

TCB

GRANT OF EQUIPMENT  
AUTHORIZATION

TCB

Certification  
Issued Under the Authority of the  
Federal Communications Commission  
By:

Timco Engineering, Inc.  
849 NW State Road 45  
P.O. Box 370,  
Newberry, FL 32669

Date of Grant: 08/01/2006

Application Dated: 08/01/2006

Shanghai Simcom Ltd.  
yaqin.lan@morlab.com  
xing.chen@sim.comP.O. Box 200233,  
Shanghai, 200233  
China

Attention: xing chen , Operation monitoring Manager

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is  
VALID ONLY for the equipment identified hereon for use under the Commission's  
Rules and Regulations listed below.

FCC IDENTIFIER: UDV-0606020060002

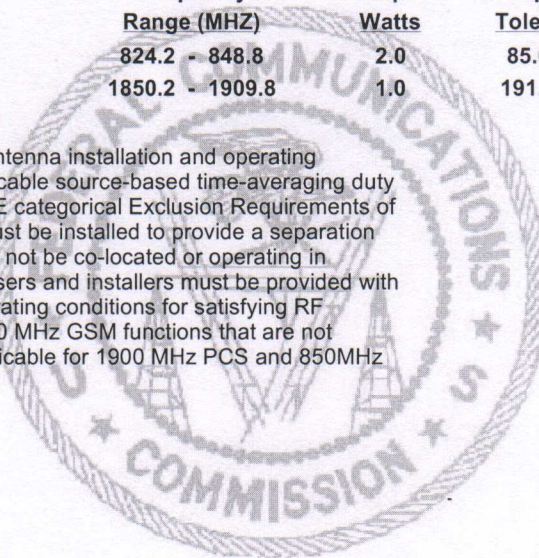
Name of Grantee: Shanghai Simcom Ltd.

Equipment Class: PCS Licensed Transmitter

Notes: GSM/GPRS QUAD-BAND MODULE

Grant Notes	FCC Rule Parts	Frequency	Output	Frequency	Emission
		Range (MHZ)	Watts	Tolerance	Designator
	22H	824.2 - 848.8	2.0	85.0 Hz	200KGXW
	24E	1850.2 - 1909.8	1.0	191.0 Hz	200KGXW

Power listed is conducted. Modular Approval. The antenna installation and operating configurations of this transmitter, including any applicable source-based time-averaging duty factor, antenna gain and cable loss must satisfy MPE categorical Exclusion Requirements of §2.1091. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance. This device contains 900/1800 MHz GSM functions that are not operational in U.S. Territories. This filing is only applicable for 1900 MHz PCS and 850MHz Cellular operations.





**Wonde Proud Technology Co , Ltd.**

21F., NO. 100 , Sec. 1, Sintai 5<sup>th</sup> Rd., Sijhih City , Taipei County , Taiwan , R. O. C.

Federal Communications Commission  
Authorization and Evaluation Division

Confidentiality Request

**FCC ID : SRKWSP100**

Pursuant to Sections 0.457 and 0.459 of the Commission's Rules , the Applicant hereby Requests confidential treatment of information accompanying this Application as outlined Below:

- Schematics
- Block Diagram

The above materials contain trade secrets and proprietary information not customarily Released to the public.

The public disclosure of these matters might be harmful to the Applicant and provide unjustified benefits to its competitors.

The Applicant understands that pursuant to Rule 0.457, disclosure of this application and all accompanying documentation will not be made before the date of the Grant for this application.

Sincerely Yours,

*Frank 25/9*

\_\_\_\_\_  
Signer / Title

E-mail:


# FCC DoC TEST REPORT

According to

## FCC Part 15 Subpart B

<b>EUT Name</b>	:	Smart Person Tracking
<b>Model No.</b>	:	SPT100
<b>Applicant</b>	:	WONDE PROUD TECHNOLOGY CO., LTD. 21F, NO. 100, SEC. 1, SHINTAI 5 <sup>TH</sup> RD., SIJHIH CITY, TAIPEI COUNTY 221, TAIWAN, R. O. C.
<b>FCCID</b>	:	SRKWPSPT100

Issued Date : APR. 25, 2007

NVLAP Signature :   
M. Y. Tsui / President

The test report shall not be reproduced except in full, without the written approval of the laboratory.

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 only for item test which described in page 4 .

The testing result in this report are traceable to national and international standard.

## PEP TESTING LABORATORY

NO. 9-6, Huzi, Hubei Village, Linkou Shiang, Taipei Hsien, Taiwan 244, R. O. C.

TEL : 886-2-26021042

TEL : 886-2-26021045

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## 1. Scope

Measurement and determination 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 EUT Docket 95-19 Declaration of Conformity(DoC).

