Product Name	:	Embbeded Controller
Model Number	:	xxxxxAEC-6821-xxxxxxx (where x is 0-9,A-Z,"-" or blank)
Applicant	:	AAEON Technology Inc.
Address	:	5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei 231,
		Taiwan, R.O.C
Report Number	:	F-U070-0902-126
Issue Date	:	February 25, 2009
Applicable Standards	s :	FCC Part 15, Subpart B Class A ITE

One sample of the designated product has been tested in our laboratory and found to be in compliance with the FCC rules cited above.

Industry Canada ICES-003 Issue 4 CSA-IEC CISPR22: 02 Class A ITE





NVLAP LAB CODE 200575-0

**TAF 0905** FCC CAB Code TW1053 IC Code 4699A VCCI Accep. No. R-1527, C-1609, T-131, T-1441



Central Research Technology Co. **EMC Test Laboratory** 11, Lane41, Fushuen St., Jungshan Chiu, Taipei, Taiwan, 104, R.O.C. Tel: 886-2-25984568 Fax: 886-2-25984546

(Tsun-Yu Shih/ General Manager) Date: February 25, 2009

## **FCC Test Report**

for

## **Embbeded Controller**

Model Number :	xxxxxAEC-6821-xxxxxxx
	(where x is 0-9,A-Z,"-" or blank)
Report Number :	F-U070-0902-126
Date of Receipt :	February 16, 2009
Date of Report :	February 25, 2009

Prepared for

## AAEON Technology Inc.

5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei 231, Taiwan, R.O.C



Prepared by Central Research Technology Co. EMC Test Laboratory

11, Lane41, Fushuen St., Jungshan Chiu, Taipei, Taiwan, 104, R.O.C.



NVLAP LAB CODE 200575-0

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# Verification of Compliance

Equipment Under Test	: Embbeded Controller
Model No.	: xxxxxAEC-6821-xxxxxxx (where x is 0-9,A-Z,"-" or blank)
Applicant	: AAEON Technology Inc.
Address	: 5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei
	231, Taiwan, R.O.C
Applicable Standards	:
	FCC Part 15, Subpart B Class A ITE
	Industry Canada ICES-003 Issue 4
	CSA-IEC CISPR22: 02 Class A ITE
Date of Testing	: February 17~19, 2009
Deviation	: N/A
Condition of Test Sample	: Engineering Sample

We, **Central Research Technology Co**., hereby certify that one sample of the designated product was tested in our facility during the period mentioned above. The test records, data evaluation and Equipment Under Test (EUT) configurations shown in the present report are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

The test results show that the EUT as described in the present report is in compliance with the requirements set forth in the standards mentioned above and apply to the tested sample identified in the present report only. The test report shall not be reproduced, except in its entirety, without the written approval of Central Research Technology Co.

PREPARED BY	: <u>Iris Chen</u> , <b>DATE</b> : <u>Feb</u> , <u>rs</u> (Iris Chen/System Executive)	5,2009
APPROVED BY	: J. Y. U.L., DATE:	t, 2009

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## 1. General Description

## 1.1 General Description of EUT

Equipment Under Test		Embbeded Controller
Model No.	:	xxxxxAEC-6821-xxxxxxx
		(where x is 0-9,A-Z,"-" or blank)
Power in	:	Supplied by the adapter
Adapter Specification	:	Model No. : FSP036-1AD101C
		Input Voltage : 100-240Vac, 50-60Hz, 1.0A
		Output Voltage : 12Vdc, 3A
Highest Operating Frequency	:	<1000MHz
Manufacturer	:	AAEON Technology Inc.
Function Description	:	

The EUT is an engineering sample of the Embbeded Controller. Please refer to the user's manual for the details.

