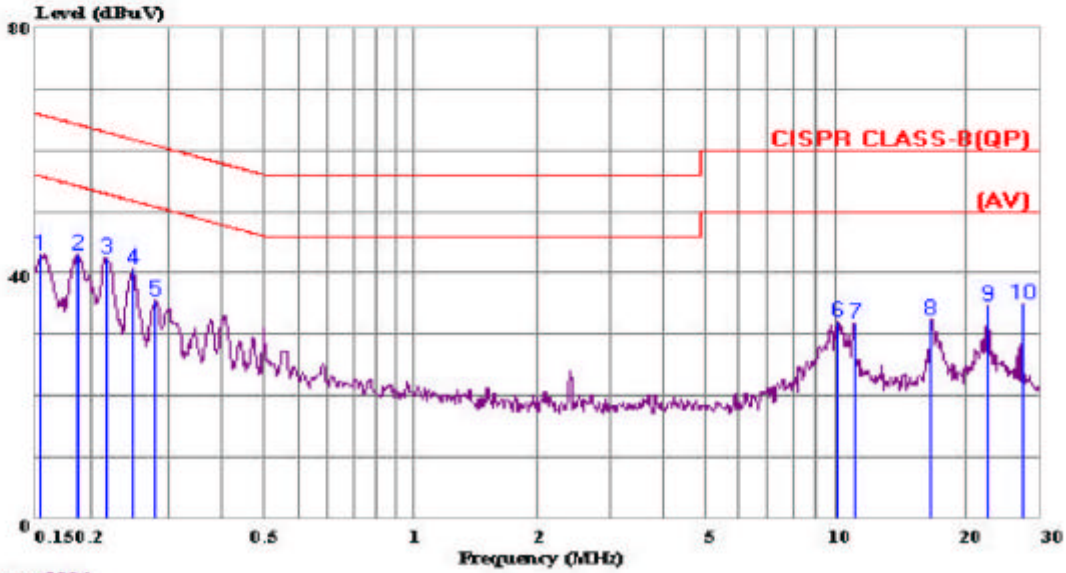
Trace: 2917

Site : Shih-Chi : Conduction No.1(Gene)
Condition: CISPR CLASS-B(QP) LISN.L(16A) LINE
eut : E920525
power : AC 120V 60Hz
memo : Peak Value
: Final Test
: TXON MODE

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.186	42.70	-21.50	64.20	42.40	0.20	0.10	
2	0.219	43.34	-19.54	62.88	43.00	0.20	0.14	
3	0.251	39.00	-22.73	61.73	38.60	0.20	0.20	
4	0.402	33.90	-23.91	57.81	33.60	0.20	0.10	
5	2.513	24.00	-32.00	56.00	23.60	0.20	0.20	
6	10.397	31.82	-28.18	60.00	31.20	0.32	0.30	
7	11.257	31.89	-28.11	60.00	31.20	0.36	0.33	
8	16.839	31.85	-28.15	60.00	30.98	0.54	0.33	
9	22.775	32.71	-27.29	60.00	31.60	0.71	0.40	
10	27.271	37.10	-22.90	60.00	35.80	0.80	0.50	

Data#: 1085 File#: EN55022-B(QP).EMI Date: 2003-09-18 Time: 11:34:50



Trace: 1084

Site : Shih-Chi : Conduction No.1(Gene)
Condition: CISPR CLASS-B(QP) LISN.N(16A) NEUTRAL
eut : E920525
power : AC 120V 60Hz
memo : Peak Value
: Final Test
: TXON MODE

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.153	43.10	-22.72	65.82	42.80	0.20	0.10	
2	0.187	42.90	-21.25	64.15	42.60	0.20	0.10	
3	0.217	42.34	-20.58	62.92	42.00	0.20	0.14	
4	0.249	40.60	-21.18	61.78	40.20	0.20	0.20	
5	0.282	35.53	-25.23	60.76	35.20	0.20	0.13	
6	10.288	32.01	-27.99	60.00	31.40	0.31	0.30	
7	11.257	31.88	-28.12	60.00	31.19	0.36	0.33	
8	16.839	32.45	-27.55	60.00	31.58	0.54	0.33	
9	22.775	34.71	-25.29	60.00	33.60	0.71	0.40	
10	27.271	35.10	-24.90	60.00	33.80	0.80	0.50	

Model No.	**: DM-001**
Frequency range	**: 150KHz to 30MHz**
Detector	**: Quasi-peak Value**
Temperature	**: 27 ℃**
Humidity	**: 43 %**
Memo	**: TX OFF MODE**

Test Data : # **1075** < LINE >
1070 < NEUTRAL >

Note 1. Level = Read Level + Cable Loss + Probe (LISN)
2. Over Limit = Level – Limit = Margin

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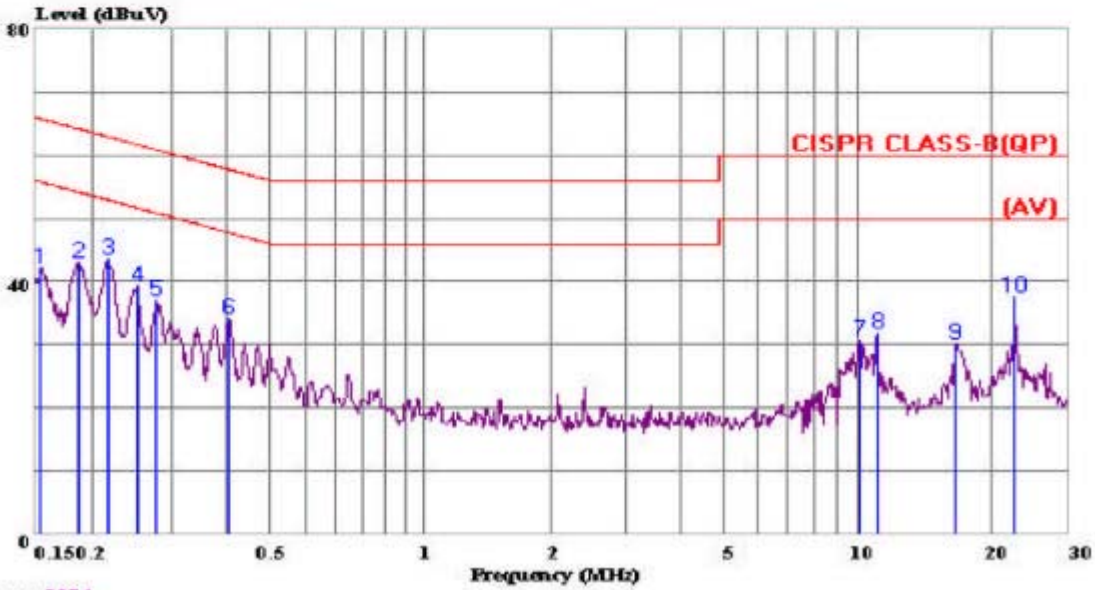
Data#: 1075 File#: EN55022-B(QP).EMI Date: 2003-09-18 Time: 11:30:16