<b>Responsible Party*:</b>	WONDE PROUD TECHNOLOGY CO., LTD.
<b>Address:</b>	21F, NO. 100, SEC. 1, SHINTAI 5 <sup>TH</sup> RD., SIJHIH CITY, TAIPEI COUNTY 221, TAIWAN, R. O. C.
<b>Contact Person:</b>	FRANK LEE / RF ENGINEER
<b>Phone No.:</b>	886-2-26968498
<b>Fax No.:</b>	886-2-26968499

- ✧ Regulation: FCC Part 15 & Part 2; Docket 95-19
- ✧ Limitation: CISPR 22 CLASS B
- ✧ Test Procedure: ANSI C63.4(2003)
- ✧ Test Item: Smart Person Tracking
- ✧ Model No.: SPT100
- ✧ Serial No.: N/A
- ✧ Place of Test: PEP Testing Laboratory  
NO. 9-6, Huzi, Hubei Village, Linkou Shiang, Taipei Hsien,  
Taiwan 244, R. O. C.  
TEL : 886-2-26021042 FAX : 886-2-26021045

### Measurement Uncertainty :

The uncertainty of the testing result is given as below. The method of uncertainty Calculation is provided in PEP Testing Lab document No. QP-T-28-B & QP-T-27-B

Frequency ( MHz )	0.15 ~ 30	30 ~ 1000
Expanded Uncertainty $\mu_c$	1.4 (dB)	2.84 (dB)

95% Confidence Level; K=2

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## 2. Product Information

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<b>a. EUT Name:</b>	Smart Person Tracking
<b>b. Model No. :</b>	SPT100
<b>c. CPU Type :</b>	N/A
<b>d. CPU Frequency :</b>	N/A
<b>e. Crystal/Oscillator(s) :</b>	32.768 kHz, 12 MHz
<b>f. Chassis Used :</b>	ABS
<b>g. Port/Connector(s) :</b>	Mini USB Port * 1
<b>h. Power Rating :</b>	(1) Adapter ----- Manufacturer : DVE Model Number : DSA-0051-05C FUS 53050F Input : AC 110-240V 50-60Hz Output : DC 5.3V (2) DC 3.7V ----- From Battery
<b>i. Condition of the EUT :</b>	Prototype Sample ✓ Engineering Sample Production Sample
<b>j. Test Item Receipt Date :</b>	MAR. 27, 2007
<b>k. Date(s) of performance of test:</b>	MAR. 27, 2007 – APR. 03, 2007



### **3. EUT Description and Test Conclusion/ Modification(s):/ Test Software Used**

The equipment under test (EUT) is Smart Person Tracking, FCC ID:SRKWPSPT100 . The EUT is designed for the applications such as car or personal navigation purpose. The working frequencies for EUT transmitter and receiver functions are 850MHz, 900MHz, 1800MHz and 1900MHz . 3.7V lithium battery or via USB interface is required to operate EUT. For more detail specification about EUT, please refer to the user's manual.

The EUT was incorporated by RF module , FCC ID: UDV-0606020060002 , date of grant: 08/01/2006 , issued by Timco Engineering , Inc.

Test method: According to the major function designed, the EUT function were set to proceed with test. The test was respectively carried out on EUT operational condition and the worst-case test result was recorded and provided in this report.

Conducted emission test:

The system was setup with the EMI diagnostic software running. The power line conducted EMI tests were run on the line and neutral conductors of the power cord and the results were recorded. The effect of varying the position of the interface cables has been investigated to find the worst-case configuration that produces maximum emission.

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.

Radiated emission test:

The maximum readings were found by varying the height of antenna and then rotating the turntable. Both polarization of antenna, horizontal and vertical, are measured. The effect of varying the position of the interface cables has been investigated to find the configuration that produces maximum emission.

The highest emissions were also analyzed in details by operating the spectrum analyzer in fixed tuned quasi-peak mode to determine the precise amplitude of the emissions.

#### **Modification(s):**

N/A

#### **Test Software Used**

- (A) Hyper Terminal program was the software use to operate EUT function during the test.
- (B) EMCTEST program that sends signal to every devices and continuously showing "H" pattern on monitor was used as the software.

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## 4. Support Equipment Used