The I/O ports of EUT are listed below:

No.	I/O Port Type	Quantity	Accessory
1	D-Sub port	1	
2	USB port	4	
3	RS232 port	2	
4	RJ45 port	2	RJ45 to RS232 Cable
5	LAN port	2	
6	PS/2 port	1	
7	CF card slot	1	
8	Printer port	1	
9	PCMCIA card slot	1	
10	Audio port	1	

## 1.2 Test Mode

Normal operating as the customer's requirement. The monitor was connected to the EUT, and the resolution mode of the monitor was D-Sub 1024\*768, V-Sync: 60Hz selected by its manufacturer to be tested herein.

## 1.3 Applied standards

According to the specifications of the manufacturers, the applied standard to evaluate the compliance of requirements is 47CFR Part 15, Subpart B and the measurement procedures specified in ANSI C63.4 are performed.

According to 47CFR Part 15 Section 15.33(b), the test frequency range of radiated emission measurements are listed below and the EUT herein shall be tested as:

Type of EUT	Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
	Below 1.705	30
	1.705 - 108	1000
	108 - 500	2000
$\mathbf{\overline{A}}$	500 - 1000	5000
	Above 1000	5 <sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower

All the test items are as following:

Applied Standards	Test Items	Results
FCC Part 15, Subpart A	☑ Conducted Emission Measurement	PASS
Class A ITE	☑ Radiated Emission Measurement	<u>PASS</u>

## 1.4 Test Setup for the EUT

The EUT is an unique unit connected with other necessary accessories and support units listed in the next section. It has been tested against each standard through the following steps:

- a. Connect the EUT and all the support units to the appropriate power source.
- b. Turn on the EUT and all the accessories and support units.
- c. Plug in the CF and PCMCIA cards into the slot of EUT.
- d. Install an EMC test software into EUT and execute it under the Windows environment.
- e. The EUT sends "H" patterns to the monitor which fills the whole screen of it.
- f. The EUT reads/writes messages from/to USB Flash Disks.
- g. Another PC sends/ receives messages to/ from the EUT through a Hub by executing the command of "PING".
- h. Repeat and keep setup steps listed above before and during all tests.

EUT I/O ports / Peripherals	Exerciser Program (software)	Version of Program	
USB Flash Disks	EMC Test	V1.5	
Monitor		1.0	