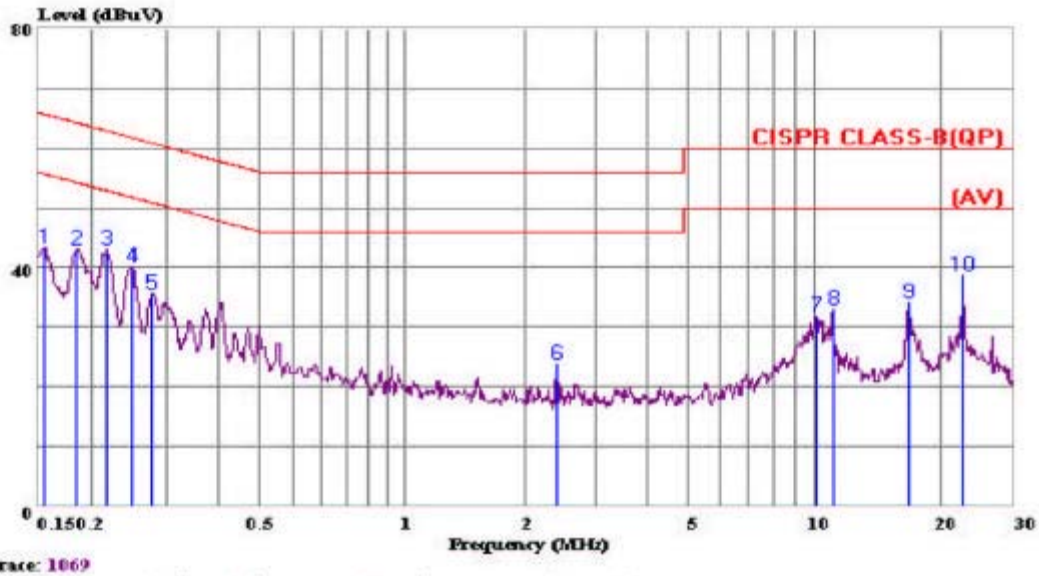
Trace: 1074

Site : Shih-Chi : Conduction No.1(Gene)
Condition: CISPR CLASS-B(QP) LISN.L(16A) LINE
eut : E920525
power : AC 120V 60Hz
memo : Peak Value
: Final Test
: TXOFF MODE

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.154	42.10	-23.68	65.78	41.80	0.20	0.10	
2	0.186	42.90	-21.30	64.20	42.60	0.20	0.10	
3	0.217	43.54	-19.38	62.92	43.20	0.20	0.14	
4	0.252	39.19	-22.50	61.69	38.79	0.20	0.20	
5	0.279	36.94	-23.91	60.85	36.60	0.20	0.14	
6	0.404	34.10	-23.67	57.77	33.80	0.20	0.10	
7	10.288	30.61	-29.39	60.00	30.00	0.31	0.30	
8	11.257	31.89	-28.11	60.00	31.20	0.36	0.33	
9	16.839	30.05	-29.95	60.00	29.18	0.54	0.33	
10	22.775	37.51	-22.49	60.00	36.40	0.71	0.40	

Data#: 1070 File#: EN55022-B(QP).EMI Date: 2003-09-18 Time: 11:28:15



Trace: 1069

Site : Shih-Chi : Conduction No.1(Gene)
Condition: CISPR CLASS-B(QP) LISN.N(16A) NEUTRAL
eut : E920525
power : AC 120V 60Hz
memo : Peak Value
: Final Test
: TXOFF MODE

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.155	43.30	-22.44	65.74	43.00	0.20	0.10	
2	0.184	42.90	-21.38	64.28	42.60	0.20	0.10	
3	0.219	43.14	-19.74	62.88	42.80	0.20	0.14	
4	0.249	40.20	-21.58	61.78	39.80	0.20	0.20	
5	0.279	35.54	-25.31	60.85	35.20	0.20	0.14	
6	2.513	23.80	-32.20	56.00	23.40	0.20	0.20	
7	10.288	31.81	-28.19	60.00	31.20	0.31	0.30	
8	11.257	32.89	-27.11	60.00	32.20	0.36	0.33	
9	16.928	34.05	-25.95	60.00	33.20	0.54	0.31	
10	22.775	38.71	-21.29	60.00	37.60	0.71	0.40	

11. Radiated Emissions Test Setup Photos

< FRONT VIEW >

< REAR VIEW >

12. Radiated Emissions Test Data

Model No. : DM-001
Frequency range : 30MHz to 1GHz Detector : Quasi-Peak Value
Frequency range : above 1GHz Detector : Quasi-Peak/Average Value
Temperature : 24° C Humidity : 53 %
Memo : TX ON MODE

Antenna polarization : HORIZONTAL ; Test distance : 3m ;

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
27.050	36.42	-43.58	80.00	34.07	21.73	0.62	20.00	105.0	4.0
53.480	22.51	- 7.49	30.00	32.89	8.34	1.46	20.18	114.0	4.0
77.240	24.62	- 5.38	30.00	36.26	6.62	1.76	20.02	189.0	4.0
189.430	21.62	- 8.38	30.00	28.43	10.24	2.76	19.81	228.0	3.6
226.020	19.05	-10.95	30.00	24.20	11.82	3.06	20.03	242.0	3.1
649.300	28.38	- 8.62	37.00	18.78	23.55	6.12	20.07	256.0	1.0
699.000	30.36	- 6.64	37.00	20.03	24.08	6.25	20.00	183.0	1.0

Note :

1. Level = Read Level + Probe Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

Model No. : DM-001
Frequency range : 30MHz to 1GHz Detector : Quasi-Peak Value
Frequency range : above 1GHz Detector : Quasi-Peak/Average Value
Temperature : 24° C Humidity : 53 %
Memo : TX ON MODE

Antenna polarization : VERTICAL ; Test distance : 3m ;

