

TECHNICAL REPORT



ISO/IEC17025 Accredited Lab.

Report No: FCC 1201056  
File reference No: 2012-08-29

Applicant: Technovare Systems, Inc.

Product: Embedded Computer

Brand Name: Technovare TNET PC

Model No: OPS-PCIA-H, OPS-PCIA-S, OPS-PCIA-WH, OPS-PCIA-WS

Test Standards: FCC Part 15 Subpart B: 2009

Test result: It is herewith confirmed and found to comply with the requirements set up by ANSI C63.4&FCC Part 15 regulations for the evaluation of electromagnetic compatibility

Approved By

Terry Tong

Manager

Dated: August 29, 2012

**Results appearing herein relate only to the sample tested**

**The technical reports is issued errors and omissions exempt and is subject to withdrawal at**

**Shenzhen Timeway Technology Consulting Co., Ltd.**

**East 5/block 4, Anhua Industrial Zone, No.8 Tairan Rd., Chegongmiao, Futian District, Shenzhen, China**

Tel (+86 755)8344 8688

Fax (+86 755)8344 2996



### **Special Statement:**

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAS. This approval result is accepted by MRA of APLAC.

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

#### **CNAS-LAB Code: L2292**

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

#### **FCC-Registration No.: 899988**

The 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 No.: 899988.

#### **IC- Registration No.: IC5205A-01**

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-01.

#### **VCCI- Registration No.: R-3015 and C-3332**

The EMC Laboratory has been registered and fully described in a report filed with the (VCCI) Voluntary Control Council for Interference. The acceptance letter from the VCCI is maintained in our files. Registration IC No.: R-3015 and C-3332



Test Report Conclusion  
Content

<b>1.0</b>	<b>General Details</b> .....	4
1.1	Test Lab Details.....	4
1.2	Applicant Details.....	4
1.3	Description of EUT .....	4
1.4	Test Uncertainty.....	4
1.5	Submitted Sample.....	4
1.6	Test Duration.....	4
<b>2.0</b>	<b>List of Measurement Equipment</b> .....	5
2.1	Conducted Emission Test.....	5
2.2	Radiated electromagnetic disturbance test.....	5
2.3	Auxiliary Equipment.....	5
2.4	I/O Cable.....	5
<b>3.0</b>	<b>Technical Details</b> .....	6
3.1	Investigations Requested.....	6
3.2	Test Standards.....	6
<b>4.0</b>	<b>Power line Conducted Emission Test</b> .....	7
<b>5.0</b>	<b>Radiated Disturbance Test</b> .....	14
<b>6.0</b>	<b>FCC Label</b> .....	27
<b>7.0</b>	<b>Photo of testing</b> .....	28

"The report refers only to the sample tested and does not apply to the bulk production.  
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer, Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



## 1.0 General Details

### 1.1 Test Lab Details

Name : SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD  
Address: East 5/Block 4, Anhua Industrial Zone, No.8,Tairan Rd. CheGongMiao, FuTian District, Shenzhen, CHINA.  
Telephone: (755) 83448688  
Fax: (755) 83442996

### 1.2 Applicant Details

Applicant: Technovare Systems, Inc.  
Address: 1675 Scenic Ave., Suite 200, Costa Mesa, Ca92626-1451, USA  
  
Telephone: 1-174-966-9099  
Fax: 1-174-966-9199

### 1.3 Description of EUT

Product: Embedded Computer  
Manufacturer: Shenzhen JEC Technology Co., Ltd.  
Address: Room 1002, Beike Innovation Building, 1077 Nanhai Blvd., Nanshan District, Shenzhen, Guang Dong Prov., China  
  
Brand Name: Technovare TNET PC  
Model Number: OPS-PCIA-H  
Additional Model Number: OPS-PCIA-S, OPS-PCIA-WH, OPS-PCIA-WS  
Rating: --  
Remark: --

### 1.4 Submitted Sample: 1 Sample

### 1.5 Test Duration

2012-04-01 to 2012-08-29

### 1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB  
Radiated Emissions Uncertainty =4.7dB

### 1.7 Test Engineer

The sample tested by

A handwritten signature in black ink that reads 'Leo Lau'.

Print Name: Leo Lau



## 2.0 List of Measurement Equipment

### 2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESH3	860905/006	RS	2012.4.21	1Year
Spectrum Analyzer	ESA-L1500A	US37451154	HP	2012.4.21	1Year
PULSE LIMITER	ESH3-Z2	100281	RS	2012.4.21	1Year
LISN	LS16C	10010947251	AFJ	2012.4.21	1Year

### 2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESVD	100008	RS	2012.4.21	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer	8595E	3441A00893	HP	2012.4.21	1Year
Amplifier	8447D	2727A05017	HP	2012.4.21	1Year
Bilog Antenna	VULB9163	9163/340	Schwarebeck	2012.4.21	1Year
Horn Antenna	BBHA 9120D	9120D-631	Schwarebeck	2012.4.21	1Year

### 2.3 Auxiliary Equipment

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
Mouse	M-F105	--	L.SELEtron	--	FCC DOC
Keyboard	KB-0225	--	IBM	--	FCC DOC
LCD Monitor	FP51G	--	BENQ	--	FCC DOC
U-DISK	--	--	Kingston	--	FCC DOC
NEC TFT LCD Monitor	NECTL40	--	NEC	--	FCC DOC
PC	IBM	--	IBM	--	FCC ID

### 2.4 I/O Cable

Cable No.	Port	Connector Type	Cable Type	Cable Length
1	VGA	VGA	Unshielded	1.5
2	AC	IEC	Unshielded	1.5
3	AC	IEC	Unshielded	2.0

"The report refers only to the sample tested and does not apply to the bulk production.

This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it, or a certified copy thereof prepared by the Shenzhen Timeway Technology Consulting Co., Ltd to his customer.

Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



### 3.0 Technical Details

#### 3.1 Investigations Requested

Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

#### 3.2 Test Standards

**FCC Part 15 Subpart B: 2009**

"The report refers only to the sample tested and does not apply to the bulk production.

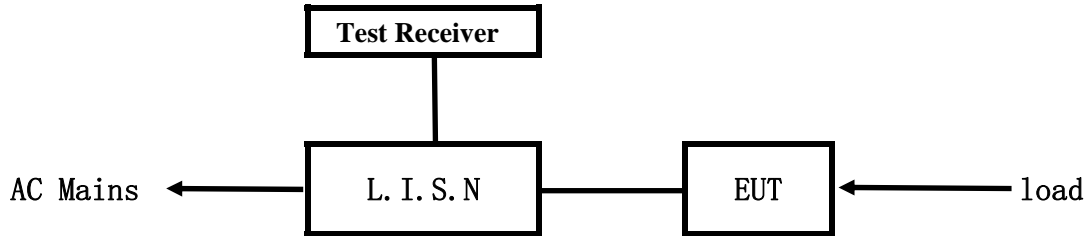
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer.

Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."

**4.0 Conducted Power line Test**

4.1 Schematics of the test



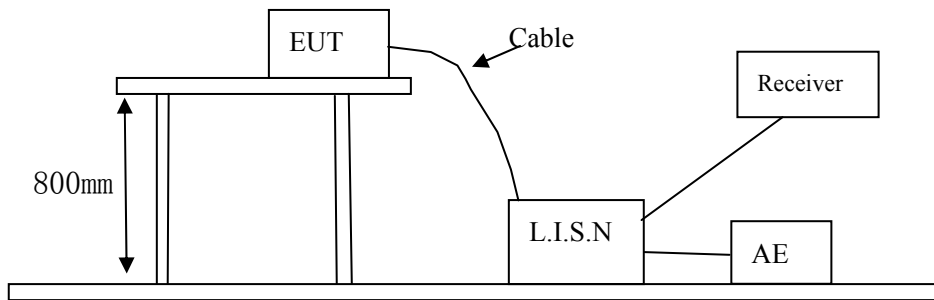
EUT: Equipment Under Test

4.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2003. The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4-2003. Cables and peripherals were moved to find the maximum emission levels for each frequency.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



4.3 Power line conducted Emission Limit

Frequency(MHz)	Class A Limits dB(μV)		Class B Limits dB(μV)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ~ 0.50	79.00	66.00	66.00~56.00*	56.00~46.00*
0.50 ~ 5.00	73.00	60.00	56.00	46.00
5.00 ~ 30.00	73.00	60.00	60.00	50.00

- Notes:
- \*decreasing linearly with logarithm of frequency.
  - The tighter limit shall apply at the transition frequencies

4.4 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**A: Conducted Emission on Live Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

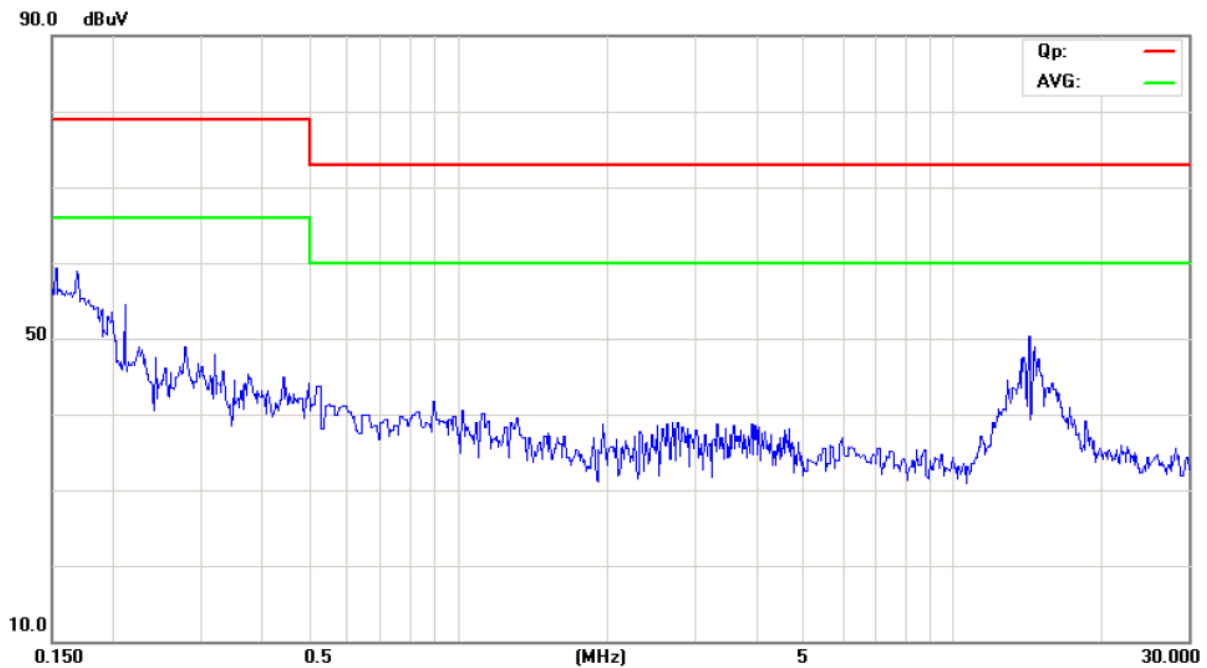
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play USB**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBμV)		Limit(dBμV)	
		Quasi-peak	Average	Quasi-peak	Average
--	Live	--	--	--	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."