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<b>Personal Computer (PC4)</b>	<b>CPU</b> : Intel P4 3GHz <b>FCC ID</b> : Declaration of Conformity(DoC) <b>Manufacturer</b> : ACER <b>Model Number</b> : Aspire T650 <b>Power Supply</b> : Switching <b>Power Cord</b> : Non-Shielded, Detachable, 1.8m <b>Data Cable</b> : N/A
<b>Keyboard (KBS1 PS/2)</b>	<b>FCC ID</b> : E5XKB5121WTH0110 <b>Manufacturer</b> : BTC <b>Model Number</b> : 5121W <b>Power Supply</b> : +5Vdc from PS2 of PC <b>Power Cord</b> : N/A <b>Data Cable</b> : 1 > Shielded , Non-detachable,1.6m 2 > Back Shell : Metal
<b>LCD (LCD1 15")</b>	<b>FCC ID</b> : Declaration of Conformity(DoC) <b>Manufacturer</b> : MiTAC <b>Model Number</b> : LC51 <b>Power Supply</b> : Switching <b>Power Cord</b> : Non-Shielded, Detachable, 1.8m <b>Data Cable</b> : 1 > Shielded , Detachable,1.2m 2 > Back Shell : Metal
<b>Printer (PRN1)</b>	<b>FCC ID</b> : B94C2642X <b>Manufacturer</b> : Hewlett-Packard <b>Model Number</b> : C2642E <b>Power Supply</b> : Linear, 30Vdc O/P <b>Power Cable</b> : Non-Shielded , Detachable,1.8m <b>Data Cable</b> : 1 > Shielded , Detachable,1.2m 2 > Back Shell : Metal
<b>Mouse (MOUS/1 PS/2)</b>	<b>FCC ID</b> : DZL211106 <b>Manufacturer</b> : LOGITECH <b>Model Number</b> : M-S43 <b>Power Supply</b> : +5Vdc from PS2 of PC <b>Power Cord</b> : N/A <b>Data Cable</b> : 1 > Shielded , Non-detachable,1.8m 2 > Back Shell : Metal



<b>Modem (MOD1)</b>	<b>FCC ID</b> : IFAXDM1414 <b>Manufacturer</b> : ACEEX <b>Model Number</b> : 1414 <b>Power Supply</b> : Linear, 9Vac O/P <b>Power Cable</b> : Non-Shielded , Detachable,1.7m <b>Data Cable</b> : 1 > Shielded , Detachable,1m 2 > Back Shell : Metal

## 7. Description of Conducted Emissions Test

### 7.1 Conducted Emissions

A 1m x1.5m wooden table 80 cm high is placed 40cm away from the vertical wall. Two AMN are bonded to the grounding plane. The EUT is powered from the designated AMN and the support equipment is powered from another designated AMN. Powers to the AMN are filtered by a high-current high insertion loss power line filters. All electrical cables are shielded by braided tinned copper zipper tubing with inner diameter of 1/2". All interconnecting cables more than 1 meter were shortened by non-inductive bundling (serpentine fashion) to a 1-meter length.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the AMN was connected to the spectrum analyzer to determine the frequency producing the maximum EME from the EUT.

The spectrum was scanned from 150kHz to 30 MHz with 1.5 sec sweep time. The frequency producing the maximum level was re-examined using Quasi-Peak adapter. The detector function was set to CISPR quasi-peak mode. The bandwidth of the receiver was set to 10kHz. The EUT, support equipment, and interconnecting cables were re-arranged and manipulated to maximize each EME emission. Each emission was maximized by: switching power lines; varying the 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; whichever determined the worst-case emission.

### 7.2 Conducted Emissions Limits

Frequency	Maximum RF Line Voltage dB(uV)			
	Class A		Class B	
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 : In the above table, the tighter limit applies at the band edges.

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## 8. Description of Radiated Emissions Test