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
27.050	37.58	-42.42	80.00	35.23	21.73	0.62	20.00	105.0	4.0
53.460	19.26	-10.74	30.00	29.64	8.34	1.46	20.18	131.0	1.0
84.810	24.76	- 5.24	30.00	35.97	6.94	1.82	19.97	195.0	1.0
121.260	18.13	-11.87	30.00	27.86	7.89	2.20	19.82	216.0	1.1
207.910	18.38	-11.62	30.00	24.25	11.06	2.96	19.89	204.0	1.6
699.700	30.51	- 6.49	37.00	20.15	24.10	6.26	20.00	163.0	4.0
824.350	30.64	- 6.36	37.00	19.13	24.38	6.63	19.50	179.0	4.0

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

Model No. : DM-001
Frequency range : 30MHz to 1GHz Detector : Quasi-Peak Value
Frequency range : above 1GHz Detector : Quasi-Peak/Average Value
Temperature : 24° C Humidity : 53 %
Memo : TX OFF MODE

Antenna polarization : HORIZONTAL ; Test distance : 3m ;

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
68.614	18.64	-11.36	30.00	30.14	6.90	1.68	20.08	122.0	4.0
115.057	16.98	-13.02	30.00	26.17	8.55	2.08	19.82	160.0	4.0
130.176	18.75	-11.25	30.00	28.31	7.97	2.30	19.83	235.0	3.7
154.745	19.88	-10.12	30.00	27.49	9.68	2.54	19.83	143.0	3.6
295.681	20.63	-16.37	37.00	22.75	14.61	3.49	20.22	197.0	2.4
499.986	28.41	- 8.59	37.00	23.42	20.10	5.14	20.25	281.0	1.0

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

Model No. : DM-001
Frequency range : 30MHz to 1GHz Detector : Quasi-Peak Value
Frequency range : above 1GHz Detector : Quasi-Peak/Average Value
Temperature : 24° C Humidity : 53 %
Memo : TX OFF MODE

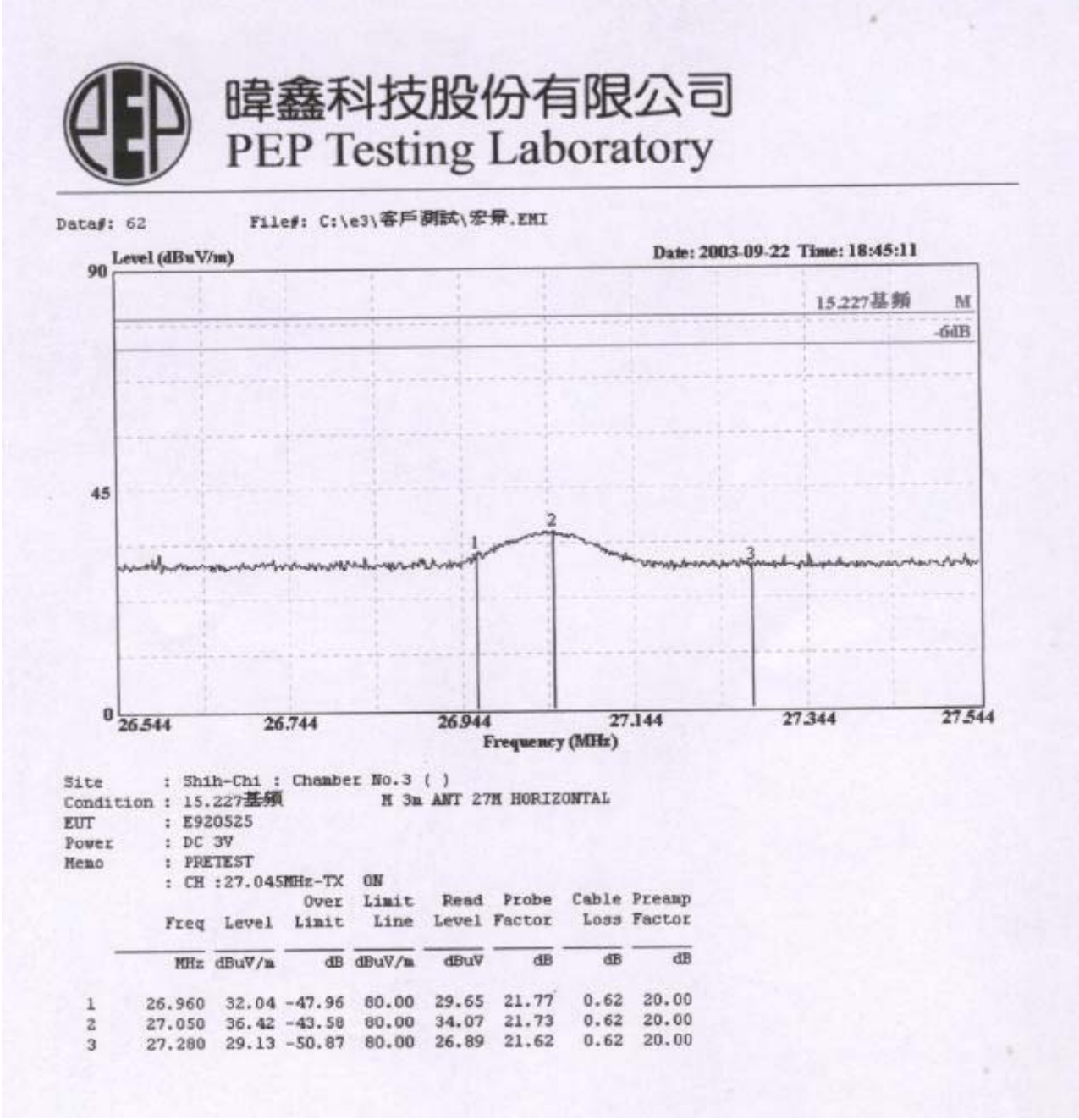
Antenna polarization : VERTICAL ; Test distance : 3m ;

Freq. (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Azimuth (°angle)	Antenna High(m)
36.885	25.67	- 4.33	30.00	28.72	15.95	1.29	20.29	128.0	1.0
68.615	22.05	- 7.95	30.00	33.55	6.90	1.68	20.08	121.0	1.0
130.950	21.78	- 8.22	30.00	31.25	8.05	2.31	19.83	249.0	1.2
159.330	19.21	-10.79	30.00	26.80	9.66	2.58	19.83	253.0	1.4
209.021	14.53	-15.47	30.00	20.38	11.09	2.96	19.90	202.0	1.7
240.060	13.63	-23.37	37.00	18.13	12.41	3.20	20.11	119.0	2.1