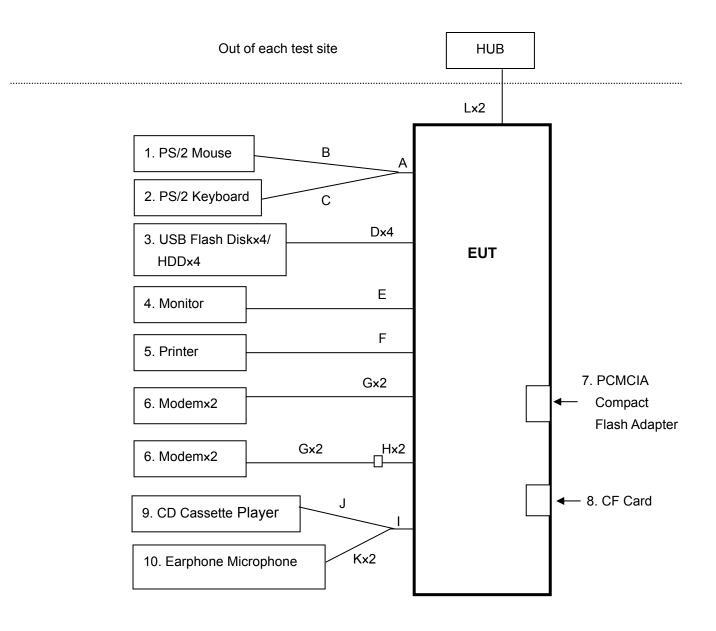
## 1.5 The Support Units

No.	Unit	Model No./ Serial No.	FCC ID	Trade Name	Power Cord	Supported by lab.
1	PS/2 Mouse	MO71KC / 515044951	DoC	DELL	N/A	~
2	PS/2 Keyboard	SK-8110/ MY-05N456-71619- 53A-0546	DoC	DELL	N/A	~
		U172/ 100-057	DoC	PQI	N/A	~
3	USB Flash	U172/ 100-041	DoC	PQI	N/A	$\checkmark$
3	Disk	U172/ 100-010	DoC	PQI	N/A	~
		U172/ 100-005	DoC	PQI	N/A	~
4	CRT Monitor	959NF/ AQ19H2RT805829D	PN19NS	SAMSUNG	1.8m	~
5	Printer	LQ-300+/ DCGY099001	N/A	EPSON	1.9m	~
	0	DM-1414/ 0509019804	IFAXDM1414	ACEEX	1.9m	~
6		DM-1414/ 0505012779	IFAXDM1414	ACEEX	1.9m	~
0	Modem	DM-1414/ 0509019803	IFAXDM1414	ACEEX	1.9m	$\checkmark$
		DM-1414/ 0406031776	IFAXDM1414	ACEEX	1.9m	~

## FCC Test Report

7	PCMCIA Compact Flash Adapter	DSC000-DP061-1/ MX65100428	DoC	A-mego	N/A	~
8	CF Card (32MB)	N/A	N/A	Transcend	N/A	$\checkmark$
9	CD Cassette Player	SL-S22/ FA0GB18509	N/A	PANASONIC	N/A	$\checkmark$
10	Earphone Microphone	KTSEP511A/ 91X541K5001079	DoC	KTNET	N/A	~

## 1.6 Layout of the Setup



## Connecting Cables :

No.	Cable	Length	Shielded	Core	Shielded Backshell	Supported by lab.	Note
Α	PS/2 Cable	0.2m	✓				1 to 2 Ports
В	PS/2 Mouse Cable	1.8m	✓			~	
С	PS/2 Keyboard Cable	2.0m	✓			~	
D	USB Cable	1.8m	✓			✓	
Е	Monitor VGA Cable	1.7m	✓	✓		✓	2 Cores
F	Printer Cable	1.8m	✓	✓		✓	2 Cores
G	Modem Cable	1.8m	✓	✓		✓	2 Cores
	RJ45 to RS232 Cable	0.2m	✓				
I	Audio Cable	0.2m	✓				1 to 3 ports
J	Audio Cable	1.5m	✓			✓	
K	Audio Cable	1.8m	✓			✓	
L	LAN Cable	1.8m				✓	

## 1.7 Test Capability

## **Test Facility**

The test facility used for evaluating the conformance of the EUT with each standard in the present report meets what required in CISPR16-1-4, CISPR16-2-3 and ANSI C63.4.

Test Room	Type of Test Room	Descriptions		
TR1	10m semi-anechoic chamber ( $23m \times 14m \times 9m$ )	Complying with the NSA requirements in documents CISPR 22 and ANSI C63.4.		
TR11	3m semi-anechoic chamber	for the radiated emission measurement.		
IKII	$(9m \times 6m \times 6m)$			
TR5	Shielding Room	For the conducted emission		
i Ko	$(8m \times 5m \times 4m)$	measurement.		

## **Test Laboratory Competence Information**

Central Research Technology Co. has been accredited / filed / authorized by the agencies listed in the following table.

Certificate	Nation	Agency	Code	Mark	
	USA	NVLAP	200575-0	ISO/IEC 17025	
	R.O.C.	TAF	0905	ISO/IEC 17025	
Accreditation	(Taiwan)	17 (1		100/120 17020	
Certificate			SL2-IN-E-0033,		
Certificate	R.O.C.	BSMI	SL2-IS-E-0033,	ISO/IEC 17025	
	(Taiwan)	DOIVII	SL2-R1/R2-E-0033,	130/IEC 17025	
			SL2-A1-E-0033		
	USA	FCC	474046,TW1053	Test facility list	
	034	100	474048,1001055	& NSA Data	
Site Filing	Canada	IC	4699A-1,-3	Test facility list	
Document	Callaua		4099A-1,-3	& NSA Data	
	lanan	VCCI	D 1527 C 1600 T 121 T 1441	Test facility list	
	Japan	VCCI	R-1527,C-1609,T-131,T-1441	& NSA Data	
Authorization	Germany	TUV	10021687-2007	ISO/IEC 17025	
Certificate	Norway	Nemko	ELA 212	ISO/IEC 17025	