### 8.1 Radiated Emissions

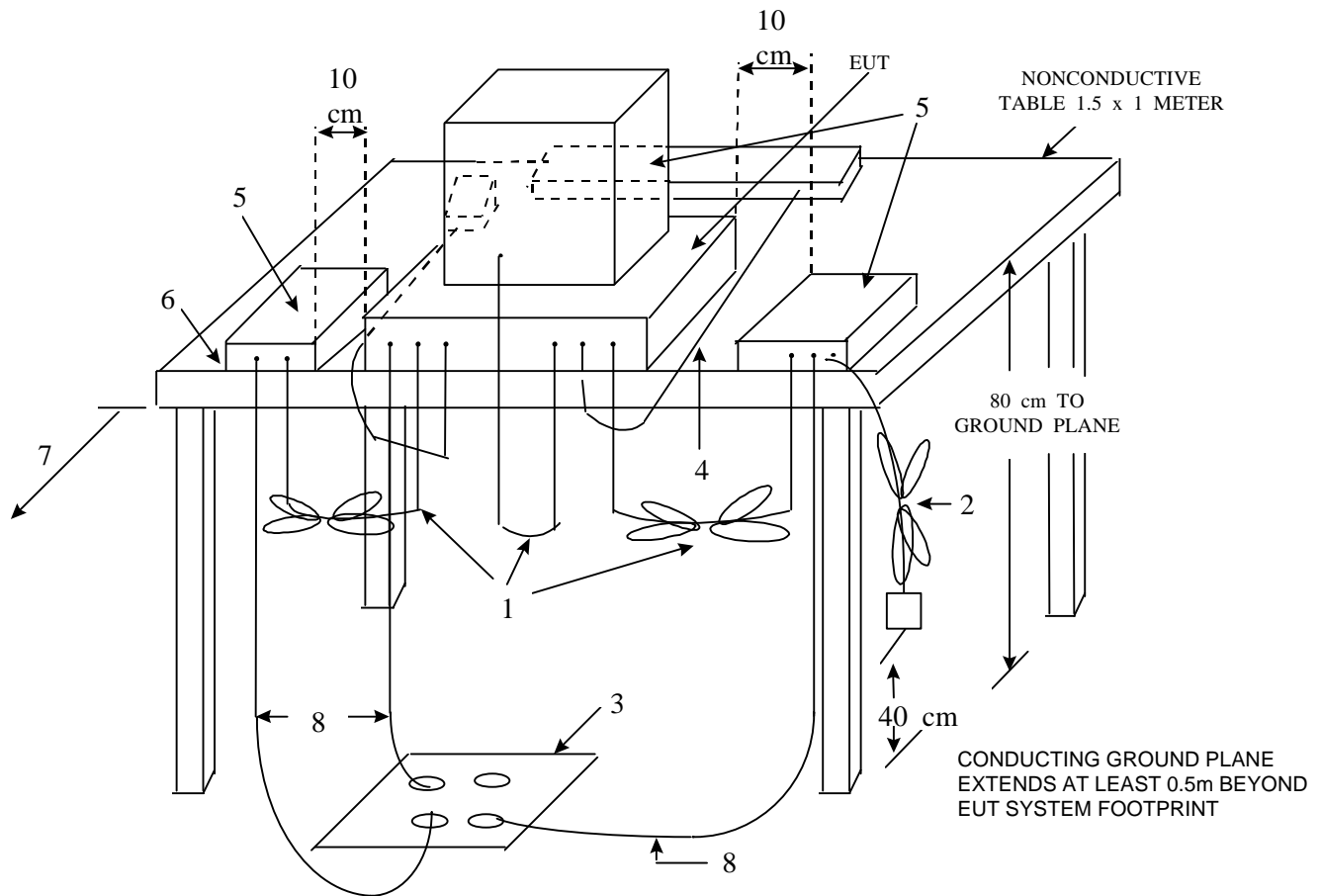
Preliminary measurements were made indoors chamber at 3 meter using broadband antennas, broadband amplifier, and spectrum analyzer to determine the frequency producing the maximum EME. Appropriate precaution was taken to ensure that all EME from the EUT were maximized and investigated. The system configuration, 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 10-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 shall be bundled in center. The end of the cable may be 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 A ITE at  
a measuring distance of 10 m

Frequency MHz	Field Strength dB( $\mu$ V/m)
30 to 230	40
230 to 1 000	47
<b>NOTES</b> 1 The lower limit shall apply at the transition frequency. 2 Additional provisions may be required for cases where interference occurs.	

Limits for radiated disturbance of Class B ITE at  
a measuring distance of 10 m

Frequency MHz	Field Strength dB( $\mu$ V/m)
30 to 230	30
230 to 1 000	37
<b>NOTES</b> 1. The lower limit shall apply at the transition frequency. 2. Additional provisions may be required for cases where interference occurs.	

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## 9. Conducted Emissions Test Setup Photo

### USB Transmitter Mode

\* FRONT VIEW \*



## Adapter Charge Mode

**\* FRONT VIEW \***



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## 10. Conducted Emissions Test Data

Model No. :	SPT100
Frequency range:	150kHz to 30MHz
Detector:	Quasi-peak Value
Temperature:	20
Humidity:	65 %
Memo	: USB Transmitter Mode

