TEST REPORT FOR FCC DOC
for
JETWAY INFORMATION CO., LTD.

Motherboard
Model Number: NC81

Prepared for : JETWAY INFORMATION CO., LTD.
4F, NO.168, LITEHST, CHUNG HO CITY 235, TAIPEI
TAIWAN R.O.C.

Prepared By : Most Compliance Laboratory Limited
Suite 508, 32/38 Leman Street, London E1 8EW, UK

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Date of Test : Sep. 17, 2008
Date of Report : Sep. 19, 2008

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TEST REPORT FOR FCC COMPLIANCE DECLARATION

Report Number		MTE/CYZ/8090933
Applicant	Company Name	JETWAY INFORMATION CO., LTD.
	Address	4F, NO.168, LITEHST, CHUNG HO CITY 235, TAIPEI TAIWAN R.O.C.
Manu-facturer1	Company Name	TOP WAY TECHNOLOGY CO., LTD.
	Address	Shang Jin Industrial Zone Jie Kou Village Chang An Town Dong Guan City Guang Dong Province P.R.C.
Manu-facturer2	Company Name	EVER ORIENT TECHNOLOGY CO., LTD.
	Address	Lian He Industrial Park, Nan Yue, Long Gong, ShenZhen, Guang Dong, China
Manu-facturer3	Company Name	RIGHT TRACK ELECTRONIC TECHNOLOGY CO., LTD.
	Address	No.2 West Wordshop, NO.1 District NanChang Industrial Zone, Gushu Village, XiXiang Town, BaoAn, ShenZhen, P.R. China.
Product	Product Name	Motherboard
	Model No.	NC81
	Power Supply	DC 12V From PC Input AC 120V/60Hz
	Remark	N/A
Test Result		The EUT was found compliant with the requirement(s) of the standards.
Standard		FCC Rules and Regulations Part 15 Subpart B Class B 2008

*Note

The above device has been tested by Most Technology Service Co., Ltd. To determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test record, data evaluation & Equipment Under Test (EUT) configurations represented are contained in this test report and Most Technology Service Co., Ltd. Is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced except in full, without written approval of Most Technology Service Co., Ltd., this document may be altered or revised by Most Technology Service Co., Ltd., personal only, and shall be noted in the revision of the document.

Prepared by	Candy zhang
Reviewed by	Sam zhong
Approved by	Yvette zhou(Manager)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Motherboard
Model Number	:	NC81
Brand Name	:	N/A
Applicant	:	JETWAY INFORMATION CO., LTD. 4F, NO.168, LITEHST, CHUNG HO CITY 235, TAIPEI TAIWAN R.O.C.
Manufacturer 1	:	TOP WAY TECHNOLOGY CO., LTD. Shang Jin Industrial Zone Jie Kou Village Chang An Town Dong Guan City Guang Dong Province P.R.C.
Manufacturer 2	:	EVER ORIENT TECHNOLOGY CO., LTD. Lian He Industrial Park, Nan Yue, Long Gong, ShenZhen, Guang Dong, China
Manufacturer 3	:	RIGHT TRACK ELECTRONIC TECHNOLOGY CO., LTD. No.2 West Wordshop, NO.1 District NanChang Industrial Zone, Gushu Village, XiXiang Town, BaoAn, ShenZhen, P.R. China.
Date of Test	:	Sep. 17, 2008

2. LABORATORY INFORMATION

2.1. Laboratory Name

Most Technology Service Co., Ltd.

2.2. Location

No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park, Nanshan, Shenzhen, Guangdong, China

2.3. Test facility

3m Anechoic Chamber	:	May 1, 2007 File on Federal Communication Commission Registration Number:490827 Certificated by VCCI, Japan Sep. 11, 2007 Registration No.:R-2622
Shielding Room	:	Certificated by VCCI, Japan Sep.11, 2007 Registration No.:C-2865
EMC Lab.	:	Accredited by TUV Rheinland Shenzhen Audit Report: 17006916001 Sep. 18, 2007 Accredited by Industry Canada Registration Number: 7103A-1 May 31, 2007 Accredited by TIMCO Registration Number: Q1460 March 28, 2007

2.4. Measurement Uncertainty

No.	Item	Uncertainty
1.	Uncertainty for Conducted Disturbance Test	1.25dB
2.	Uncertainty for Radiated Disturbance Test	3.15dB