**B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

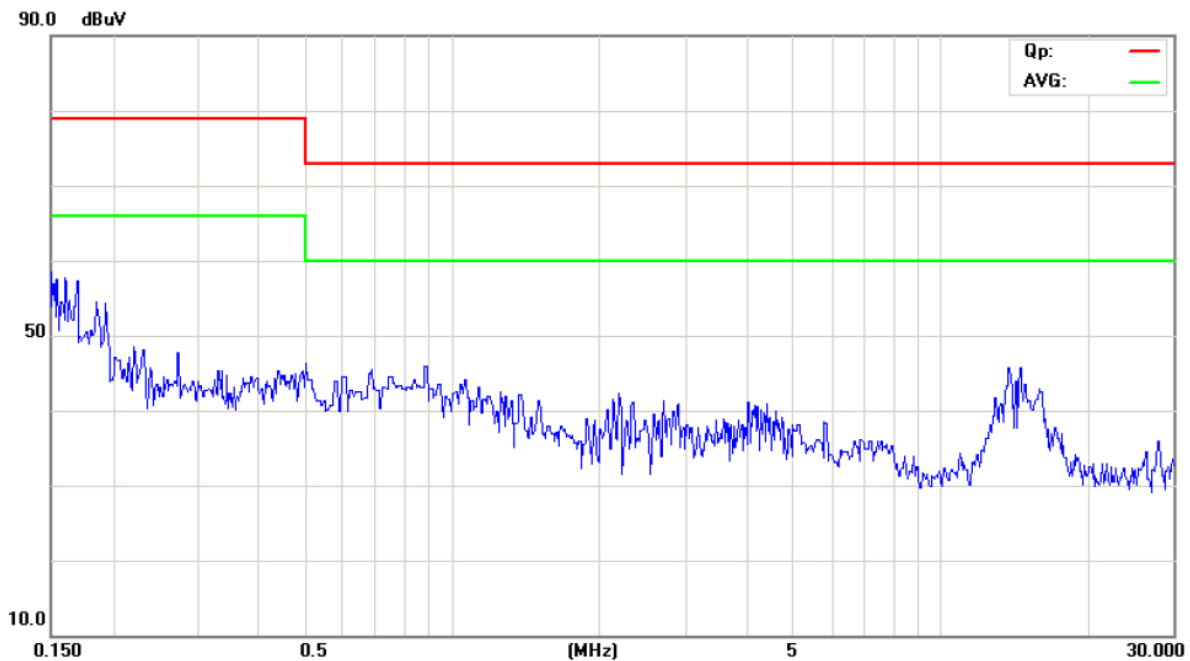
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play USB**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBµV)		Limit(dBµV)	
		Quasi-peak	Average	Quasi-peak	Average
--	Neutral	--	--	--	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**C Conducted Emission on Live Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

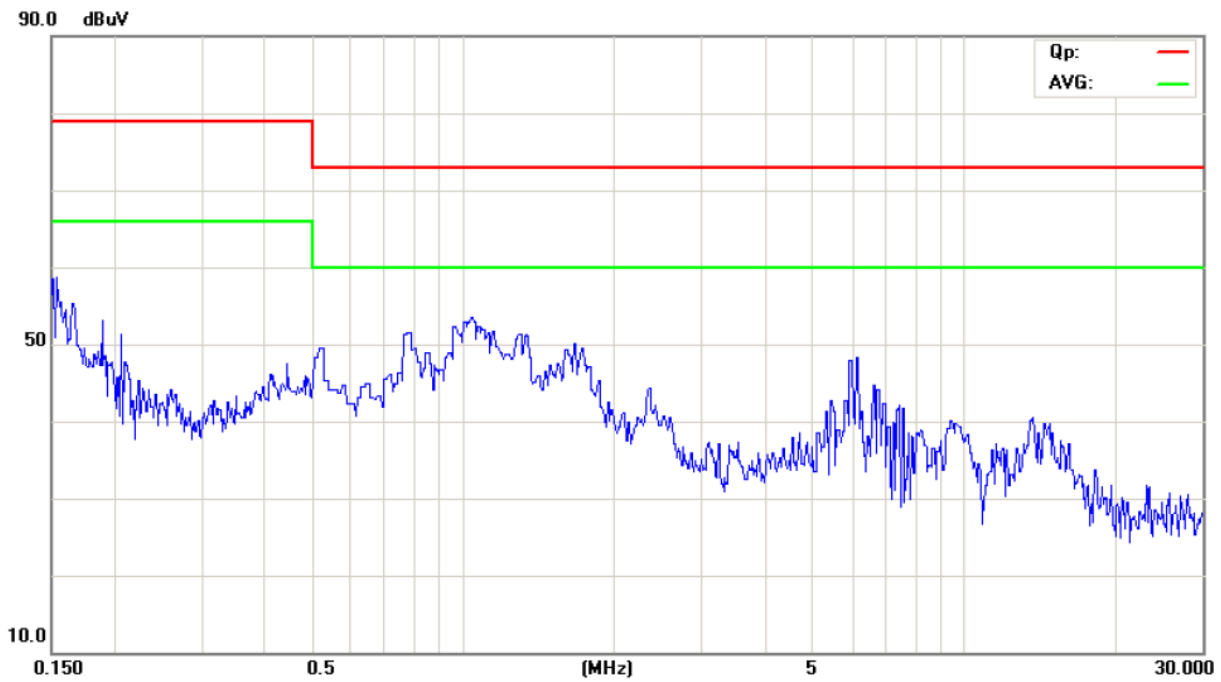
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play SD**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBµV)		Limit(dBµV)	
		Quasi-peak	Average	Quasi-peak	Average
--	Live	--	--	--	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**D Conducted Emission on Neutral Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

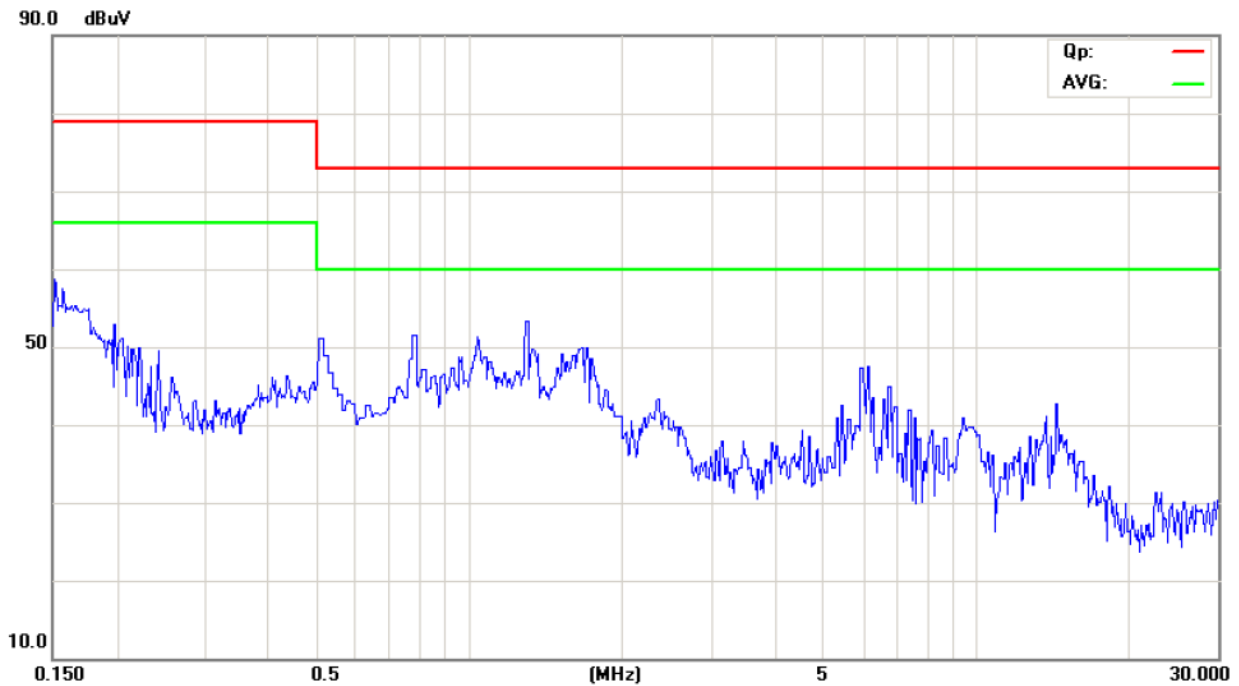
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play SD**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBμV)		Limit(dBμV)	
		Quasi-peak	Average	Quasi-peak	Average
--	Neutral	--	--	--	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**E Conducted Emission on Live Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