Test Data :	# <u>118</u>	< LINE >
	# <u>113</u>	<NEUTRAL>

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

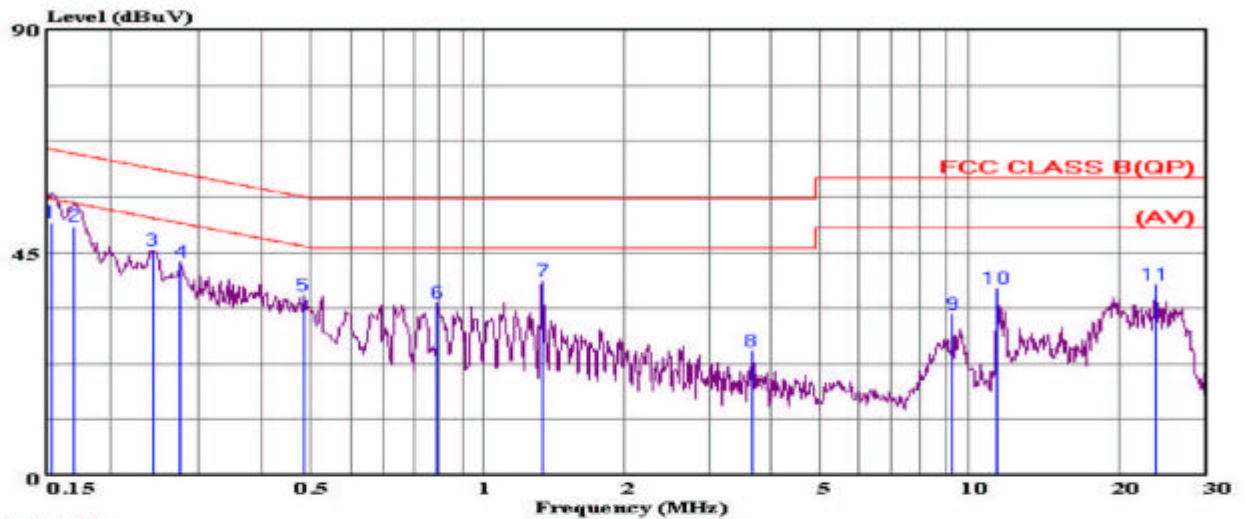




暉鑫科技股份有限公司  
PEP Testing Laboratory

Data#: 118 File#: FCC CLASS B(QP).EMI

Date: 2007-03-29 Time: 17:02:30



Trace: 117

Site : Shih-Chi : Conduction No.1(Dennis)  
Condition: FCC CLASS B(QP) LISN.L(16A) 2006 LINE  
eut : E960082  
power : AC 120V 60Hz  
memo : Peak Value  
memo : Final Test  
memo : SPT100  
memo : transmitter mode

Page: 1

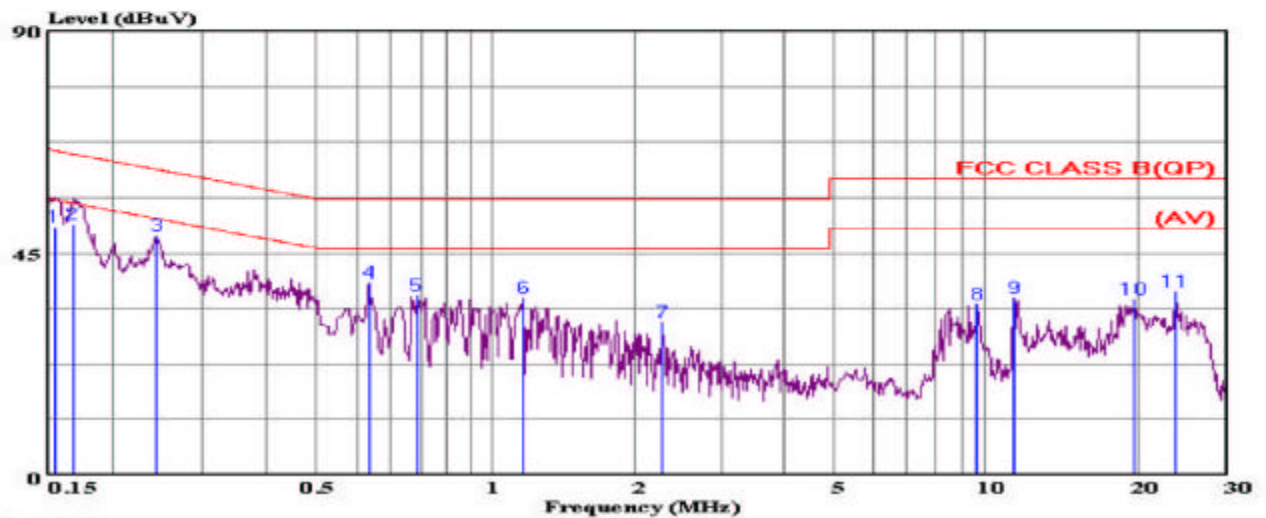
	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.152	50.96	-14.91	65.87	50.76	0.10	0.10	QP
2	0.169	50.22	-14.77	64.99	50.02	0.10	0.10	QP
3	0.243	45.52	-16.48	62.00	45.23	0.10	0.19	
4	0.276	43.16	-17.78	60.94	42.91	0.10	0.15	
5	0.484	36.28	-19.99	56.27	36.01	0.10	0.17	
6	0.890	34.84	-21.16	56.00	34.55	0.10	0.19	
7	1.441	39.26	-16.74	56.00	38.91	0.15	0.20	
8	3.759	25.09	-30.91	56.00	24.61	0.20	0.28	
9	9.401	32.55	-27.45	60.00	31.87	0.38	0.30	
10	11.498	37.70	-22.30	60.00	36.85	0.50	0.35	
11	23.762	38.55	-21.45	60.00	37.38	0.77	0.40	



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PEP Testing Laboratory

Data#: 113 File#: FCC CLASS B(QP).EMI

Date: 2007-03-29 Time: 17:00:22



Trace: 112

Site : Shih-Chi : Conduction No.1(Dennis)  
Condition: FCC CLASS B(QP) LISN.N(16A) 2006 NEUTRAL  
eut : E960082  
power : AC 120V 60Hz  
memo : Peak Value  
memo : Final Test  
memo : SPT100  
memo : transmitter mode