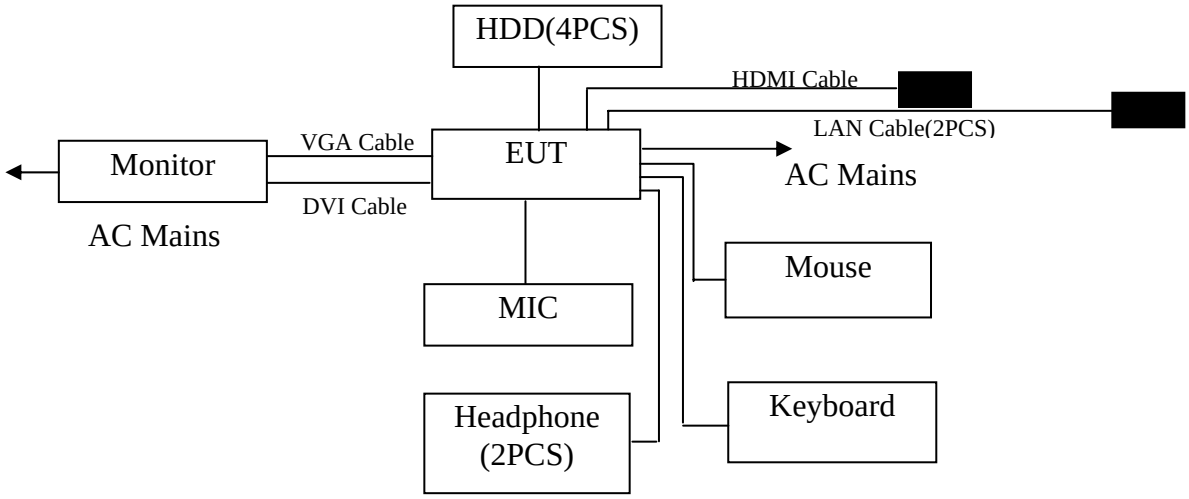
3. SUMMARY OF TEST RESULTS

EMISSION			
Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	FCC Part 15:2008	Class B	PASS
Radiated disturbance	FCC Part 15:2008	Class B	PASS
N/A is an abbreviation for Not Applicable.			

4. BLOCK DIAGRAM OF TEST SETUP

The equipments are installed test to meet ANSI C63.4:2003 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application. EUT was tested in normal configuration (Please See following Block diagrams)

4.1. Block Diagram of connection between EUT and simulation-EMI



(EUT: Motherboard)

5. TEST INSTRUMENT USED

5.1. For Conducted Disturbance at Mains Terminals Emission Test

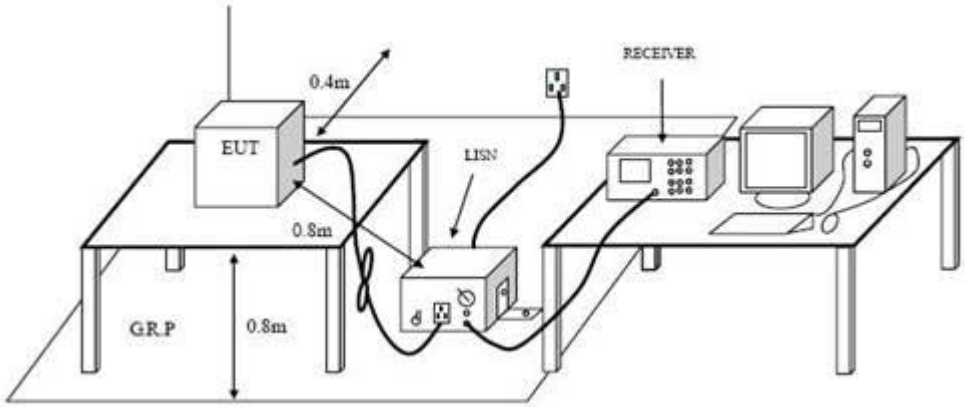
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100492	Mar. 15, 08	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ENV216	100093	Mar. 15, 08	1 Year
3.	Coaxial Switch	Anritsu Corp	MP59B	6200283933	Mar. 15, 08	1 Year
4.	Terminator	Hubersuhner	50Ω	No.1	Mar. 15, 08	1 Year
5.	RF Cable	SchwarzBeck	N/A	No.1	Apr. 05, 08	1/2 Year