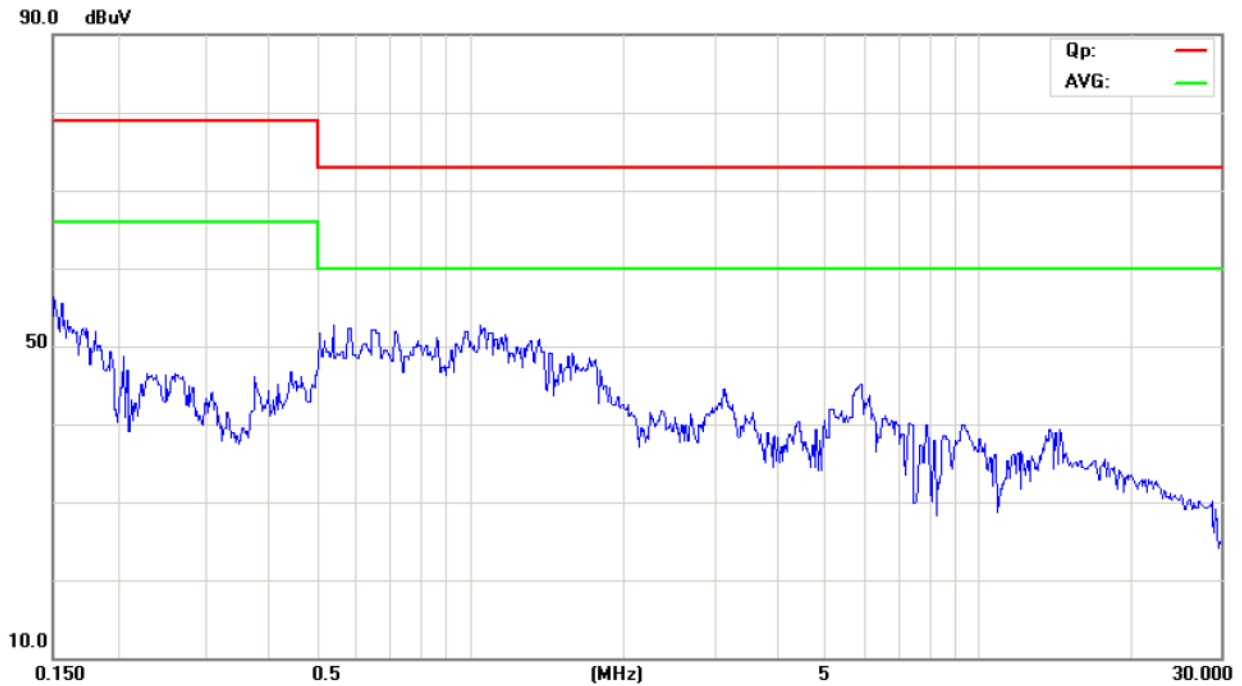
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: WLAN**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBµV)		Limit(dBµV)	
		Quasi-peak	Average	Quasi-peak	Average
--	Live	--	--	--	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**F Conducted Emission on Neutral Terminal (150kHz to 30MHz)**

**EUT Operating Environment**

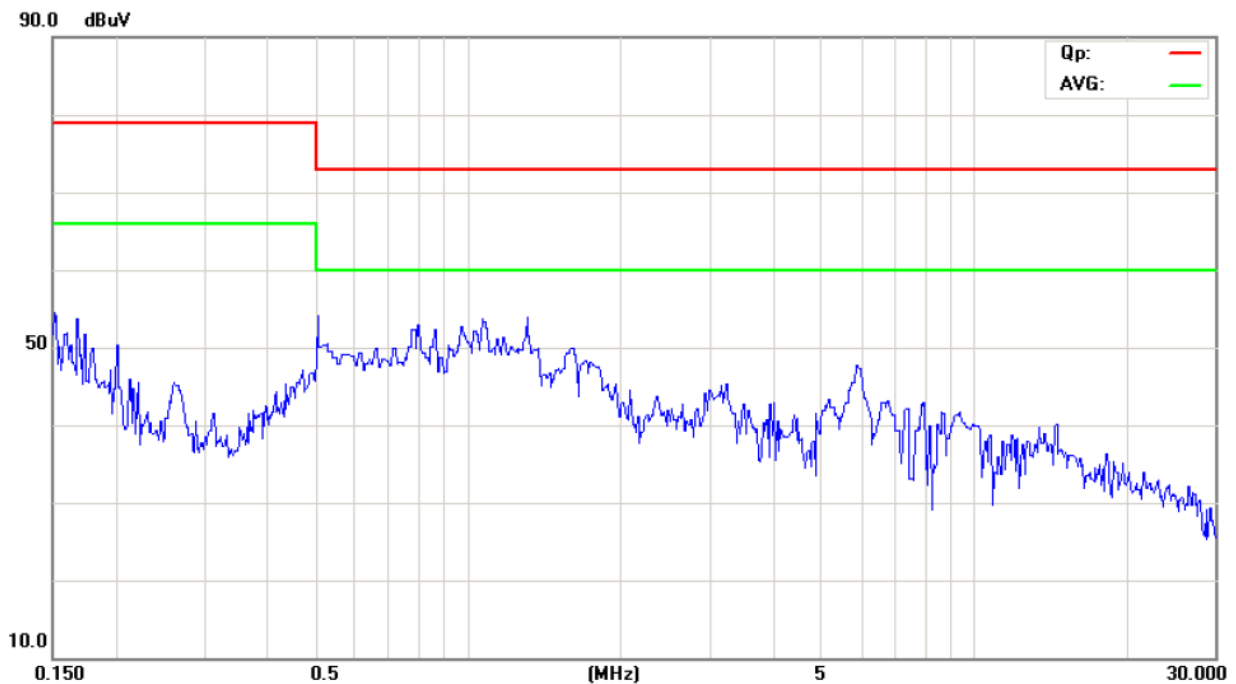
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: WLAN**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBµV)		Limit(dBµV)	
		Quasi-peak	Average	Quasi-peak	Average
--	Neutral	--	--	--	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."

**5.0 Radiated Disturbance Test**

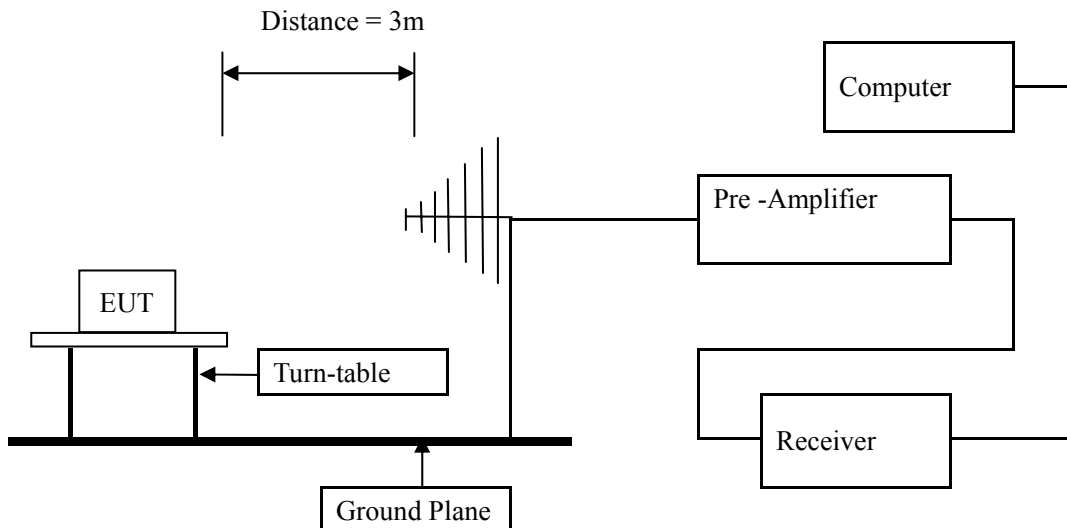
5.1 Schematics of the test



5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak 0values with a resolution bandwidth of 120KHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.  
Test Voltage: 120V~, 60Hz

**Block diagram of Test setup**



5.3 Radiated Emission Limit

Frequency Range (MHz)	Distance (m)	Field strength (dB $\mu$ V/m)
30-88	3	50.00
88-216	3	53.50
216-960	3	56.00
Above 960	3	60.00

Note: The lower limit shall apply at the transition frequencies

5.4 Test result

The frequency spectrum from 30MHz to 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

"The report refers only to the sample tested and does not apply to the bulk production.  
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**A: Radiated Disturbance (30MHz----1000MHz)**

**EUT Operating Environment**

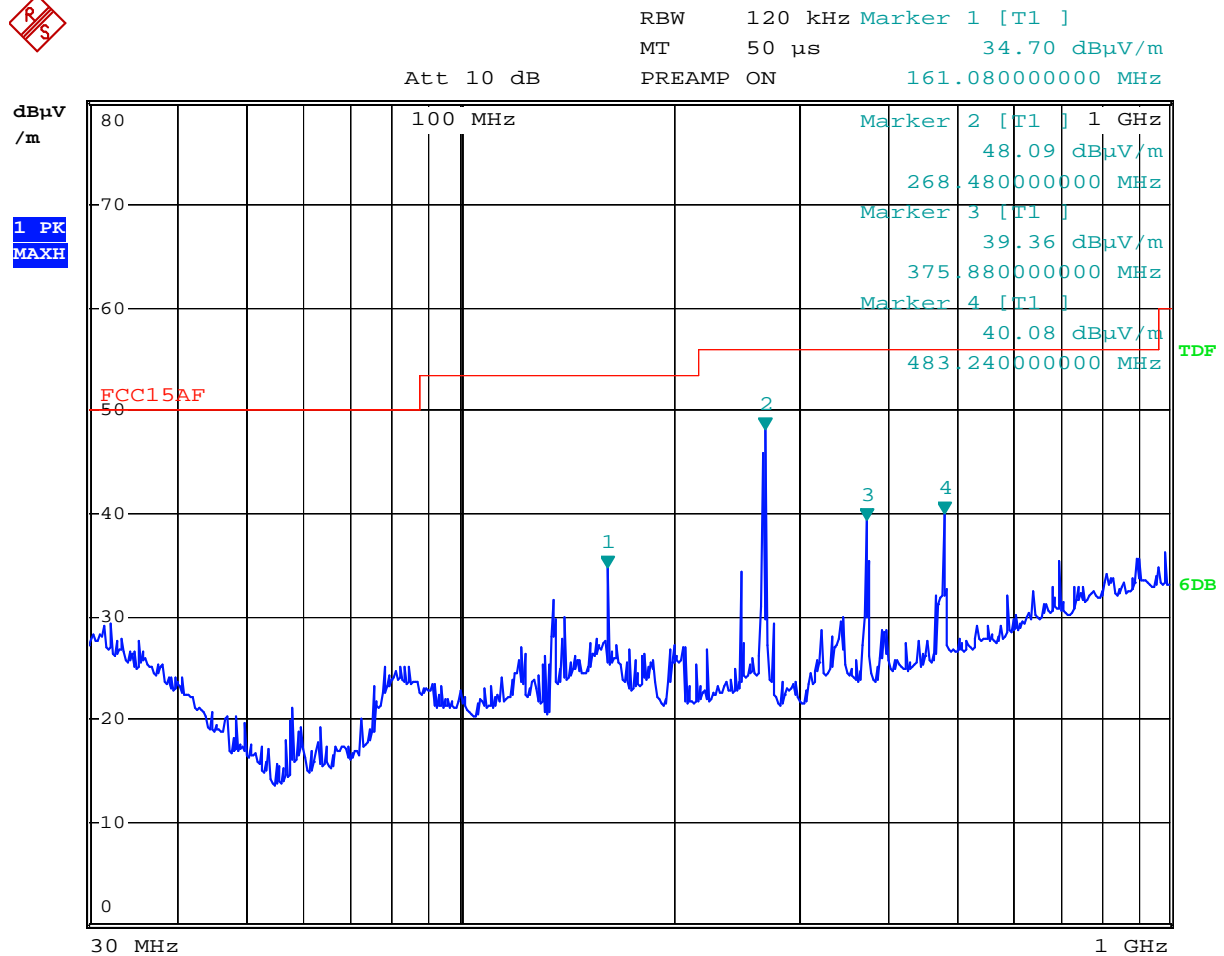
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play USB**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Date: 6.APR.2012 18:32:06

Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
161.080	34.70	H	53.50
268.480	48.09	H	56.00
375.880	39.36	H	56.00
483.240	40.08	H	56.00

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**B: Radiated Disturbance (30MHz----1000MHz)**

**EUT Operating Environment**

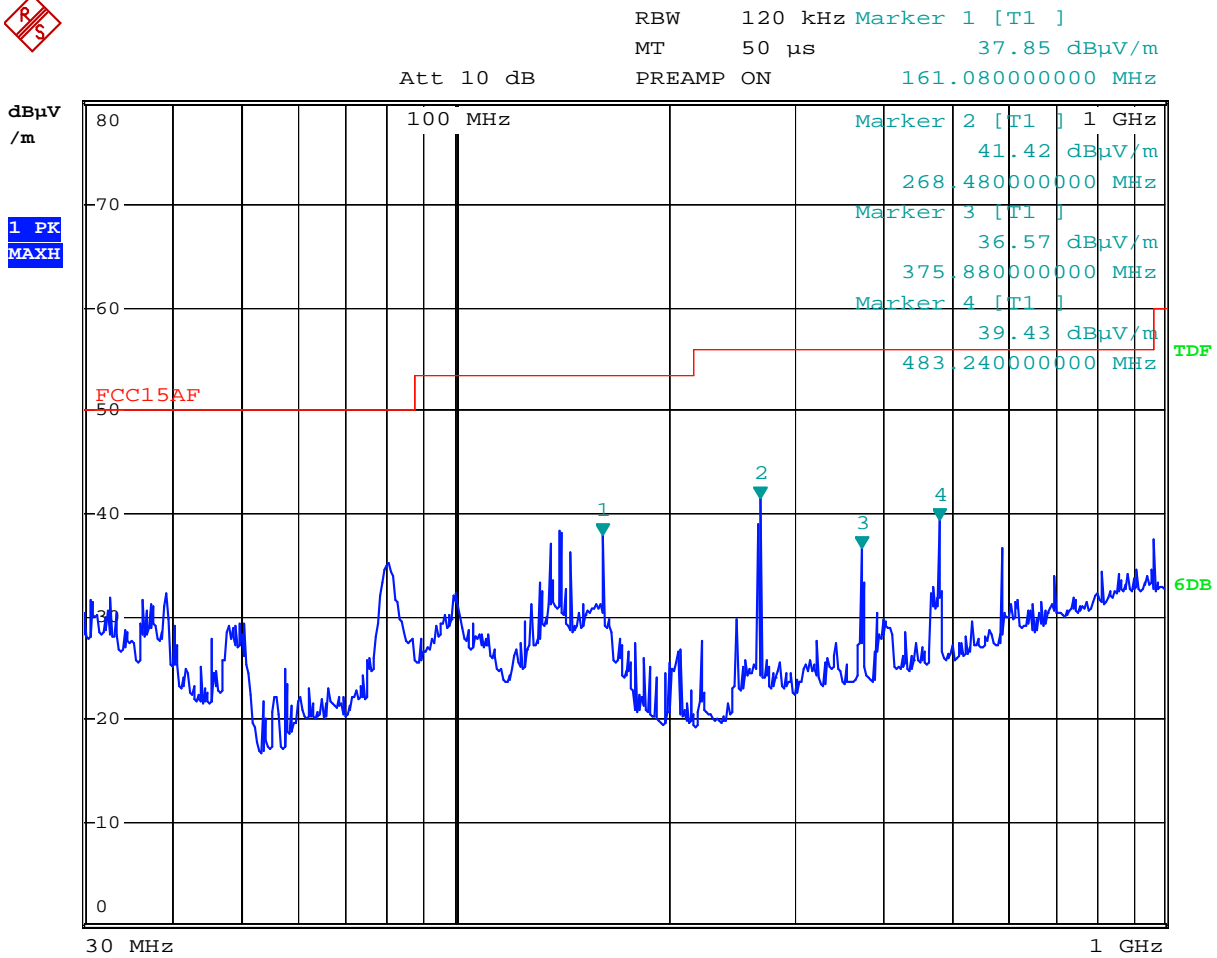
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play USB**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Date: 6.APR.2012 18:31:20

Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
161.080	37.85	V	53.50
268.480	41.42	V	56.00
375.880	36.57	V	56.00
483.240	39.43	V	56.00

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."





**C Radiated Disturbance (30MHz----1000MHz)**

**EUT Operating Environment**

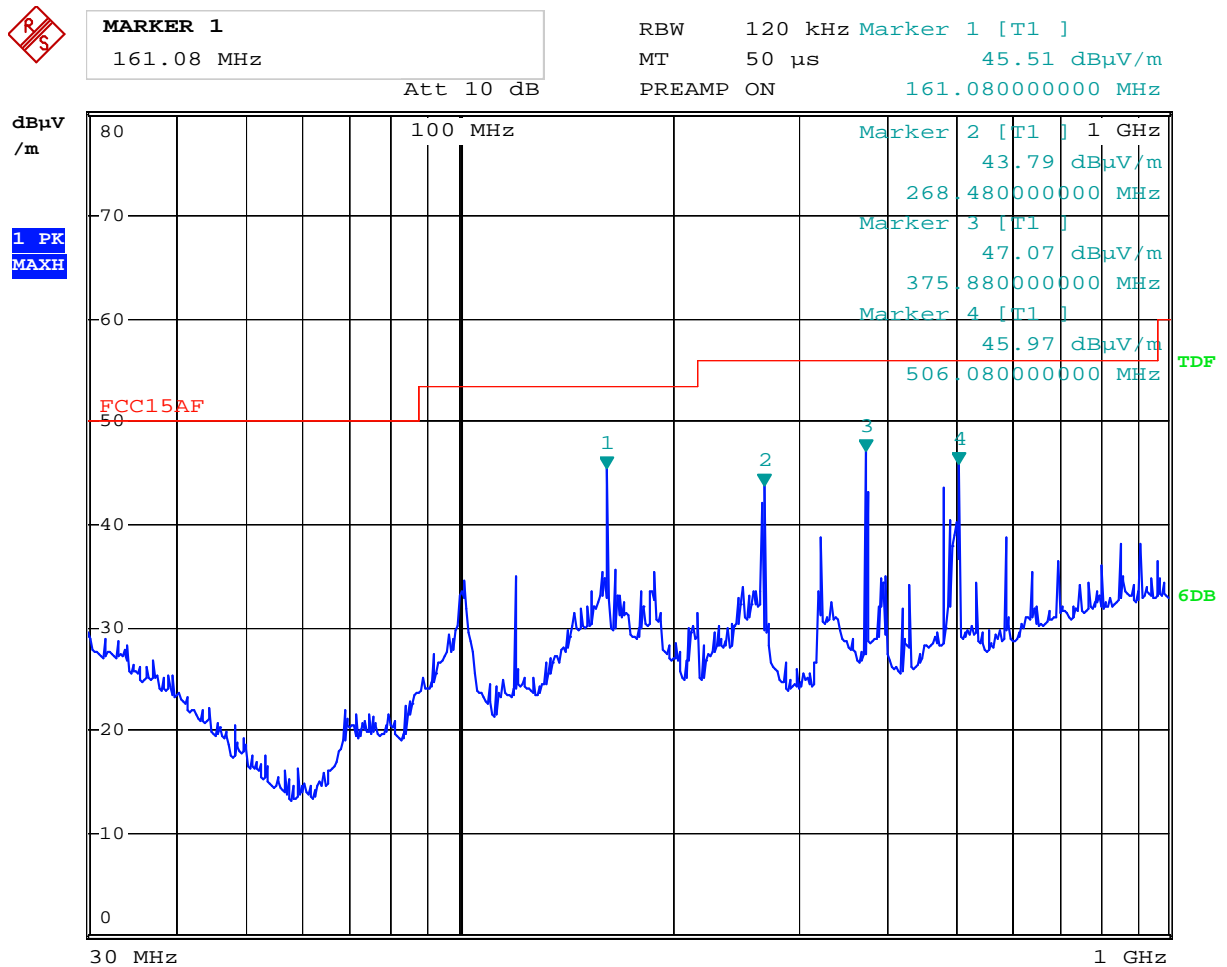
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play SD**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Date: 1.APR.2012 14:24:17

Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
161.080	45.51	H	53.50
268.480	43.79	H	56.00
375.880	47.07	H	56.00
506.080	45.97	H	56.00

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**D Radiated Disturbance (30MHz----1000MHz)**