Page: 1

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.154	50.27	-15.51	65.78	50.07	0.10	0.10	QP
2	0.168	50.86	-14.22	65.08	50.66	0.10	0.10	QP
3	0.244	48.48	-13.47	61.95	48.19	0.10	0.19	
4	0.634	39.07	-16.93	56.00	38.87	0.10	0.10	
5	0.783	36.31	-19.69	56.00	36.11	0.10	0.10	
6	1.269	35.91	-20.09	56.00	35.61	0.10	0.20	
7	2.371	31.03	-24.97	56.00	30.71	0.12	0.20	
8	9.757	34.65	-25.35	60.00	34.05	0.30	0.30	
9	11.498	35.93	-24.07	60.00	35.25	0.33	0.35	
10	19.740	35.65	-24.35	60.00	34.85	0.40	0.40	
11	23.762	37.19	-22.81	60.00	36.32	0.47	0.40	

<b>Model No. :</b>	<b>SPT100</b>
<b>Frequency range:</b>	<b>150kHz to 30MHz</b>
<b>Detector:</b>	<b>Quasi-peak Value</b>
<b>Temperature:</b>	<b>20</b>
<b>Humidity:</b>	<b>65 %</b>
<b>Memo</b>	<b>: Adapter Charge Mode</b>

<b>Test Data :</b>	<b># <u>103</u></b>	<b>&lt; LINE &gt;</b>
	<b># <u>108</u></b>	<b>&lt;NEUTRAL&gt;</b>

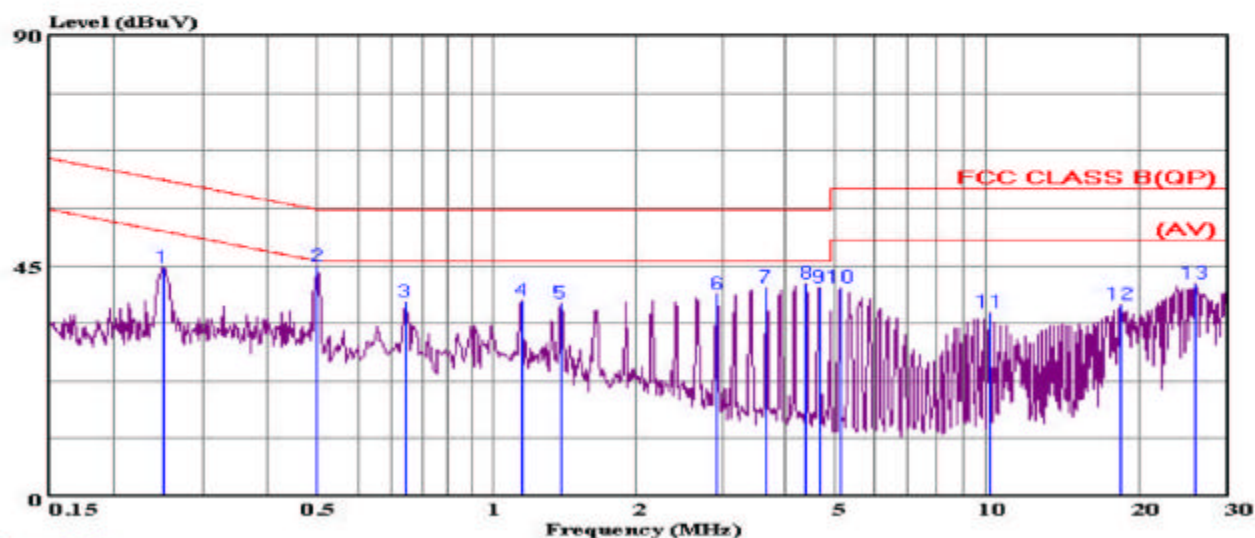
Note 1. Level = Read Level + Probe (LISN) Factor + Cable Loss  
2. Over Limit = Level – Limit Line = Margin



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PEP Testing Laboratory

Data#: 103 File#: FCC CLASS B(QP).EMI

Date: 2007-03-29 Time: 16:12:22



Trace: 102

Site : Shih-Chi : Conduction No.1(Dennis)  
Condition: FCC CLASS B(QP) LISN.L(16A) 2006 LINE  
eut : E960082  
power : AC 120V 60Hz  
memo : Peak Value  
memo : Final Test  
memo : SPT100  
memo : Charge mode

Page: 1

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.249	44.63	-17.15	61.78	44.33	0.10	0.20	
2	0.499	44.93	-11.08	56.01	44.63	0.10	0.20	
3	0.743	37.86	-18.14	56.00	37.66	0.10	0.10	
4	1.249	38.23	-17.77	56.00	37.90	0.13	0.20	
5	1.495	37.77	-18.23	56.00	37.41	0.16	0.20	
6	3.009	39.36	-16.64	56.00	38.96	0.20	0.20	
7	3.759	40.86	-15.14	56.00	40.38	0.20	0.28	
8	4.501	41.60	-14.40	56.00	41.07	0.23	0.30	
9	4.772	40.85	-15.15	56.00	40.31	0.24	0.30	
10	5.249	40.80	-19.20	60.00	40.26	0.26	0.28	
11	10.288	35.98	-24.02	60.00	35.26	0.42	0.30	
12	18.524	37.33	-22.67	60.00	36.27	0.70	0.36	
13	25.864	41.47	-18.53	60.00	40.23	0.80	0.44	