5.2. For Radiation Test (In Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESPI	101202	Mar. 15, 08	1 Year
2.	Bilog Antenna	Sunol	JB3	A121206	Mar. 15, 08	1 Year
3.	Cable	Resenberger	N/A	NO.1	Apr. 05, 08	1 /2Year
4.	Cable	SchwarzBeck	N/A	NO.2	Apr. 05, 08	1 /2Year
5.	Cable	SchwarzBeck	N/A	NO.3	Apr. 05, 08	1 /2Year
6.	DC Power Filter	DuoJi	DL2×30B	N/A	N/A	N/A
7.	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	N/A	N/A
8.	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	N/A	N/A

6. CONDUCTED DISTURBANCE AT MAINS TERMINALS TEST

6.1. Configuration of Test System



6.2. Test Standard

FCC Part 15 B:2008

6.3. Power Line Conducted Disturbance at Mains Terminals Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

6.4. Operating Condition of EUT

6.4.1. Environmental Conditions:
Ambient Temperature: 26℃, Relative Humidity: 60%

6.4.2. Setup the EUT and the simulators as shown on Section 4.1.

6.4.3. Turn on the power of all equipments.

6.4.4. Let the EUT work in test mode (Running) and test it.

6.5. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2003 on conducted Disturbance test.

The bandwidth of test receiver is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 6.6.

6.6. Conducted Disturbance at Mains Terminals Test Results

6.6.1. Test Results: **PASS**

6.6.2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

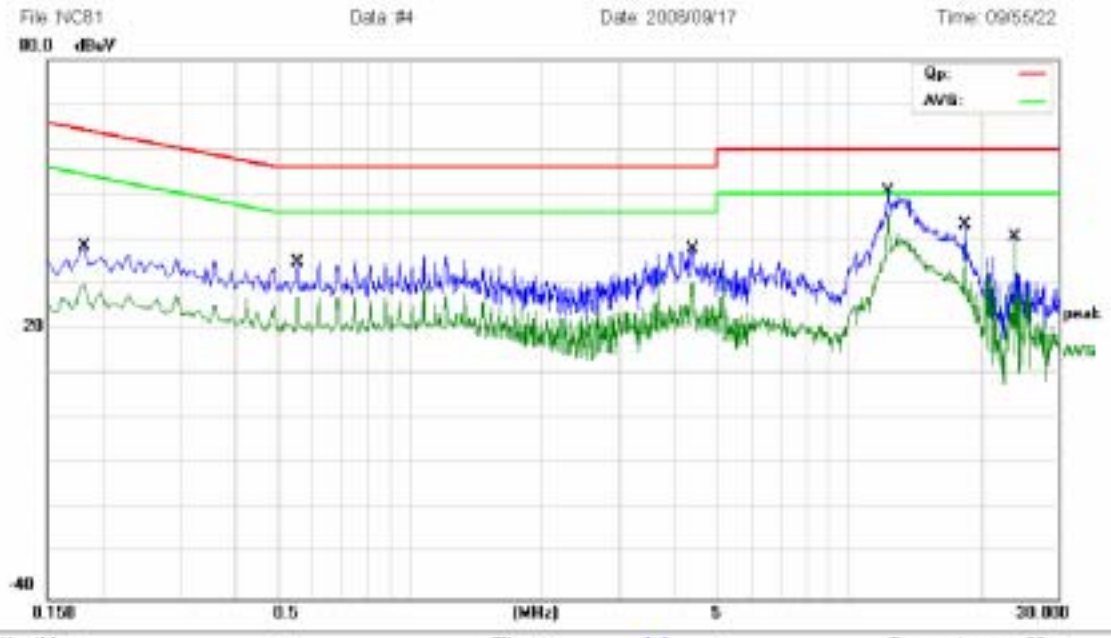
6.6.3. Emission Level= Correct Factor + Reading Level.

6.6.4. All scanning waveforms and test data on the following pages.

6.6.5. Test Engineer: Jack , Test Date: Sep. 17, 2008

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



Site: site #1
Limit: FCC Part15 B Class B QP
EUT: Motherboard
M/N: NC81
Mode: Running
Note:

Phase: L1
Power: DC 12V From PC Input AC 120V/60Hz

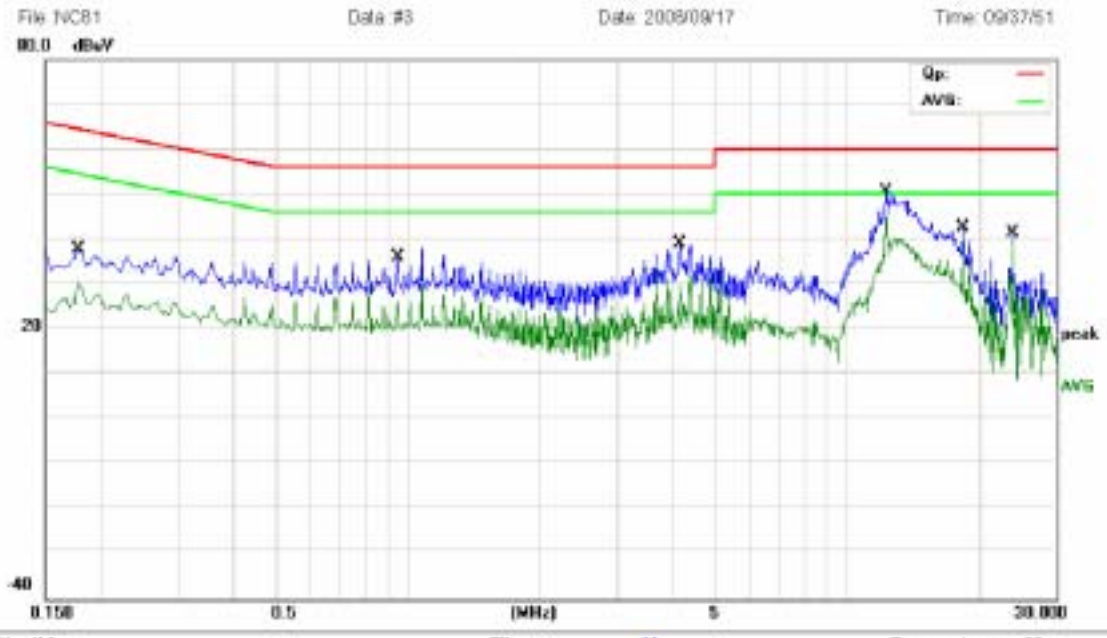
Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1806	27.21	10.84	38.05	64.46	-26.41	QP	
2		0.1806	18.81	10.84	29.65	54.46	-24.81	AVG	
3		0.5580	24.87	10.00	34.87	56.00	-21.13	QP	
4		0.5580	11.21	10.00	21.21	46.00	-24.79	AVG	
5		4.4060	26.28	11.41	37.69	56.00	-18.31	QP	
6		4.4060	18.24	11.41	29.65	46.00	-16.35	AVG	
7		12.2620	40.90	9.00	49.90	60.00	-10.10	QP	
8	*	12.2620	36.60	9.00	45.60	50.00	-4.40	AVG	
9		18.3940	34.18	9.00	43.18	60.00	-16.82	QP	
10		18.3940	30.25	9.00	39.25	50.00	-10.75	AVG	
11		24.0020	31.69	9.00	40.69	60.00	-19.31	QP	
12		24.0020	29.92	9.00	38.92	50.00	-11.08	AVG	

*:Maximum data x:Over limit !:over margin

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Conducted Emission Measurement



Site: site #1
Limit: FCC Part15 B Class B QP
EUT: Motherboard
M/N: NC81
Mode: Running
Note:

Phase: N
Power: DC 12V From PC Input AC 120V/60Hz

Temperature: 26
Humidity: 60 %

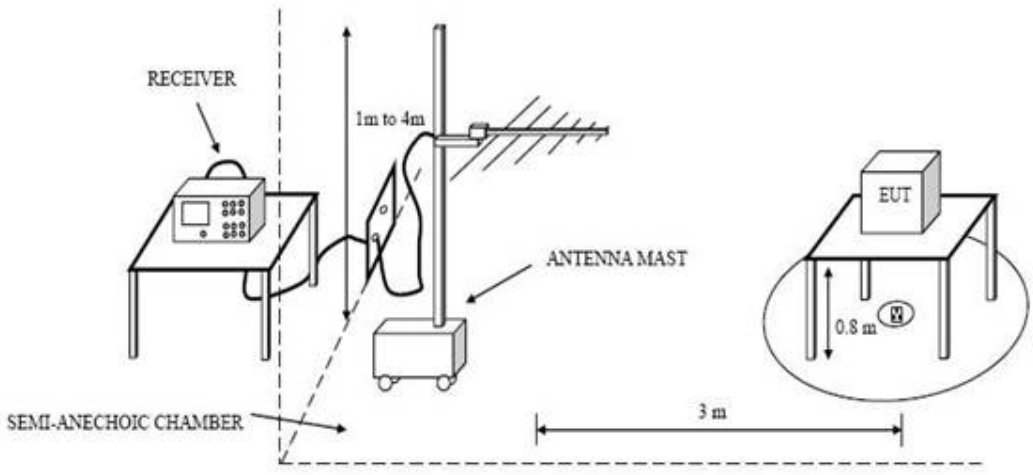
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1785	26.81	10.71	37.52	64.56	-27.04	QP	
2		0.1785	19.55	10.71	30.26	54.56	-24.30	AVG	
3		0.9460	24.54	10.00	34.54	56.00	-21.46	QP	
4		0.9460	14.89	10.00	24.89	46.00	-21.11	AVG	
5		4.1620	27.85	11.16	39.01	56.00	-16.99	QP	
6		4.1620	18.45	11.16	29.61	46.00	-16.39	AVG	
7		12.2620	41.10	9.00	50.10	60.00	-9.90	QP	
8	*	12.2620	36.20	9.00	45.20	50.00	-4.80	AVG	
9		18.3980	33.69	9.00	42.69	60.00	-17.31	QP	
10		18.3980	30.64	9.00	39.64	50.00	-10.36	AVG	
11		24.0020	32.59	9.00	41.59	60.00	-18.41	QP	
12		24.0020	30.65	9.00	39.65	50.00	-10.35	AVG	