**EUT Operating Environment**

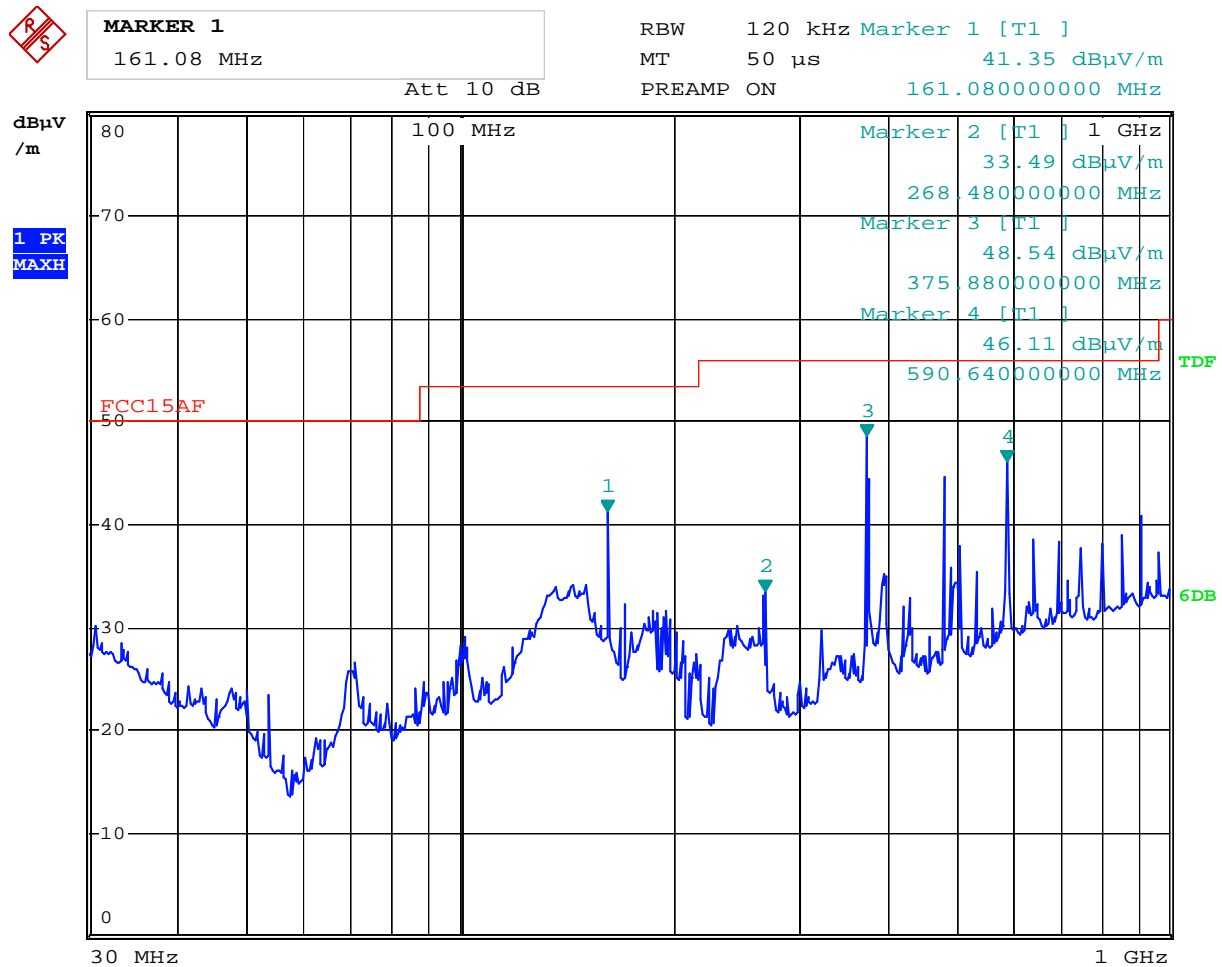
Temperature:25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play SD**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Date: 1.APR.2012 14:25:03

Frequency (MHz)	Level@3m (dBuV/m)	Antenna Polarity	Limit@3m (dBuV/m)
161.080	41.35	V	53.50
268.480	33.49	V	56.00
375.880	48.54	V	56.00
590.640	46.11	V	56.00

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**E Radiated Disturbance (30MHz----1000MHz)**

**EUT Operating Environment**

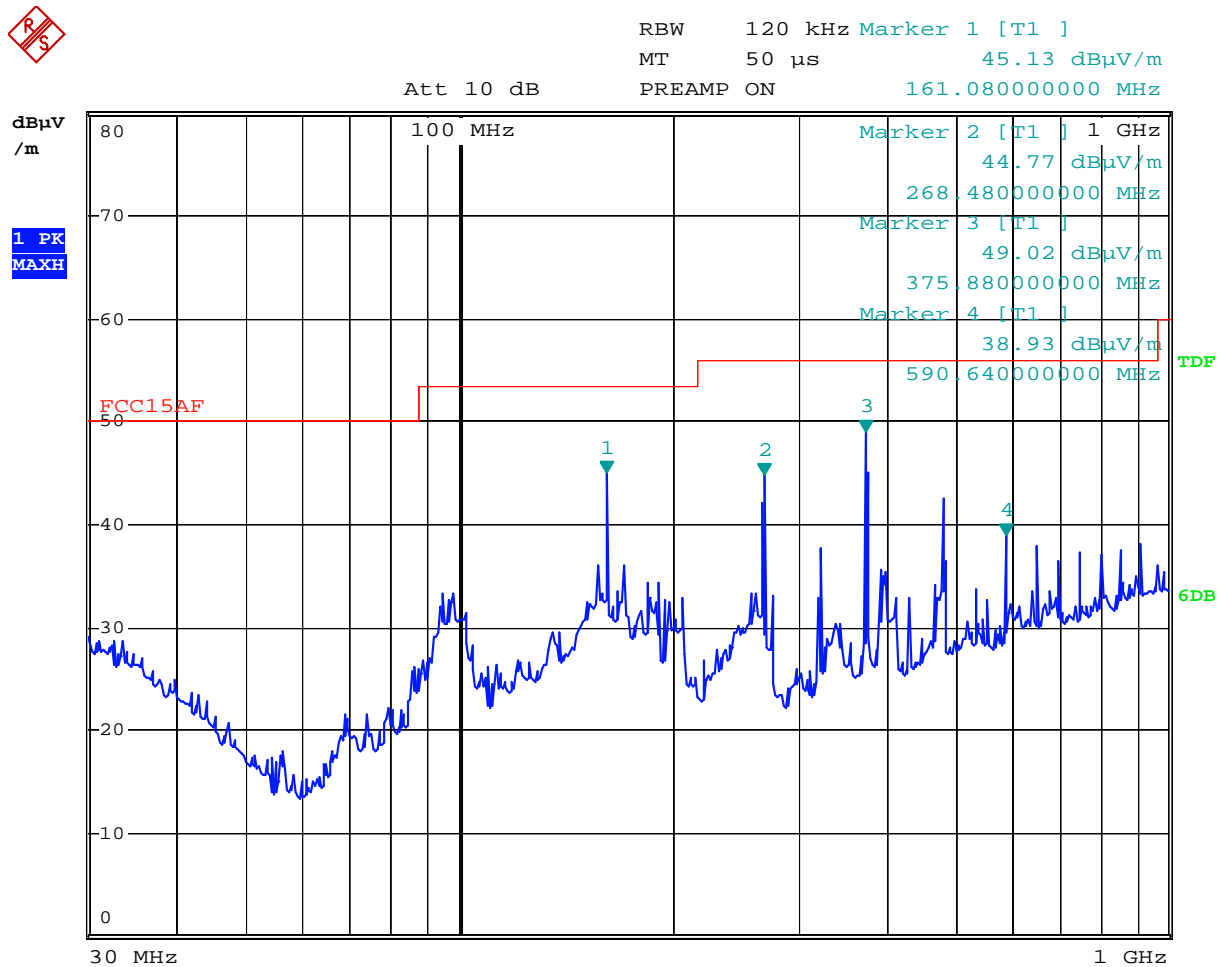
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Ping LAN and Running EMC test Software**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Date: 1.APR.2012 14:28:51

Frequency (MHz)	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
161.080	45.13	H	53.50
268.480	44.77	H	56.00
375.880	49.02	H	56.00
590.640	38.93	H	56.00

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**F Radiated Disturbance (30MHz----1000MHz)**

**EUT Operating Environment**

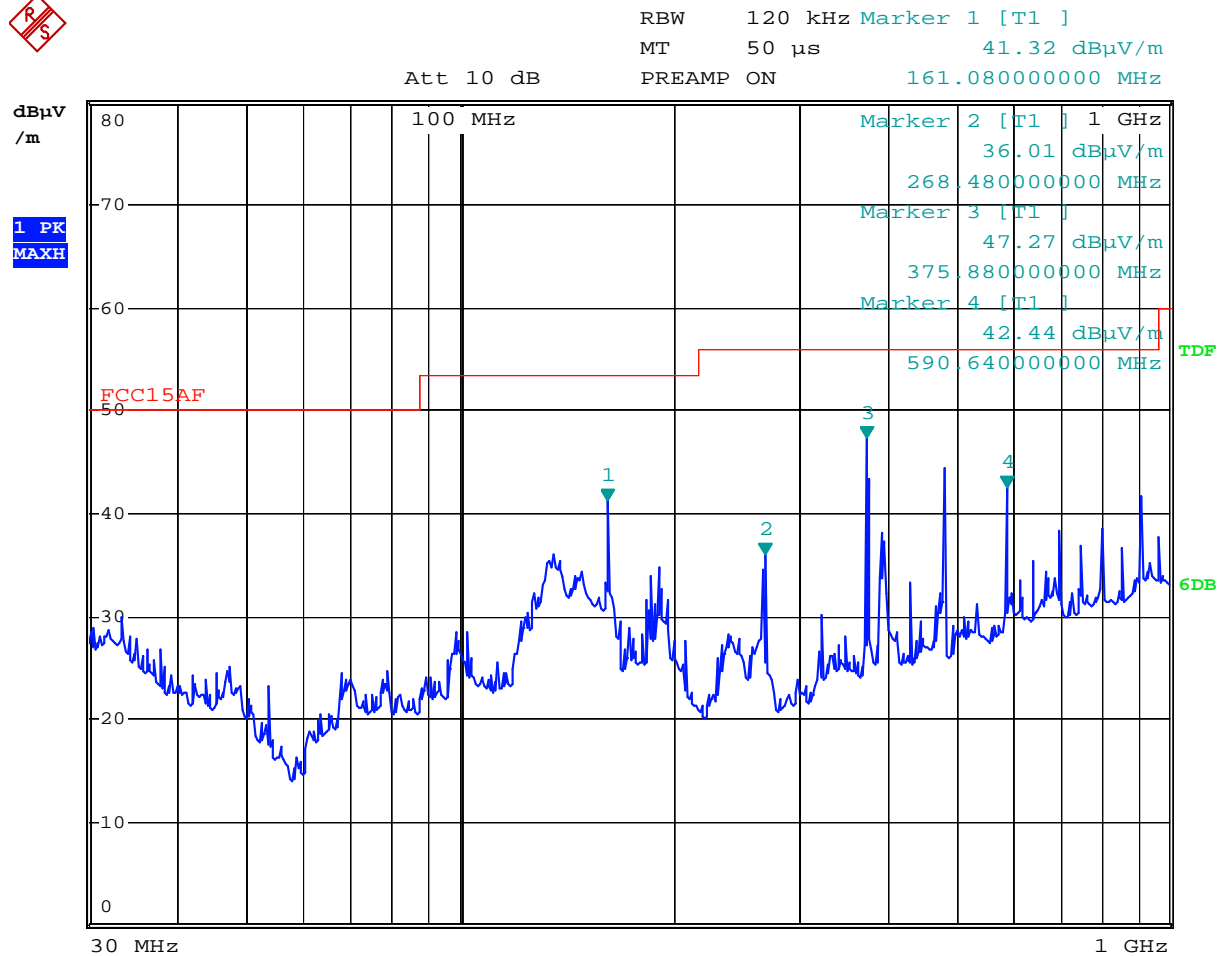
Temperature:25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Ping LAN and Running EMC test Software**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Date: 1.APR.2012 14:26:36

Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
161.080	41.32	V	53.50
268.480	36.01	V	56.00
375.880	47.27	V	56.00
590.640	42.44	V	56.00

"The report refers only to the sample tested and does not apply to the bulk production.  
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**I Radiated Disturbance (1000MHz----18000MHz)**

**EUT Operating Environment**

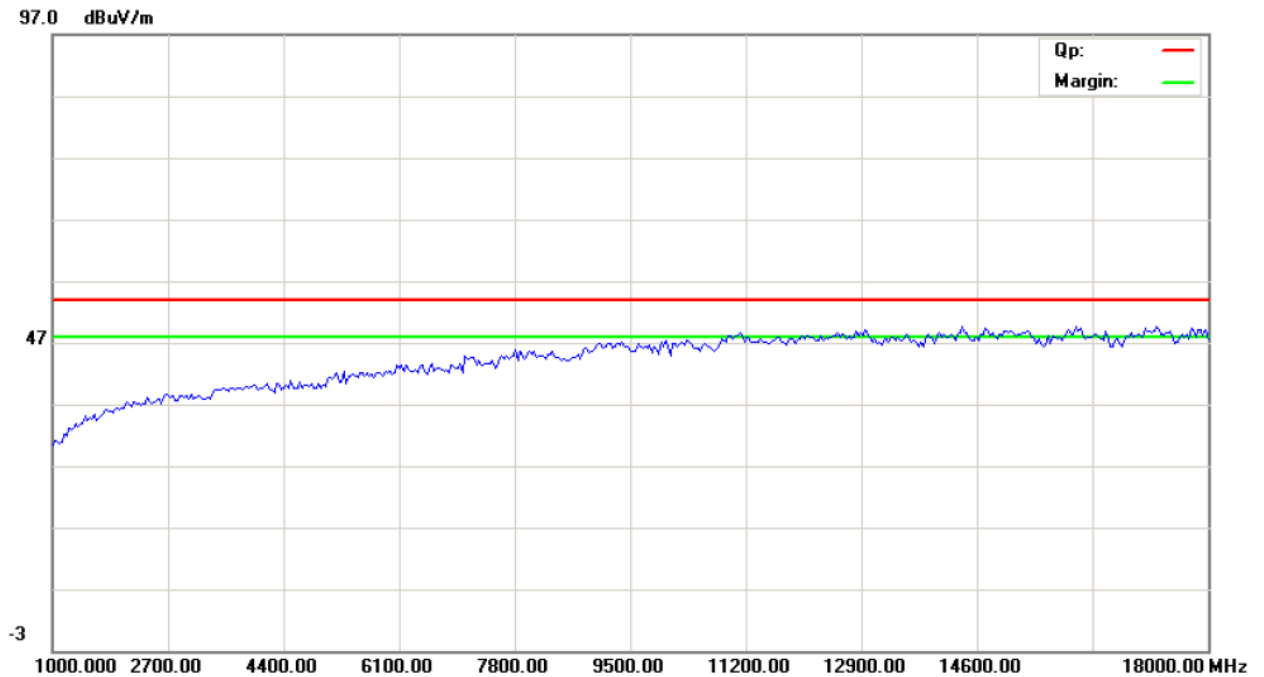
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play USB**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	H	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production.  
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**J Radiated Disturbance (1000MHz----18000MHz)**

**EUT Operating Environment**

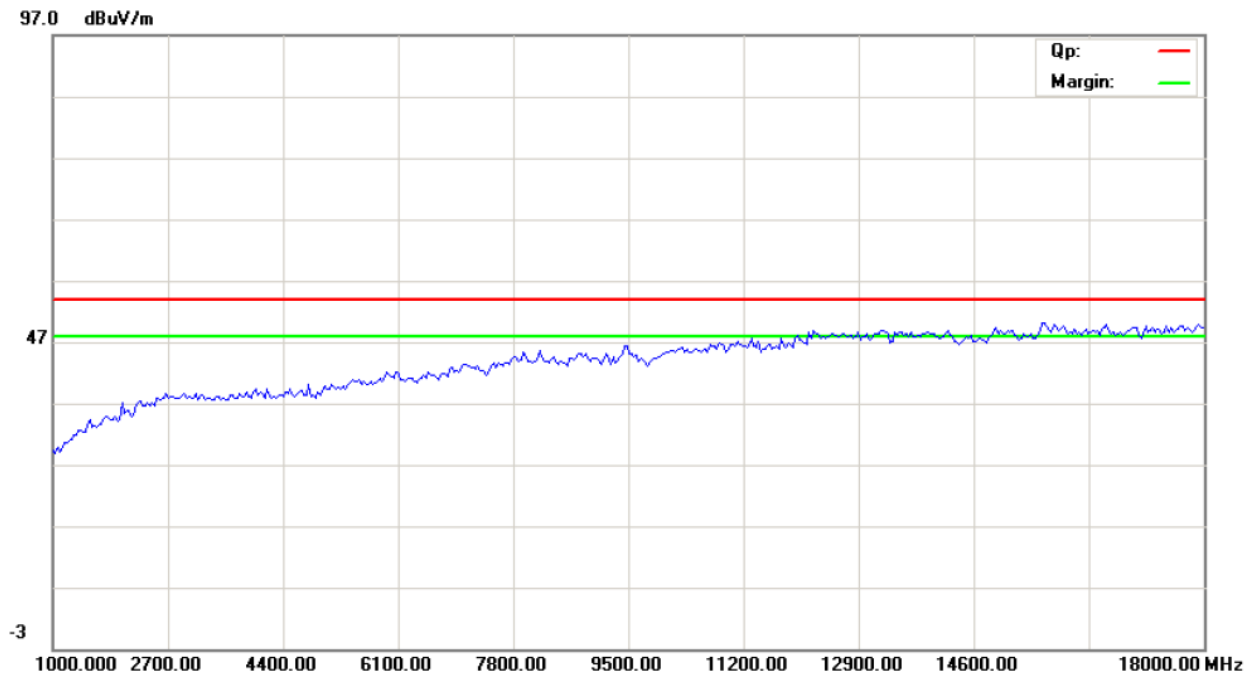
Temperature:25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play USB**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	V	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production.  
 This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**K Radiated Disturbance (1000MHz----18000MHz)**

**EUT Operating Environment**

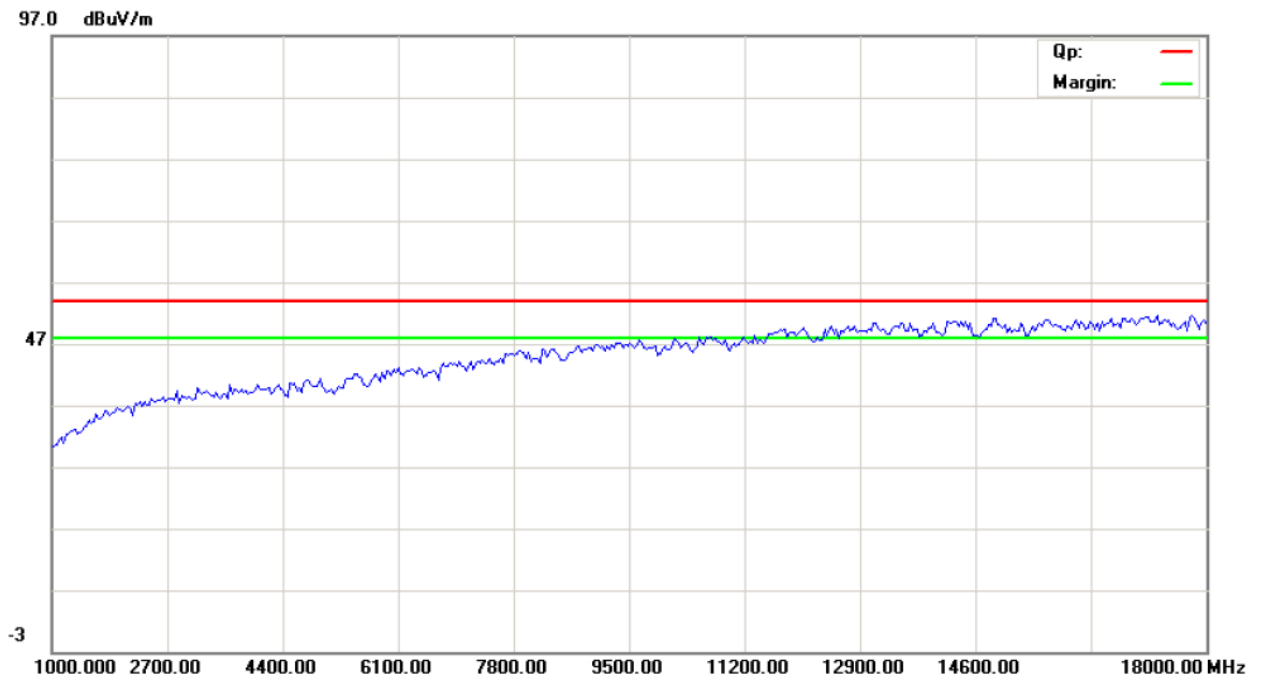
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play SD**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	H	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production.  
 This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**L Radiated Disturbance (1000MHz----18000MHz)**