Note :

1. Level = Read Level + Antenna Factor + Cable Loss – Preamp Factor
2. Over Limit = Level – Limit Line

13. Occupied Bandwidth Plot Data

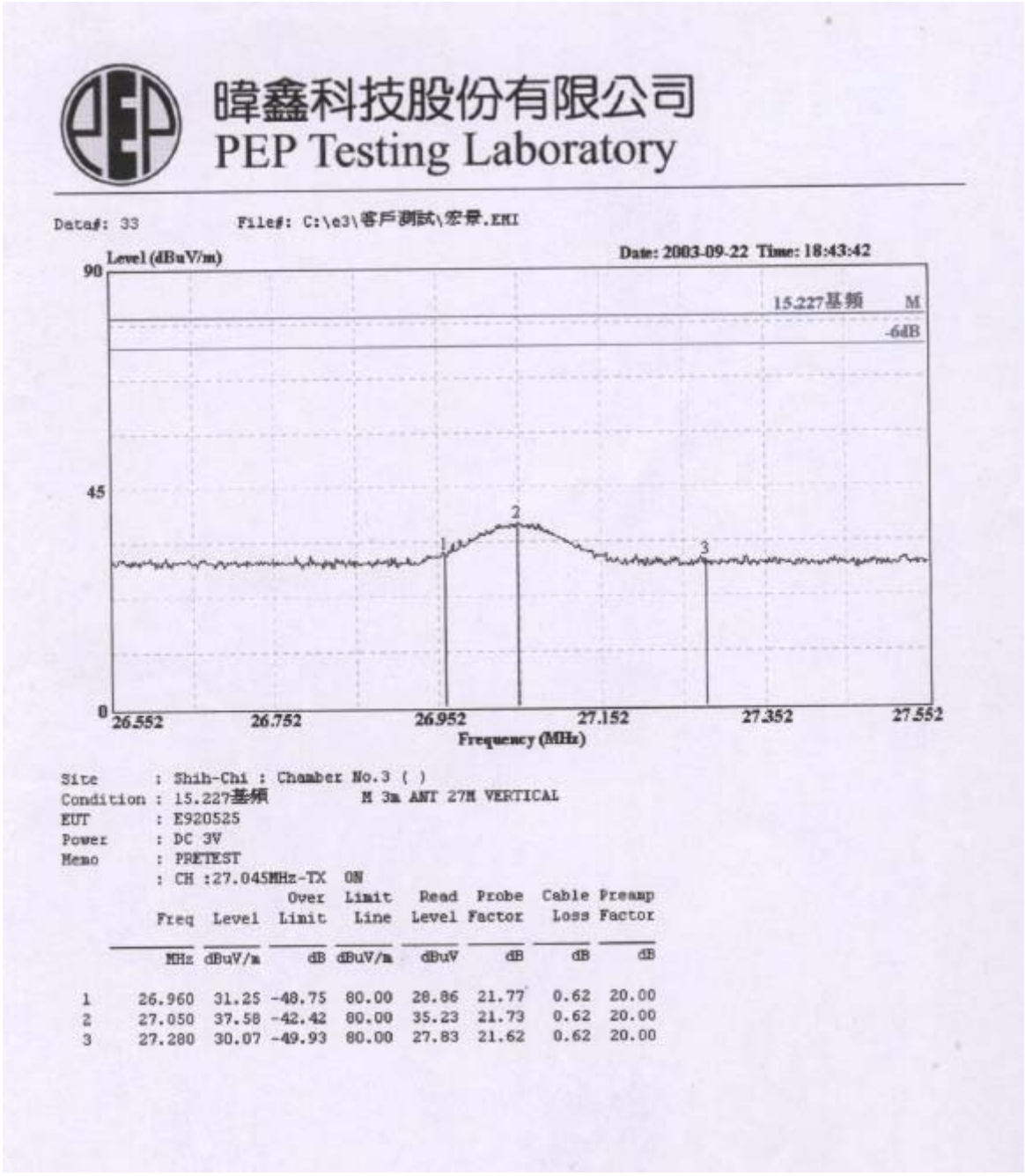


Site : Shih-Chi : Chamber No.3 ( )
Condition : 15.227基頻 H 3m ANT 27M HORIZONTAL
EUT : E920525
Power : DC 3V
Memo : PRETEST
: CH :27.045MHz-TX ON

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB
1	26.960	32.04	-47.96	80.00	29.65	21.77	0.62	20.00
2	27.050	36.42	-43.58	80.00	34.07	21.73	0.62	20.00
3	27.280	29.13	-50.87	80.00	26.89	21.62	0.62	20.00

RBW = 120 KHz

VBW = 300 KHz



	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB
1	26.960	31.25	-48.75	80.00	20.86	21.77	0.62	20.00
2	27.050	37.58	-42.42	80.00	35.23	21.73	0.62	20.00
3	27.280	30.07	-49.93	80.00	27.83	21.62	0.62	20.00

RBW = 120 KHz

VBW = 300 KHz

14. List of Measured Instruments

Test Mode	Instrument	Model No.	Serial No.	Next Cal. Date	Cal. Interval
Conduction (No.1)	R & S Receiver	ESHS10	830223/008	May 22, 2004	1Year
	Rolf Heine LISN	NNB-4/63TL	98008	May 01, 2004	1Year
	R & S LISN	ESH3-Z5	844982/039	Aug. 06, 2004	1Year
	Spectrum Analyzer	R3261A	91720076	June 08, 2004	1Year
	RF Cable	Rg400	N/A	May 12, 2004	1Year
	Schaffner ISN	T411	N/A	June 29, 2004	1Year
Radiation (OP No.1)	R & S Receiver	ESVS30	863342/012	May 22, 2004	1Year
	Schaffner Pre-amplifier	CPA9232	1028	May 20, 2004	1Year
	COM-Power Horn Ant.	AH-118 (1GHz~18GHz)	10095	May 21, 2004	2Year
	Schwarzbeck Precision Dipole Ant	VHAP (30MHz~1GHz)	970 + 971 953 + 954	June 26, 2006	3Year
	R &S Signal Generator	SMY01	841104/037	Apr. 29, 2005	2Year
	RF Cable	No. 1	N/A	May 11, 2004	1Year
	EMCO Antenna	3142B (26MHz~2GHz)	9904-1370	Aug. 24, 2004	1Year

15. Duties of The Responsible Party

The responsible party upon signing or accepting the Declaration of Conformity as specified in Section 2.906 of the FCC Rules hereby agrees to the duties listed below.