*:Maximum data x:Over limit !:over margin

6.7. Test Setup Photograph

7. RADIATED DISTURBANCE TEST

7.1. Configuration of Test System



7.2. Test Standard

FCC Part 15 B:2008

7.3. Radiated Disturbance Limit

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

FREQUENCY (MHz)	DISTANCE (Meters)	FIELD STRENGTHS LIMITS (dBμV/m)
30 ~ 88	3	40.0
88~216	3	43.5
216~960	3	46.0
960 ~ 1000	3	47.0

Note: 1.The lower limit shall apply at the transition frequencies.

2. Distance refers to the distance in meters between the test antenna and the closed point of any part of the EUT.

7.4. Operating Condition of EUT

7.4.1. Environmental Conditions:
Ambient Temperature: 26℃, Relative Humidity: 60 %

7.4.2. Setup the EUT and the simulators as shown on Section 4.1.

7.4.3. Turn on the power of all equipments.

7.4.4. Let the EUT work in test mode (Running) and test it.

7.5. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 10m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2003 on Radiated Disturbance test.

The bandwidth setting on the test receiver is 120 kHz.

The frequency range from 30MHz to 1000MHz is checked. The test result are reported on Section 7.6..

7.6. Radiated Disturbance Test Results

7.6.1. Test Results: **PASS**

7.6.2. Emission Level= Correct Factor + Reading Level.

7.6.3. All reading are Quasi-Peak values.

7.6.4. All scanning waveforms and test data on the following pages.

7.6.5. Test Engineer: Jack , Test Date: Sep. 17, 2008

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement

Site: site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: Motherboard
M/N: NC81
Mode: Running
Note:

Polarization: *Horizontal*
Power: DC 12V From PC Input AC 120V/60Hz
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		70.7399	16.97	9.69	26.66	40.00	-13.34	QP			
2		119.2399	16.10	15.42	31.52	43.50	-11.98	QP			
3		167.7400	21.79	14.20	35.99	43.50	-7.51	QP			
4		359.8000	15.23	18.30	33.53	46.00	-12.47	QP			
5	*	650.7999	16.31	24.12	40.43	46.00	-5.57	QP			
6		800.1798	11.92	25.90	37.82	46.00	-8.18	QP			

*:Maximum data x:Over limit !:over margin

Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park
Guangdong ,China
Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement

Site: site MOST 3M
Limit: FCC Part15 B 3M Radiation
EUT: Motherboard
M/N: NC81
Mode: Running
Note:

Polarization: *Vertical*
Power: DC 12V From PC Input AC 120V/60Hz
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		43.5800	20.07	12.51	32.58	40.00	-7.42	QP			
2		142.5200	18.79	15.05	33.84	43.50	-9.66	QP			
3		454.8600	16.35	20.15	36.50	46.00	-9.50	QP			
4		520.8200	16.32	21.84	38.16	46.00	-7.84	QP			
5	*	625.5800	15.45	23.62	39.07	46.00	-6.93	QP			
6		800.1799	11.04	25.90	36.94	46.00	-9.06	QP			

*:Maximum data x:Over limit !:over margin

7.7. Test Setup Photograph

APPENDIX I
(Photos of the EUT)

Figure 1
General Appearance of the EUT

Figure 2
General Appearance of the EUT