**EUT Operating Environment**

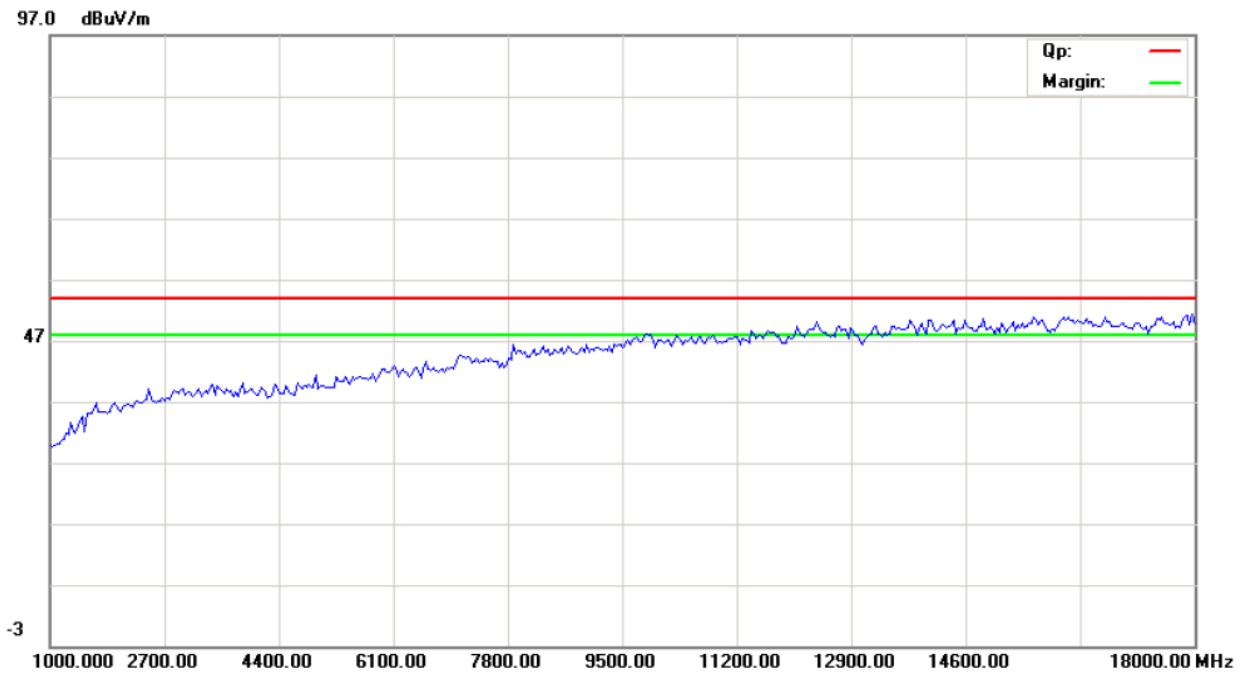
Temperature:25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Play SD**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	V	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."





**M Radiated Disturbance (1000MHz----18000MHz)**

**EUT Operating Environment**

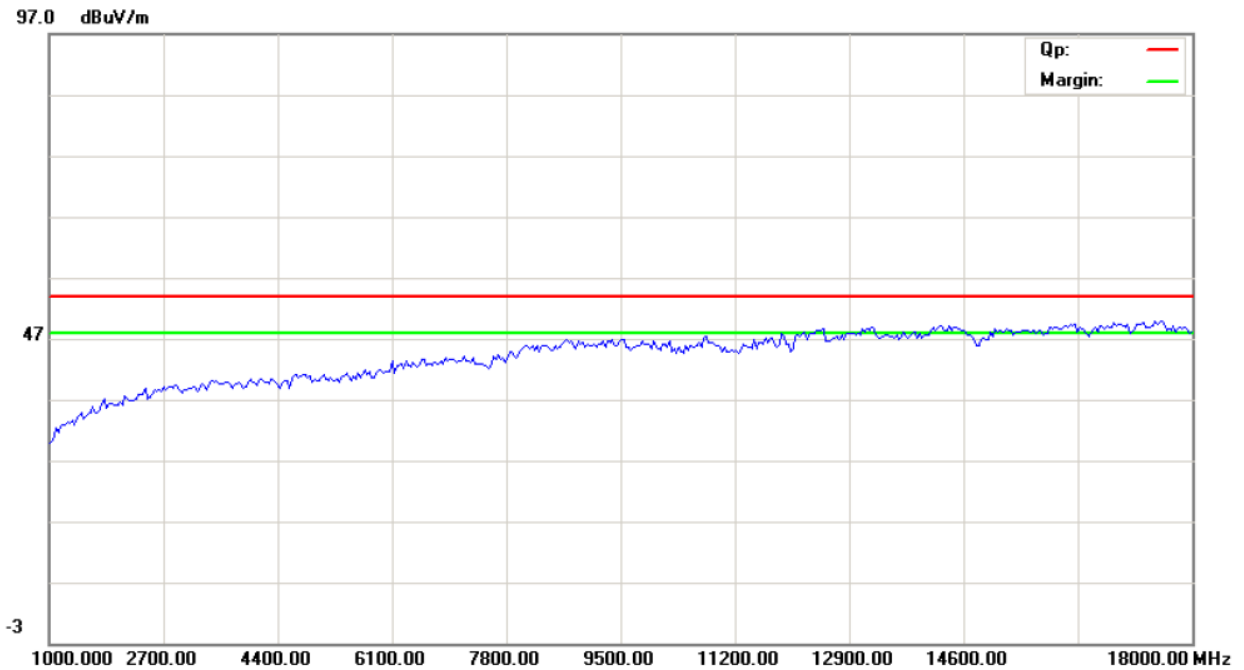
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Ping LAN and Running EMC test Software**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
--	--	H	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production.  
 This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



**N Radiated Disturbance (1000MHz----18000MHz)**

**EUT Operating Environment**

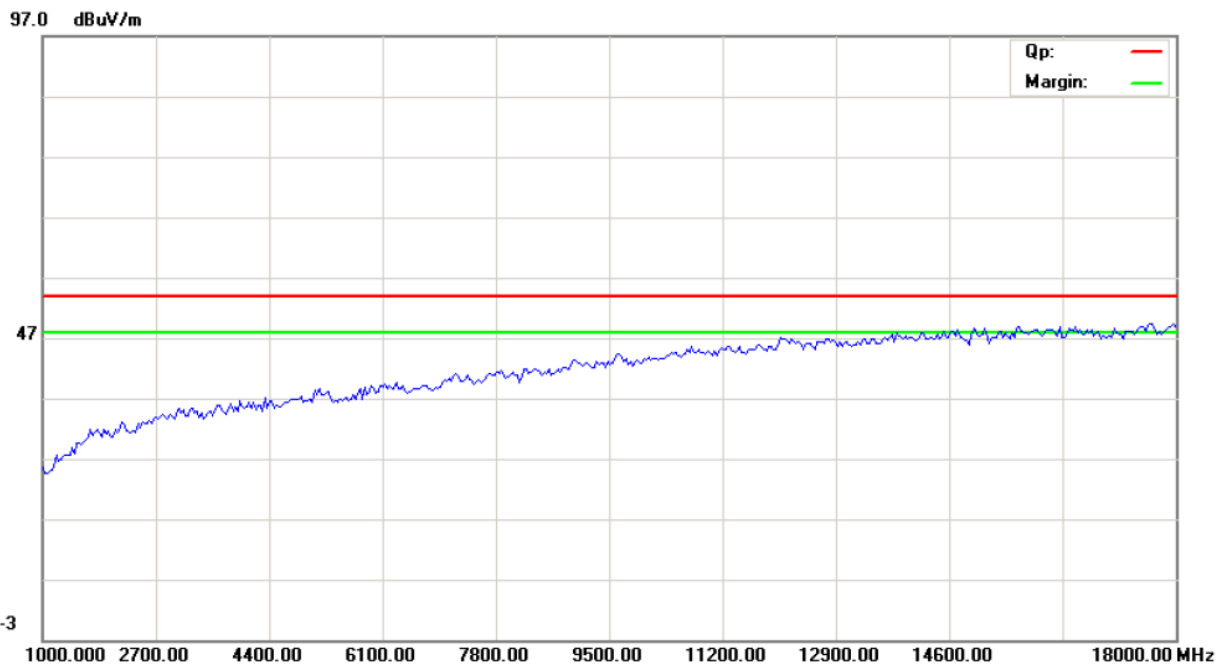
Temperature:25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

**EUT set Condition: Ping LAN and Running EMC test Software**

**Equipment Level: Class A**

**Results: Pass**

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dB $\mu$ V/m)	Antenna Polarity	Limit@3m (dB $\mu$ V/m)
--	--	V	--

-The test data shows much less than the limit, no necessary take down the results.

"The report refers only to the sample tested and does not apply to the bulk production.  
 This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
 In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



## 6.0 FCC Label

**This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.**

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

**Mark Location: On the product body**

7.0 Photo of testing

7.1 Conducted test View--



"The report refers only to the sample tested and does not apply to the bulk production.

This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer.

Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."

7.2 Radiated emission test view--



"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



7.3 Photo for the EUT

Front View



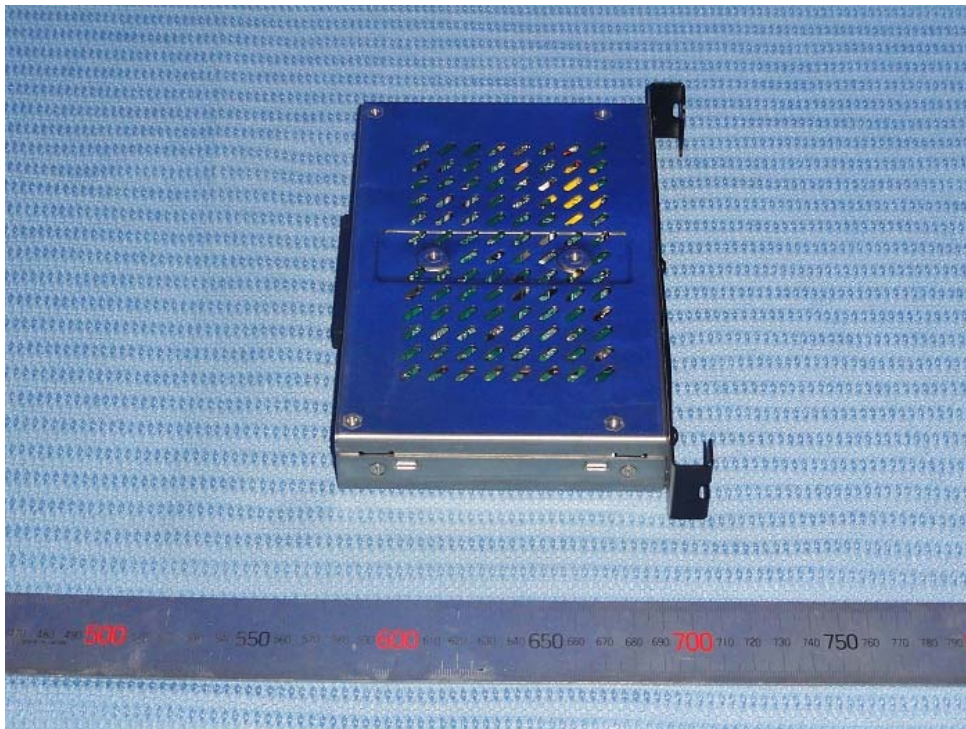
"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



Side View



Side View



"The report refers only to the sample tested and does not apply to the bulk production.