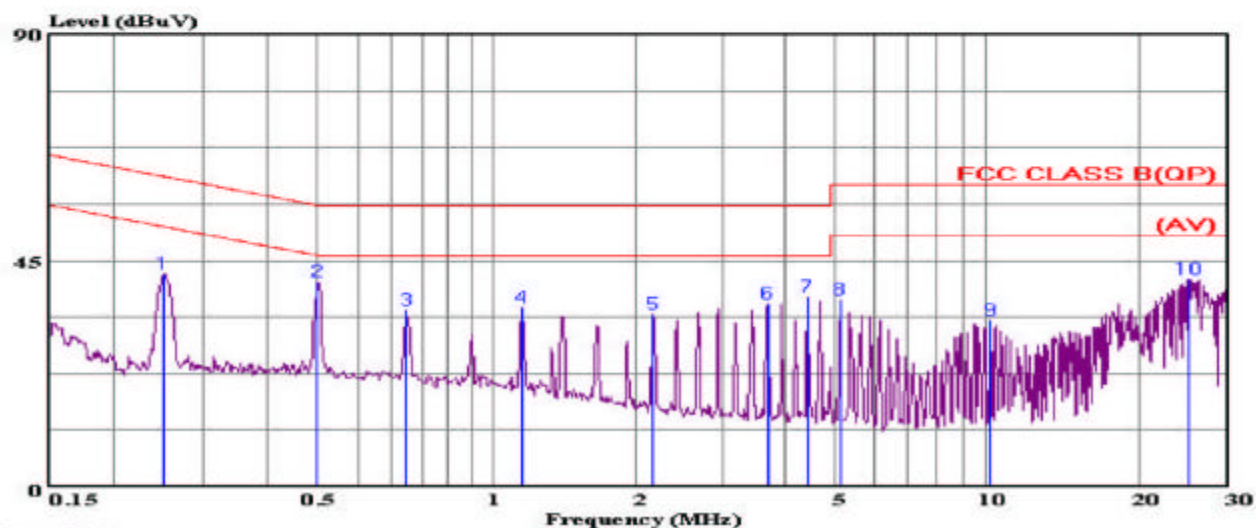




暉鑫科技股份有限公司  
PEP Testing Laboratory

Data#: 108 File#: FCC CLASS B(QP).EMI

Date: 2007-03-29 Time: 16:18:22



Trace: 107

Site : Shih-Chi : Conduction No.1(Dennis)  
Condition: FCC CLASS B(QP) LISN.N(16A) 2006 NEUTRAL  
eut : E960082  
power : AC 120V 60Hz  
memo : Peak Value  
memo : Final Test  
memo : SPT100  
memo : Charge mode

Page: 1

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.249	42.31	-19.47	61.78	42.01	0.10	0.20	
2	0.499	40.81	-15.20	56.01	40.51	0.10	0.20	
3	0.747	35.01	-20.99	56.00	34.81	0.10	0.10	
4	1.249	35.71	-20.29	56.00	35.41	0.10	0.20	
5	2.261	34.19	-21.81	56.00	33.87	0.12	0.20	
6	3.779	36.45	-19.55	56.00	35.98	0.19	0.28	
7	4.525	37.61	-18.39	56.00	37.10	0.21	0.30	
8	5.249	37.11	-22.89	60.00	36.60	0.23	0.28	
9	10.288	33.04	-26.96	60.00	32.43	0.31	0.30	
10	25.188	41.28	-18.72	60.00	40.37	0.50	0.41	

## 11. Radiated Emissions Test Setup Photos

### USB Transmitter Mode

\* FRONT VIEW \*



\* REAR VIEW \*



## Adapter Charge Mode

**\* FRONT VIEW \***



**\* REAR VIEW \***



## 12. Radiated Emissions Test Data

Model No. : SPT100  
 Frequency range : 30MHz to 1GHz      Detector : Quasi-Peak Value  
 Frequency range : above 1GHz      Detector : Quasi-Peak/Average Value  
 Temperature : 20° C      Humidity : 58 %  
 Memo : USB Transmitter Mode

Antenna polarization : HORIZONTAL ; Test distance : 10m ;

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)
191.730	19.70	-10.30	30.00	26.50	11.79	1.80	20.39	400	277
203.664	20.82	- 9.18	30.00	28.59	10.69	1.84	20.30	400	276
233.580	23.51	-13.49	37.00	31.32	10.45	1.94	20.20	400	281
270.300	21.66	-15.34	37.00	27.94	11.52	2.20	20.00	400	268
397.201	25.37	-11.63	37.00	27.98	14.89	2.69	20.19	400	288
531.700	27.31	- 9.69	37.00	26.54	17.31	3.28	19.82	400	273

Antenna polarization : VERTICAL ; Test distance : 10m ;

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)
200.018	20.57	- 9.43	30.00	28.43	10.64	1.80	20.30	100	88
285.366	22.31	-14.69	37.00	27.86	12.10	2.20	19.85	100	89
298.614	29.18	- 7.82	37.00	34.38	12.40	2.20	19.80	100	77
397.252	27.22	- 9.78	37.00	29.83	14.89	2.69	20.19	100	85
500.156	27.23	- 9.77	37.00	27.29	16.75	3.00	19.81	100	93
531.684	25.55	-11.45	37.00	24.78	17.31	3.28	19.82	100	84

Note :

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

**Model No.** : SPT100  
**Frequency range** : 30MHz to 1GHz      **Detector** : Quasi-Peak Value  
**Frequency range** : above 1GHz      **Detector** : Quasi-Peak/Average Value  
**Temperature** : 20° C      **Humidity** : 58 %  
**Memo** : Adapter Charge Mode

**Antenna polarization :** HORIZONTAL ; **Test distance :** 10m ;

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)
113.725	20.91	- 9.09	30.00	29.43	10.80	1.38	20.70	400	82
134.220	22.00	- 8.00	30.00	27.85	13.21	1.50	20.56	400	86
165.579	21.11	- 8.89	30.00	21.49	18.40	1.66	20.44	400	75
173.012	20.84	- 9.16	30.00	24.52	14.99	1.70	20.37	400	78
273.759	21.03	-15.97	37.00	27.11	11.68	2.20	19.96	400	85
500.151	24.35	-12.65	37.00	24.41	16.75	3.00	19.81	400	95

**Antenna polarization :** VERTICAL ; **Test distance :** 10m ;

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)
196.928	20.93	- 9.07	30.00	28.38	11.08	1.80	20.33	100	80
218.776	21.41	- 8.59	30.00	28.93	10.88	1.90	20.30	100	85
231.454	22.79	-14.21	37.00	30.70	10.38	1.91	20.20	100	79
299.503	20.83	-16.17	37.00	26.01	12.42	2.20	19.80	100	91
374.869	22.60	-14.40	37.00	25.70	14.41	2.59	20.10	100	86
399.448	21.25	-15.75	37.00	23.82	14.93	2.70	20.20	100	91

Note :

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

### 13. List of Measured Instruments

Test Mode	Instrument	Model No.	Serial No.	Next Cal. Date	Cal. Interval
<b>Conduction ( No.1)</b>	R & S Receiver	ESHS10	830223/008	May 22, 2007	1Year
	Rolf Heine LISN	NNB-4/63TL	98008	May 01, 2007	1Year
	R & S LISN	ESH3-Z5	844982/039	Aug. 06, 2007	1Year
	Spectrum Analyzer	R3261A	91720076	June 08, 2007	1Year
	RF Cable	Rg400	N/A	May 12, 2007	1Year
	Schaffner ISN	T411	N/A	June 29, 2007	1Year
<b>Radiation (OP No.3)</b>	R & S Receiver	ESBI	845658/003	July 28, 2007	1Year
	Schaffner Pre-Amp.	CPA-9232	1012	Aug. 20, 2007	1Year
	SCJWARZBECL Antenna	VULB9161	D-69250	May 19, 2007	1Year
	COM-Power Horn Ant.	AH-118 (1GHz~18GHz)	10095	May 25, 2007	1Year
	RF Cable	No.2	N/A	Feb. 19, 2007	1Year
	SCHWARZBECK Precision Dipole Ant.	VHAP (30MHz~1GHz)	970+971 953+954	June 26, 2008	3Year
	R & S Signal Generator	SMY01	829846/038	Feb. 16, 2008	2Year



## 14. 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.*

**§.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 basis.

**§.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.

**§.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.

**§.1073(d).**

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

**§.1073(e).**

If any modifications or changes made by anyone other than the responsible party, the party making the modifications or changes, if located within the U.S., becomes the new responsible party. 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.

**§.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.

**§.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.

**§.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.

**§.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.

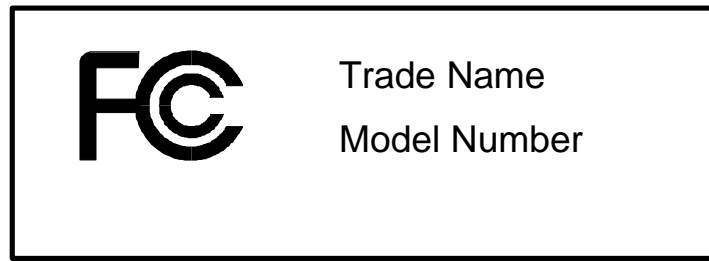
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*\*The Responsible Party is the manufacturer, system integrator, or the importer as defined in Section 2.909 of the FCC Rules. The Rules. The Responsible Party for a DoC must be located within the United States as specified in Section 2.1077.*

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## 15. Labelling Requirements

The sample label shown below shall be permanently affixed at a conspicuous location on the device, instructions 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 §5.19 (b)(1)(i).



## 16. 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 instructions, 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.

## 17. EUT Photographs

MODEL NO. : SPT100