§2.1073(a).
The responsible party warrants that each unit of equipment marketed under DoC is identical to the unit tested and found acceptable with the standards and that the records maintained by the responsible party continue to reflect the equipment being produced is within the variation that can be expected due to quantity production and testing on a statistical bass.

§2.1073(b).
The responsible party must have a written statement from the manufacturer or accredited test laboratory that the equipment complies with the appropriate technical standards.

§2.1073(c).
In case of transfer of control of equipment, as in the case of sale or merger, the new responsible party shall bear the responsibility of continued compliance of the equipment.

§2.1073(d).
Equipment shall be retested if any modifications or changes are made that could adversely affect the emanation characteristics of the equipment.

§2.1073(e).
If any modifications or changes made by anyone other than the responsible party, the party making the modifications of changes, if located within the U.S., becomes the new responsible part. The new responsible party must comply with all provisions for the DoC, including having test data on file demonstrating that the product continues to comply with all of the applicable technical standards.

§2.1075(a)(1).
The responsible party shall maintain records of the original design drawings and specifications and all changes made to the product that may affect compliance.

§2.1075(a)(2).
The responsible party shall maintain records of the procedures used for production inspection and testing to insure the conformance with the FCC Rules.

§2.946(a)(1).
The test report data shall be provided to the FCC within 14 days of delivery of request. The test sample(s) shall be provided within 60 days of delivery of request.

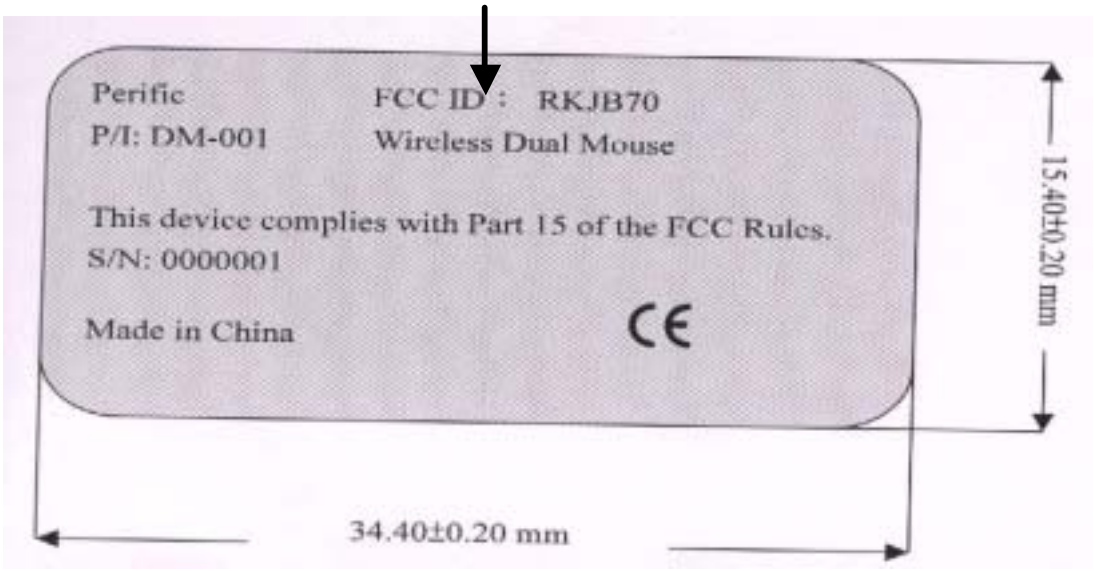
§2.946(b)
In case involving harmful interference or safety of life or property, the production sample must be provided within 60 days, but not less than 14 days. Failure to comply with such a request with the time frame shown may be cause for forfeiture, pursuant to Section 1.80 of Part 1 of the FCC Rules.

**The Responsible Party is the manufacturer, system integrator, or the importer as defined in Section 2.909 of the FCC Rules. The Rules. The Responsible Party for a DoC must be located within the United States as specified in Section 2.1077.*

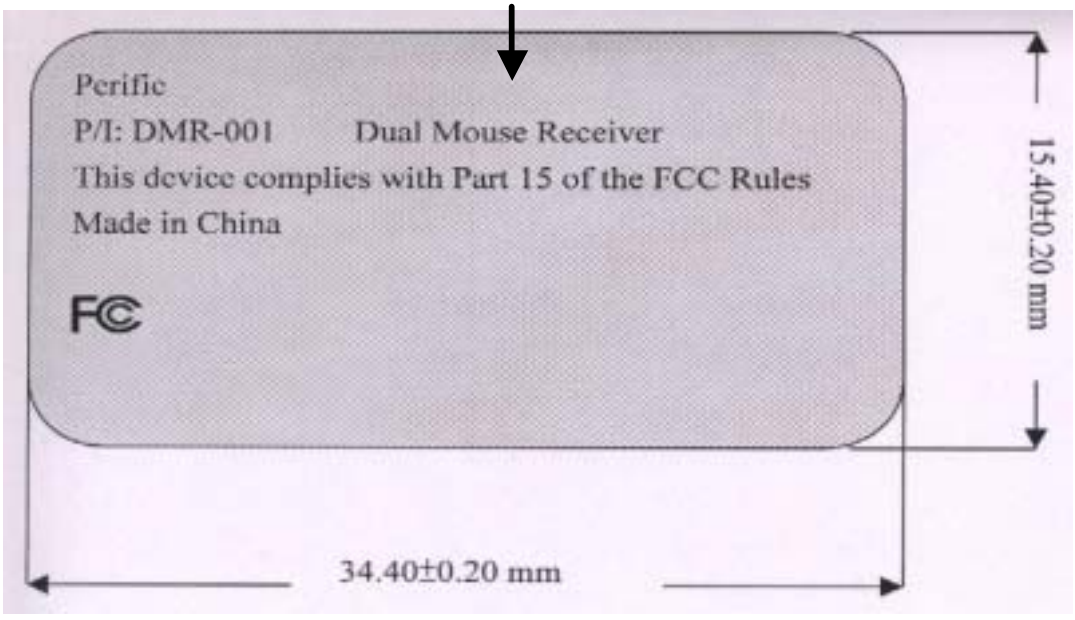
16. FCC ID Label Sample

The sample label shown below shall be permanently affixed at a conspicuous location on the device, instruction manual or pamphlet supplied to the user and be readily visible to the purchaser at the time of purchase. However, when the device is so small wherein placement of the label with specified statement is not practicable, only the trade name, model number, and the FCC logo must be displayed on the device per Section §15.19 (b)(2).