This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer.

Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.

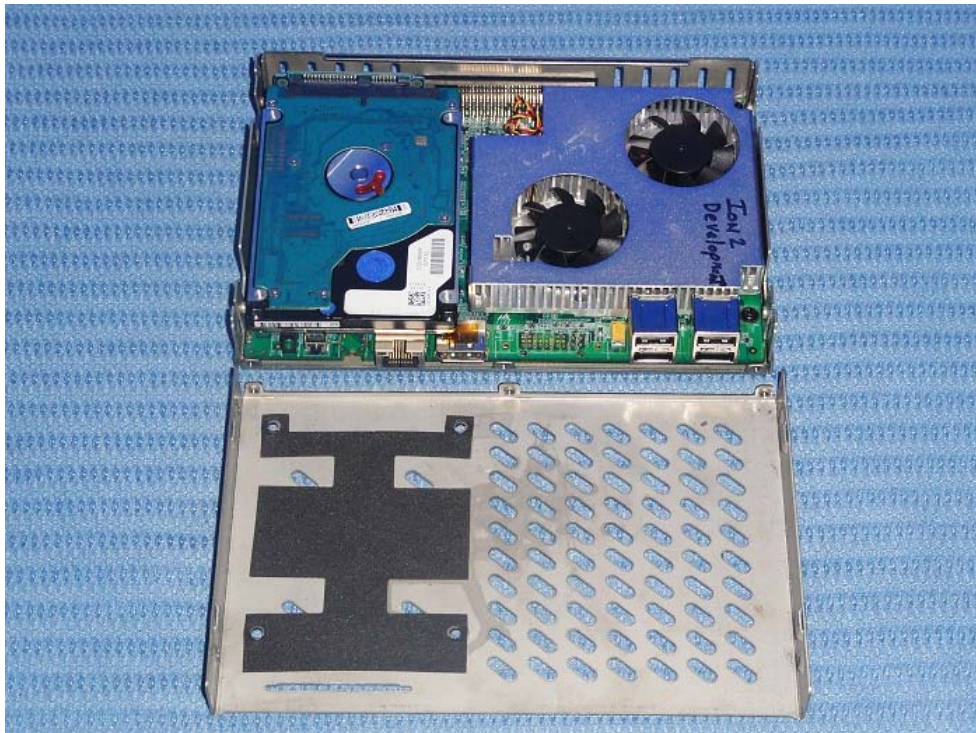
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



Side View



Interior View



"The report refers only to the sample tested and does not apply to the bulk production.  
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



Interior View



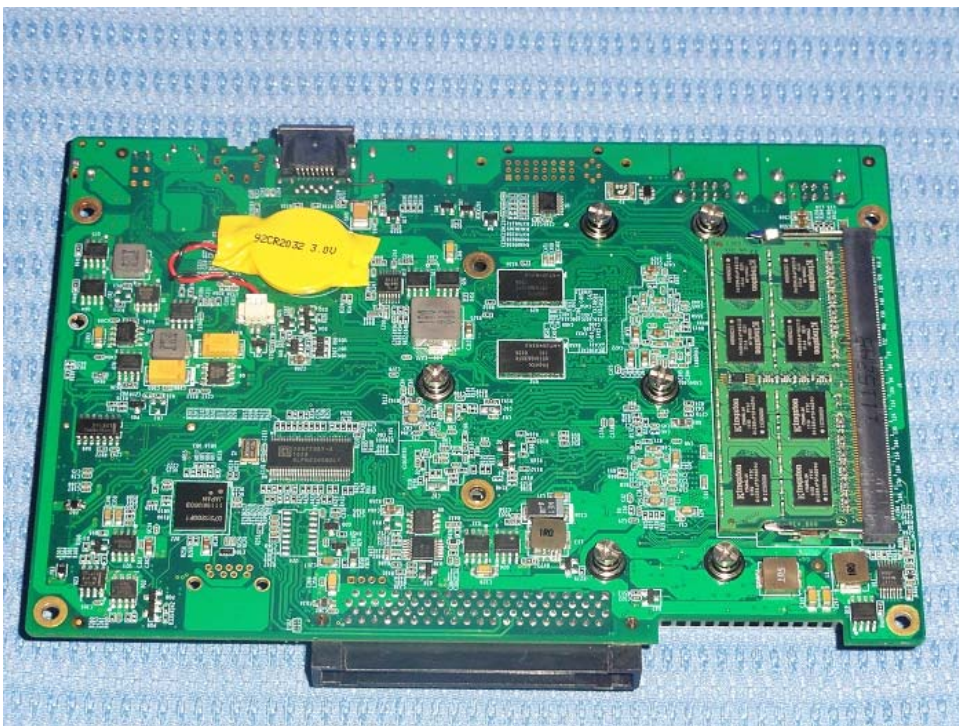
Interior View



"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



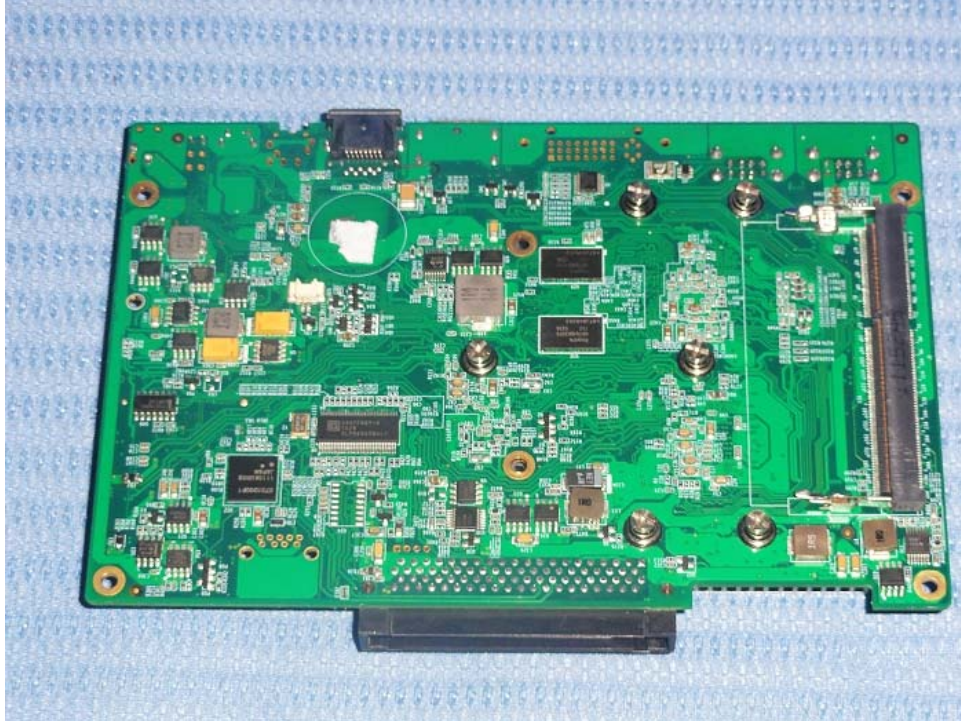
Interior View



"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



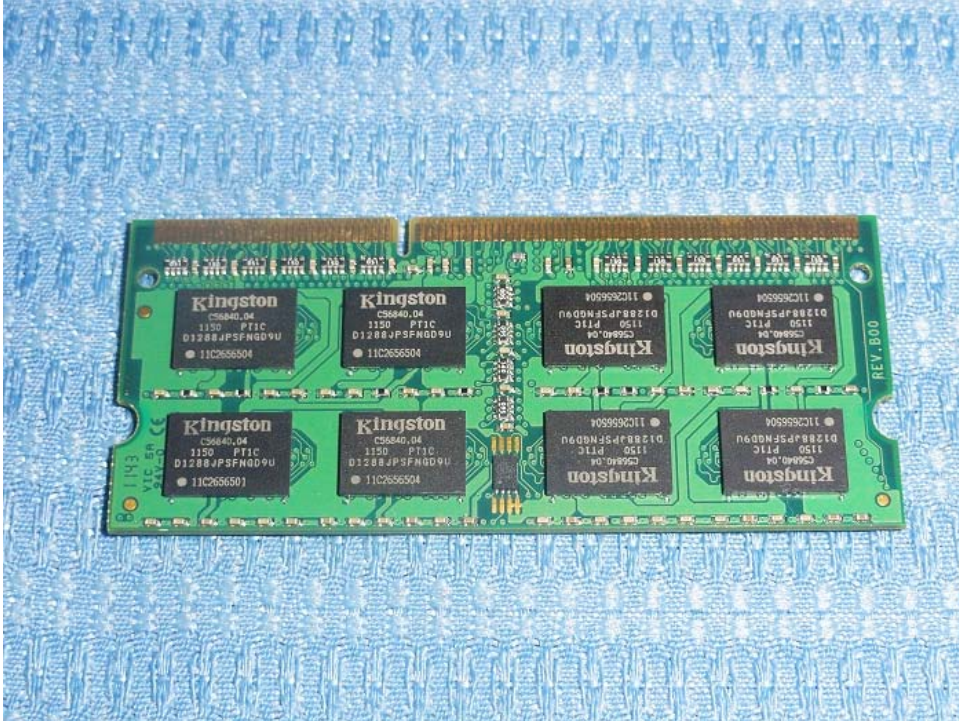
Interior View



"The report refers only to the sample tested and does not apply to the bulk production. This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."



Interior View



**-End of the report-**

"The report refers only to the sample tested and does not apply to the bulk production.  
This report is issued in confidential to the client and it will be strictly treated as such by the Shenzhen Timeway Technology Consulting Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for illegal purpose. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen Timeway Technology Consulting co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen Timeway Technology Consulting co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report.  
In the event of the improper use of the report. The Shenzhen Timeway Technology Consulting co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate."