

Tel:(86) 755-26825180 Fax:(86) 755-86170310

Http://www.szmost.com Email: szmost@szmost.com

## Test Report

Product Name: USB 2.0 10/100M ETHERNET ADAPTER

FCC ID: U3P-SPEED7830

MODEL NO. : FG-AMLN-V1-7830 SD-AMLN-V1-7830

Applicant:

Speed Dragon Multimedia Ltd.
Room 1312, Vanta Industrial Centre, 33 Tai Lin Pai Road,
Kwai Chung, N.T., Hong Kong

Date Received: 07/01/2008

Date Tested: 06/30/2008

APPLICANT: Speed Dragon Multimedia Ltd.



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# EMC Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.	
					Interval	
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	100492	Apr 05,2008	1 Year	
LISN	ROHDE&SCHWARZ	ENV216	100093	Apr 05,2008	1Year	
EMI Test Receiver	ROHDE&SCHWARZ		101202	Apr 05,2008	1 Year	
Spectrum Analyzer	ANRITSU	MS2651B	6200238316	Apr 05,2008	1 Year	
50 Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Apr 05,2008	1 Year	
Bilog Antenna	Sunol	JB3	A121206	Apr 05,2008	1 Year	
Horn Antenna	EMCO	3115	640201028-0 6	Apr 05,2008	1 Year	
50 Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Apr 05,2008	1 Year	
Cable	Resenberger	N/A	NO.1	Apr 05,2008	1 Year	
Cable	SCHWARZBECK	N/A	NO.2	Apr 05,2008	1 Year	
Cable	SCHWARZBECK	N/A	NO.3	Apr 05,2008	1 Year	
Single Phase Power	Kikusui	LIN40MA-PC	LM002352	Apr 05,2008	1Year	
Line Filter		R-L				
AC Power Source	Kikusui	AC40MA	LM003232	Apr 05,2008	1Year	
Test analyzer	Kikusui	KHA1000	LM003720	Apr 05,2008	1Year	
ESD Tester	Kikusui	KES4021	LM003537	Apr 05,2008	1 Year	
Signal Generator	IFR	2032	203002/100	Apr 05,2008	1 Year	
Amplifier	A&R	150W1000	301584	NCR	NCR	
Dual Directional Coupler	A&R	DC6080	301508	Apr 05,2008	1 Year	
Power Head	A&R	PH2000	301193	Apr 05,2008	1 Year	
Power Meter	A&R	PM2002	302799	Apr 05,2008	1 Year	
Field Monitor	A&R	FM5004	300329	Apr 05,2008	1 Year	
Field Probe	Field Probe A&R		300221	Apr 05,2008	1 Year	
EMCPRO System EM Test		UCS-500-M4	V064810202 6	Apr 05,2008	1 Year	
EMCPRO System	EM Test	UCS-500-M4	V064810202 6	Apr 05,2008	1 Year	

### Remark:

Test Firm Name: Most Technology Service Co., Ltd.

Test Firm Address:

No. 5, 2nd Langshan Road, North District, Hi-tech Industrial Pa

rk, Nanshan, Shenzhen, Guangdong, China

FCC Registered Test Site Number: 490827

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#### TEST PROCEDURE

**GENERAL:** This report shall NOT be reproduced except in full without the written approval of MOST TECHNOLOGY SERVICE CO., LTD. The EUT was transmitting a test signal during the testing.

**POWER LINE CONDUCTED INTERFERENCE:** The test procedure used was ANSI Standard C63.4-2003 using a 50 U H LISN. Both Lines were observed. The bandwidth of the receiver was 10kHz with an appropriate sweep speed. The ambient temperature of the EUT was 25 with a humidity of 58%.

RADIATION INTERFERENCE: The test procedure used was ANSI Standard C63.4-2003 using a ANRITSU spectrum analyzer with a pre-selector. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz up to 1 GHz and 1 MHz with a video BW of 3 MHz above 1 GHz. The ambient temperature of the EUT was 25 with a humidity of 58%.

FORMULA OF CONVERSION FACTORS: The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer and cable loss. The antenna correction factors and cable loss are stated in terms of dB. The gain of the Pre-selector was accounted for in the Spectrum Analyzer Meter Reading.

Example:

Freq (MHz) METER READING + ACF + CABLE = FS 20 dBuV + 10.36 dB + 0.9 dB = 31.26 dBuV/m @ 3m

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The EUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m. The EUT was placed in the center of the table (1.5m side). The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to 10th harmonic of the fundamental.

Peak readings were taken in three (3) orthogonal planes and the highest readings were converted to average readings based on the duration of "ON" time.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

The situation was similar for the conducted measurement except that the table did not rotate. The EUT was setup as described in ANSI Standard C63.4-2003 10.1.7 with the EUT 40 cm from the vertical ground wall.

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NAME OF TEST: POWER LINE CONDUCTED INTERFERENCE

RULES PART NUMBER: 15.107

**REQUIREMENTS:** 

Frequency of Emission (MHz)

0.15-0.5

0.5-5

56

5-30

Conducted Limit (dBuV)

Quasi-peak
Average

66 to 56 \* 56 to 46 \*

60

50

TEST PROCEDURE: ANSI STANDARD C63.4-2003

THE HIGHEST EMISSION READ FOR LINE 1 WAS 42.76dBUV @ 0.226MHz.

THE HIGHEST EMISSION READ FOR LINE 2 WAS 50.04dBuv @ 0.150MHz.

THE PLOTS ON THE NEXT PAGE REPRESENT THE EMISSIONS READ FOR POWER LINE CONDUCTED FOR THIS DEVICE.

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<sup>\*</sup> Decreases with the logarithm of the frequency.



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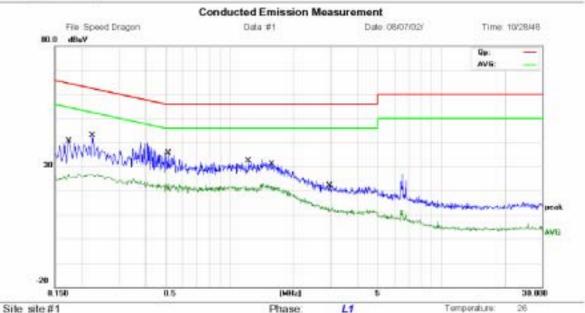
Http://www.szmost.com Email: szmost@szmost.com



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong, China

Power: DC 6V from PC Input AC 120V/66Hz Humidity: 60 %

Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part 15 B Class B Conduction(QP)

EUT: USB 2.0 10/100M ETHERNET ADAPTER

M/N: FG-AMLN-V1-7830

Mode: Running

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1	0.1740	30.28	10.44	40.72	64.76	-24.04	QP		
2 *	0.2260	30.93	11.83	42.76	62.59	-19.83	QP		
3	0.5140	25.60	10.00	35.60	56.00	-20.40	QP		
4	1.2340	22.58	9.77	32.35	56.00	-23.65	QP		
5	1.5780	21.82	9.42	31.24	56.00	-24.76	QP		
6	2.9739	12.21	9.97	22.18	56.00	-33.82	QP		

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<sup>\*:</sup>Maximum data x:Over limit !:over margin



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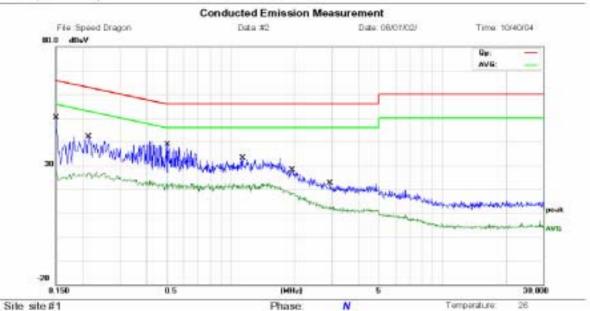
Http://www.szmost.com Email: szmost@szmost.com



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Power: DC 5V from PC Input AC 120V/60Hz Humidity 60 %

Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part 15 B Class B Conduction(QP)

EUT: USB 2.0 10/100M ETHERNET ADAPTER

M/N: FG-AMLN-V1-7830

Mode: Running

Note:

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1 *	0.1500	41.04	9.00	50.04	66.00	-15.96	QP	
2	0.2140	30.16	11.91	42.07	63.04	-20.97	QP	
3	0.5020	28.90	10.00	38.90	56.00	-17.10	QP	
4	1.1460	23.23	9.85	33.08	56.00	-22.92	QP	
5	1.9660	19.02	9.03	28.05	56.00	-27.95	QP	
6	2.9500	12.73	9.95	22.68	56.00	-33.32	QP	

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<sup>\*:</sup>Maximum data x:Over limit !:over margin



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NAME OF TEST: RADIATION INTERFERENCE

RULES PART NUMBER: 15.109

### **REQUIREMENTS:**

S15.109 30 -88 MHz 40 dBuV/m @3M 88 - 216 MHz 43.5 216 - 960 MHz 46 ABOVE 960 MHz 54dBuV/m

### Test Data:

REMARK: Emissions attenuated more than 20 dB below the permissible value are not reported.

Test Mode: Running

Frequency (MHz)	Antenna Polarization	E	Emission Level (	FCC 15 Subpart	
		Avg	QP	Peak	B Limit (dBuV/m)
30.00	Horizontal			31.72	40.0
119.24	Horizontal			30.42	43.5
239.52	Horizontal			33.09	46.0
648.86	Horizontal		35.69	37.11	46.0
30.00	Vertical			33.84	40.0
119.24	Vertical			28.19	43.5
165.80	Vertical			29.21	43.5
338.46	Vertical			30.80	46.0

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