EUT Label A



EUT Label B



17. Information To The User

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver .
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected .
- Consult the dealer or an experienced radio / TV technician for help .

18. EUT External Photos

PHOTO. 1. **EUT (TX + RX) TOP VIEW**

PHOTO. 2. **EUT (TX) FRONT VIEW**

PHOTO. 3. **EUT (TX) BOTTOM VIEW**

19. EUT Internal Photos

PHOTO. 4. EUT (TX) INSIDE VIEW

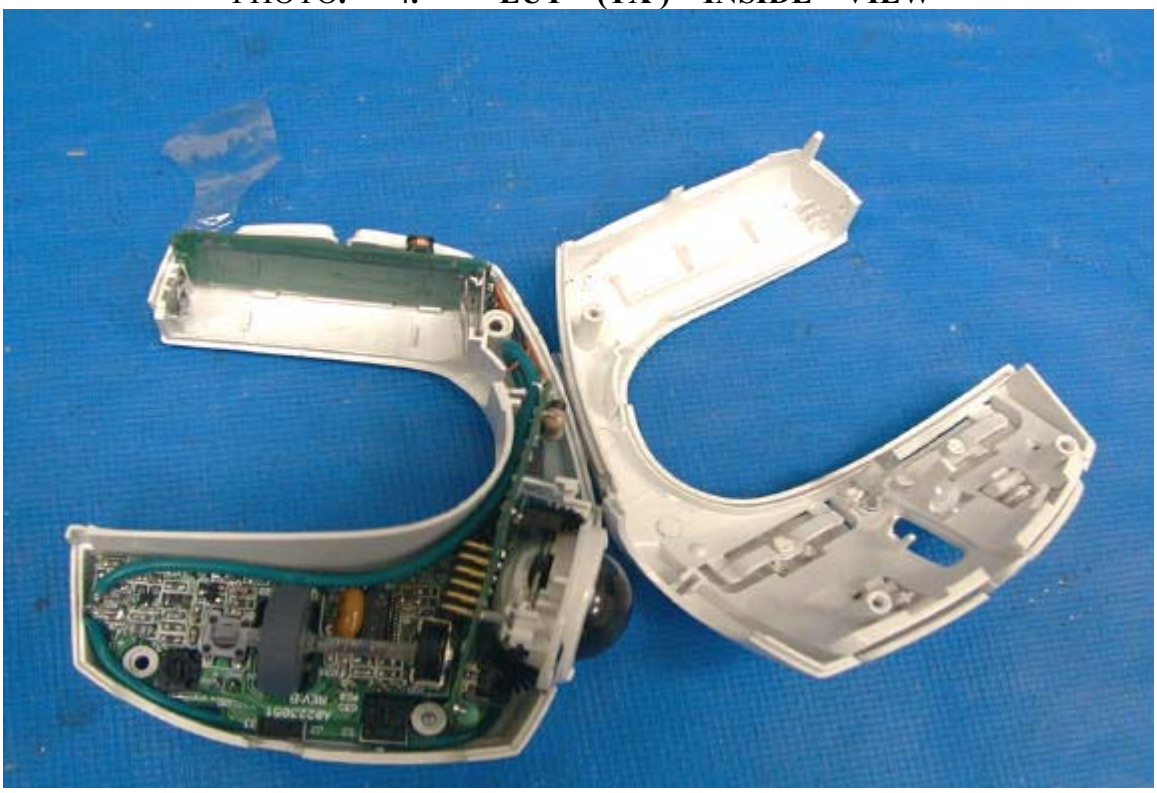


PHOTO. 5. EUT (TX) COMPONENT SIDE VIEW

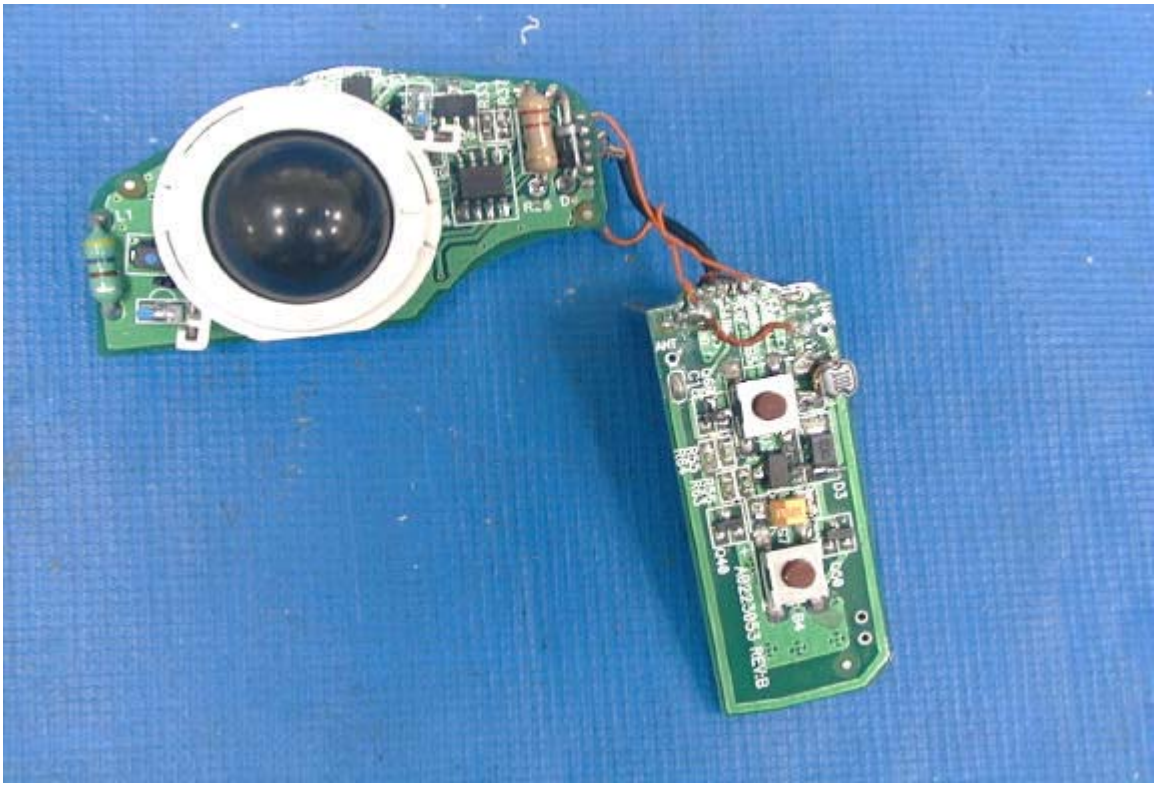


PHOTO. 6. **EUT (TX) SOLDERING SIDE VIEW**

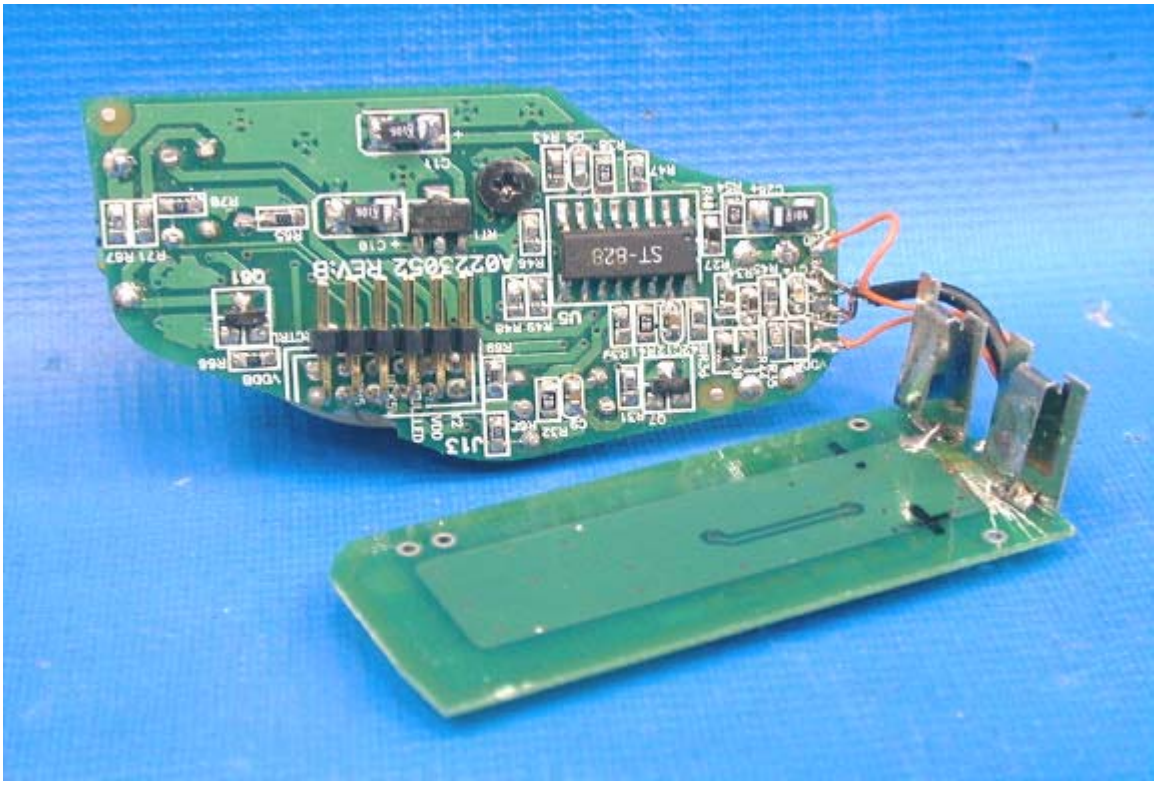


PHOTO. 7. **EUT (TX) COMPONENT SIDE VIEW**

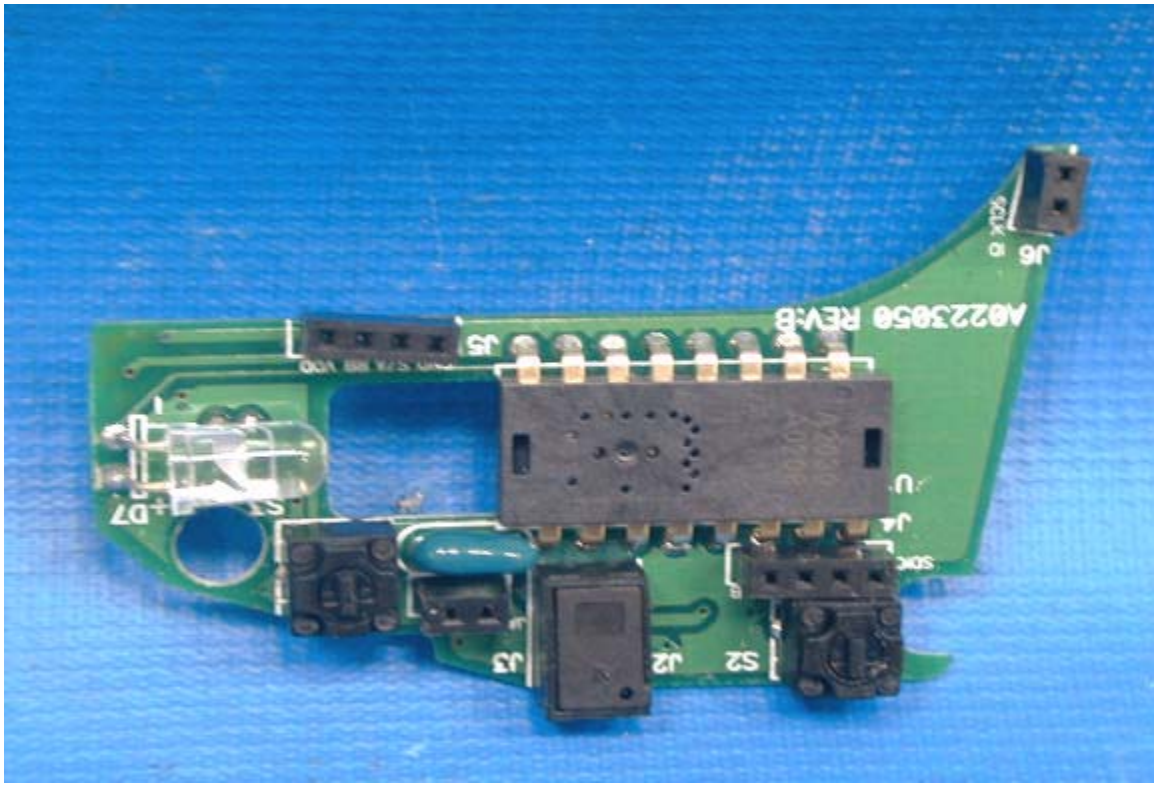


PHOTO. 8. **EUT (TX) SOLDERING SIDE VIEW**

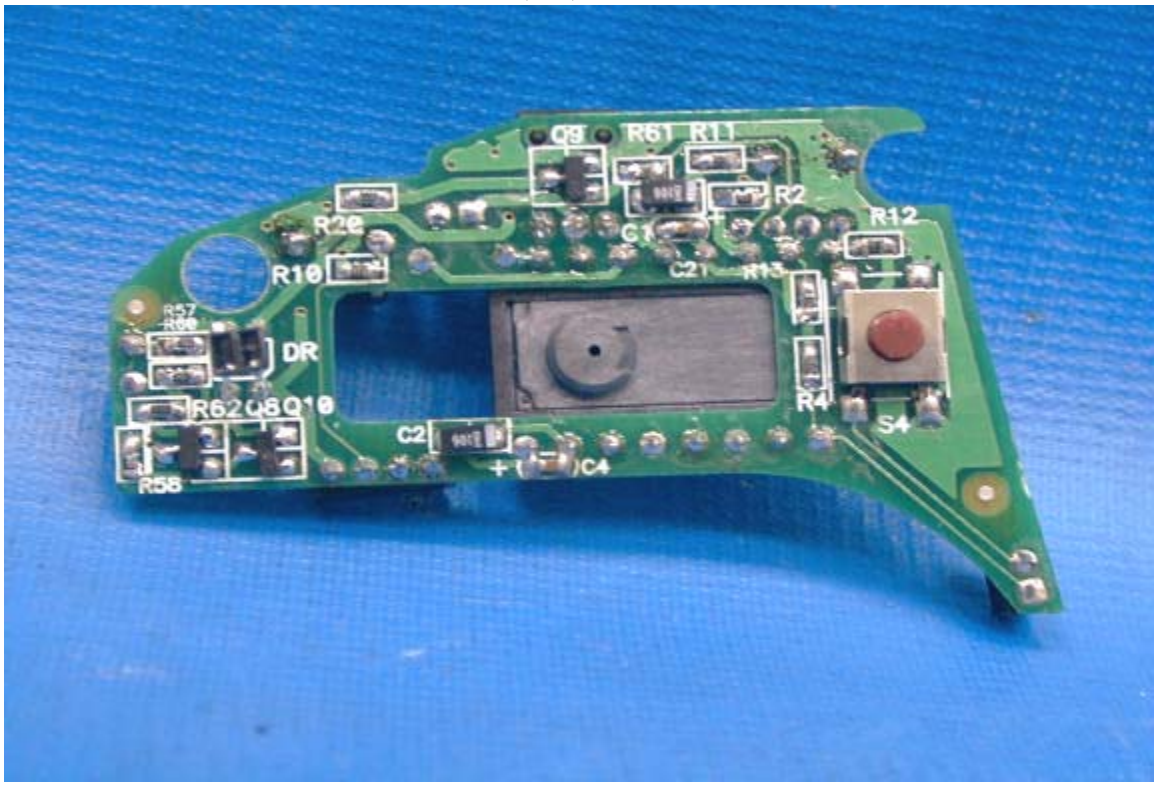


PHOTO. 9. **EUT (TX) COMPONENT SIDE VIEW**

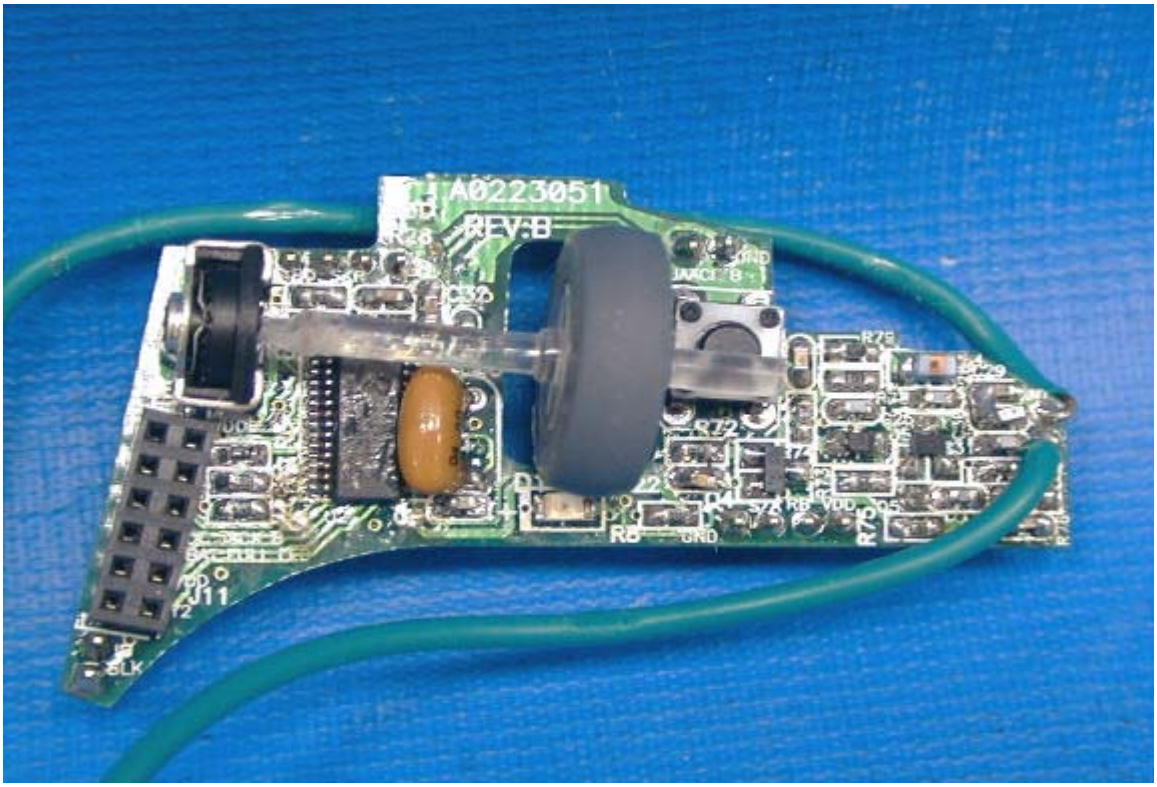


PHOTO. 10. **EUT (TX) SOLDERING SIDE VIEW**