The copy of each certificate can be downloaded from our web site: <u>www.crc-lab.com</u>

## 2. Conducted Emission Measurement

Test Result : PASS

## 2.1 Limits for Emission Measurement

## ☑ Limits for conducted disturbances at the power mains

Frequency	Class A E	quipment	Class B E	quipment			
(MHz)	Quasi-peak	Average	Quasi-peak	Average			
(1011 12)	(dBµV)	(dBµV)	(dBµV)	(dBµV)			
0.15 to 0.5	79	66	66 – 56	56 – 46			
0.5 to 5	73	60	56	46			
5 to 30	73	60	60	50			
Note 1- The lower limit shall apply at the transition frequency.							
Note 2- The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to							
0.5MHz for Cla	0.5MHz for Class B equipment.						

## 2.2 Test Instruments

Test Site and	Manufacturer	Model No./	Last	Calibration	
Equipment	Manufacturer	Serial No.	<b>Calibration Date</b>	Due Date	
Test Receiver	R&S	ESCS 30/	Jan. 13, 2009	lon 12 2010	
lest Receiver	Ras	836858/021	Jan. 15, 2009	Jan. 13, 2010	
LISN	R&S	ESH2-Z5/		Aug 12 2000	
LISIN	Ras	836613/001	Aug. 13, 2008	Aug. 13, 2009	
2 <sup>nd</sup> LISN	R&S	ENV4200/	lan 12 2000	lon 12 2010	
2 LISIN	Ras	833209/010	Jan. 13, 2009	Jan. 13, 2010	
50Ω terminator	N/A	N/A/		Aug. 26, 2009	
	N/A	001	Aug. 26, 2008		
RF Switch	N/A	RSU28/	Sept. 2, 2008	March 2, 2000	
	N/A	338965/002	3ept. 2, 2000	March 2, 2009	
RF Cable	N/A	N/A/	Sont 2 2008	March 2, 2000	
RF Cable	N/A	C0052 ~ 56	Sept. 2, 2008	March 2, 2009	
Test Software	Audix	e3/	NCR		
iest Soltware	Audix	Ver. 5.2004-2-19k	NCK	NCR	
TR5	ETS	TR5/	NCR	NCR	
shielded room	LINDGREN	15353-F	NOR	NOR	

Note:

1. The calibrations are traceable to NML/ROC.

2. NCR : No Calibration Required.

## **Measurement Uncertainty**

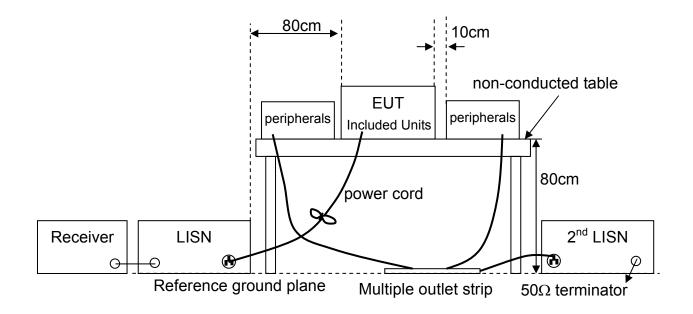
The assessed measurement uncertainty with a suitable coverage factor K to ensure 95% confidence level for the normal distribution are shown as below, the values are less than  $U_{cispr}$  in table 1 of CISPR 16-4-2.

Equipment	Model Number	Uncertainty Value
LISN	ESH2-Z5	3.1dB
	ENV 4200	3.8dB

### 2.3 Test Procedures

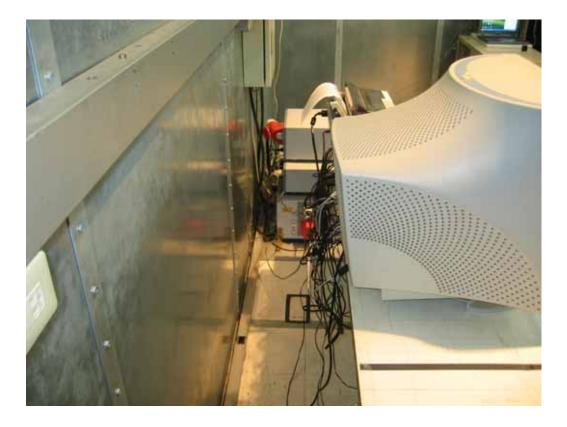
- a. The EUT was set up per the test configuration figured in the next section of this chapter to simulate the typical usage per the user's manual.
- b. If the EUT is tabletop equipment, it was placed on a non-conducted table with a height of 0.8 meters above the reference ground plane and 0.4 meters from the conducting wall of the shielded room. Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height of 12 millimeters above the reference ground plane.
- c. Connect the EUT's power source to the appropriate power mains through the LISN.
- d. All the other peripherals are connected to the 2<sup>nd</sup> LISN, if any.
- e. The LISN was placed 0.8 meters from the EUT and at least 0.8 meters from other units and other metal planes.
- f. Measure the conducted emissions on each power line (Neutral Line and Line 1 Hot side) of the EUT's power source by using the test receiver connected to the coupling RF output port of LISN.
- g. Rapidly scan the signal from 150kHz to 30MHz by using the receiver through the Maximum-Peak detector to determine those frequencies associated with higher emission levels for each measured line.
- h. Then measure the maximum level of conducted disturbance for each frequency found from step g. by using the receiver through the Quasi-Peak and Average detectors per CISPR 16-1.
- i. Record the level for each frequency and compare with the required limit.

## 2.4 Test Configurations

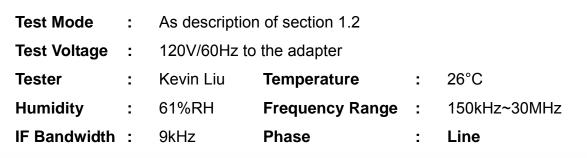


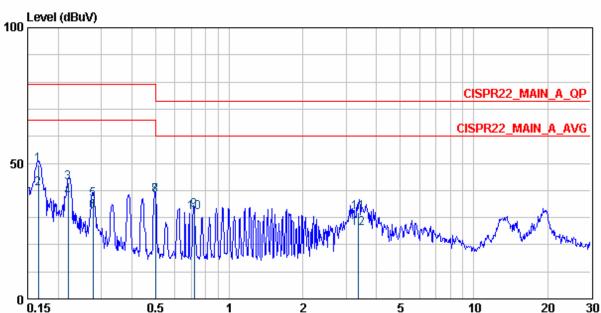
## 2.5 Photographs of the Test Configurations





### 2.6 Test Results



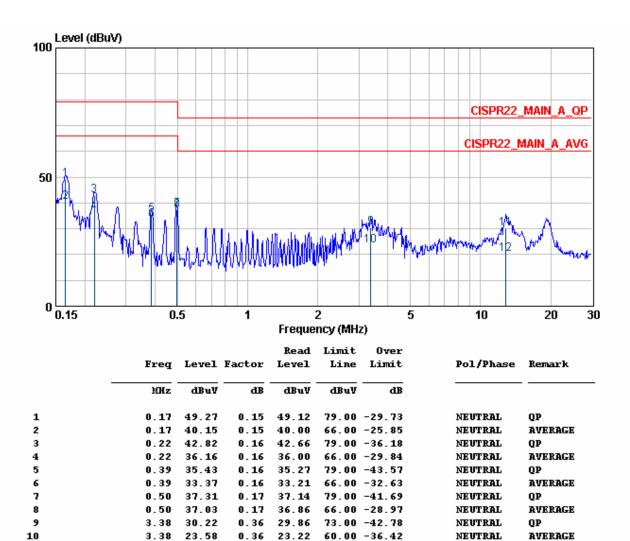


Frequency (MHz)

	Freq	Level	Factor	Read Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBu¥	dBu∛	dB		
1	0.17	49.46	0.14	49.32	79.00	-29.54	LINE	QP
2 @	0.17	40.62	0.14	40.48	66.00	-25.38	LINE	AVERAGE
3	0.22	42.95	0.15	42.80	79.00	-36.05	LINE	QP
4	0.22	37.22	0.15	37.07	66.00	-28.78	LINE	AVERAGE
5	0.28	36.56	0.15	36.41	79.00	-42.44	LINE	QP
6	0.28	32.13	0.15	31.98	66.00	-33.87	LINE	AVERAGE
7	0.50	37.95	0.16	37.79	79.00	-41.05	LINE	QP
8	0.50	37.93	0.16	37.77	66.00	-28.07	LINE	AVERAGE
9	0.72	32.58	0.17	32.41	73.00	-40.42	LINE	QP
10	0.72	31.76	0.17	31.59	60.00	-28.24	LINE	AVERAGE
11	3.38	31.91	0.34	31.57	73.00	-41.09	LINE	QP
12	3.38	25.99	0.34	25.65		-34.01	LINE	AVERAGE

- 1. Emission Level = reading value + correction factor.
- 2. Correction factor = cable loss + insertion loss of LISN.
- 3. Q.P. is abbreviation of quasi-peak.

Test Mode	:	As description of section 1.2				
Test Voltage	:	120V/60Hz to the adapter				
Tester	:	Kevin Liu	Temperature	:	26°C	
Humidity	:	61%RH	Frequency Range	:	150kHz~30MHz	
IF Bandwidth	:	9kHz	Phase	:	Neutral	



Note:

11

12

1. Emission Level = reading value + correction factor.

29.90

20.00

0.92

0.92

28.98

19.08

73.00 -43.10

60.00 - 40.00

NEUTRAL

NEUTRAL

QP

AVERAGE

2. Correction factor = cable loss + insertion loss of LISN.

3. Q.P. is abbreviation of quasi-peak.

12.85

12.85

## 3. Radiated Emission Measurement

Test Result : <u>PASS</u>

## 3.1 Limits for Emission Measurement

### ☑ Limits for radiated disturbances below 1000MHz

Frequency	Class A Equipment (10m distance)	Class B Equipment (3m distance)			
(MHz)	Quasi-peak	Quasi-peak			
	(dBµV/m)	(dBµV/m)			
30 to 88	39.1	40			
88 to 216	43.5	43.5			
216 to 960	46.4	46			
960 to 1000	49.5	54			
Note 1- The lower limi	t shall apply at the transition frequency.				
Note 2- Additional pro	visions may be required for cases where	e interference occurs.			
Note 3- According to 1	5.109(g), as an alternative to the radiat	ed emission limits shown above, digital			
devices may be shown to comply with the standards (CISPR), Pub. 22 shown as below.					
30 to 230	40	30			
230 to 1000	47	37			

## □ Limits for radiated disturbances in the frequency range 1000MHz ~ 2000MHz at a measuring distance of 10m

Frequency (GHz)	Class A Ec	uipment	Class B Equipment		
	Peak	Average	Peak	Average	
	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	
1 to 2	69.5	49.5	63.5	43.5	

# ☑ Limits for radiated disturbances above 1000MHz at a measuring distance of 3m

Frequency (GHz)	Class A Ec	uipment	Class B Equipment		
	Peak	Average	Peak	Average	
	(dBµV/m)	(dBµV/m)	(dBµV/m)	(dBµV/m)	
1 to 40	80	60	74	54	

## 3.2 Test Instruments

## For Measurement below 1000MHz

Test Site and Equipment	Manufacturer	Model No./ Serial No.	Last Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESCS 30/ 836858/020	Aug. 4, 2008	Aug. 4, 2009
Broadband Antenna	R&S	HL-562/ 360543/007	March 12, 2008	March 12, 2009
Broadband Antenna	R&S	HL-562/ 830547/010	Dec. 16, 2008	Dec. 16, 2009
Pre-Amplifier	Mini Circuit	ZKL-2/ 001	Sept. 4, 2008	March 4, 2009
Pre-Amplifier	Mini Circuit	ZKL-2/ 002	Sept. 4, 2008	March 4, 2009
Spectrum	R&S	FSP7/ 100384	Dec. 16, 2008	Dec. 16, 2009
Spectrum	R&S	FSP 7/ 100108	May 29, 2008	May 29, 2009
RF Cable	JYEBAO	0214/ C0049	July 24, 2008	July 24, 2009
RF Cable	JYEBAO	0214/ C0050	July 24, 2008	July 24, 2009
Test Software	Audix	e3/ Ver. 4.3.714.e	NCR	NCR
TR1 Semi - anechoic Chamber	ETS. LINDGREN	TR1/ 17627-B	Nov. 22, 2008	Nov. 22, 2009

- 1. The calibrations are traceable to NML/ROC.
- 2. NCR : No Calibration Required.
- 3. The calibration date of the semi-anechoic chamber listed above is the date of NSA measurement.

## For Measurement above 1000MHz

Test Site and	Manufacturer	Model No./	Last Calibration Date	Calibration
Equipment EMI Test Receiver	R&S	FSCI/		Due Date Dec. 26, 2009
Bi-Log Antenna	EMCO	3142C/ 52088	July 25, 2008	July 25, 2009
Horn Antenna	EMCO	3117/ 57416	Feb. 25, 2008	Feb. 25, 2009
	Mini Circuit	ZKL-2/ 004	Feb.11, 2009	Aug.10, 2010
Pre-Amplifier	MITEQ	AMF-4D-005180- 24-10P/ 1072961	Dec. 19, 2008	Dec. 19, 2009
	MITEQ	AFS6-02001800- 35-10P-6/ 866643	Dec. 19, 2008	Dec. 19, 2009
Spectrum Analyzer	Agilent	E4407B/ MY45106795	March 19, 2008	March 19, 2009
RF Cable	N/A	N/A/ C0080	Feb.11, 2009	Aug.10, 2010
RF Cable	N/A	/A N/A/ C0081 Oct. 27		April 27, 2009
Test Software	Audix	e3/ Ver. 4.3.714.e	NCR	NCR
TR11 Semi - anechoic Chamber	ETS. LINDGREN	TR11/ 906-A	June 30, 2008	June 30, 2009

- 1. The calibrations are traceable to NML/ROC.
- 2. NCR : No Calibration Required.
- 3. The calibration date of the semi-anechoic chamber listed above is the date of NSA measurement.

## **Measurement Uncertainty**

The assessed measurement uncertainty with a suitable coverage factor K to ensure 95% confidence level for the normal distribution are shown as below, the values are less than  $U_{cispr}$  in table 1 of CISPR 16-4-2.

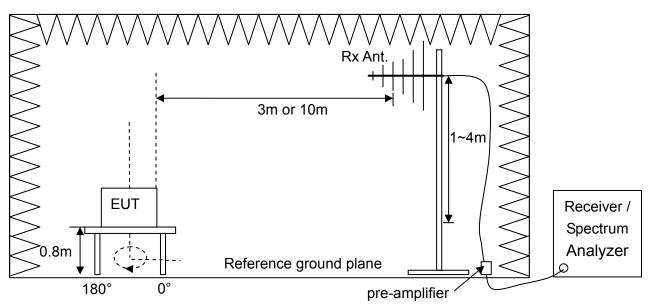
Test Site	Polarization	Frequency Range			
(Measuring distance)		30MHz ~200MHz	200MHz ~1000MHz		
TR1(10m)	Horizontal	3.5dB	3.4dB		
	Vertical	3.6dB	3.2dB		
TR1(3m)	Horizontal	3.4dB	4.0dB		
	Vertical	3.8dB	4.1dB		
TR11(3m)	Horizontal	2.8dB	3.4dB		
	Vertical	3.5dB	2.8dB		

## 3.3 Test Procedures

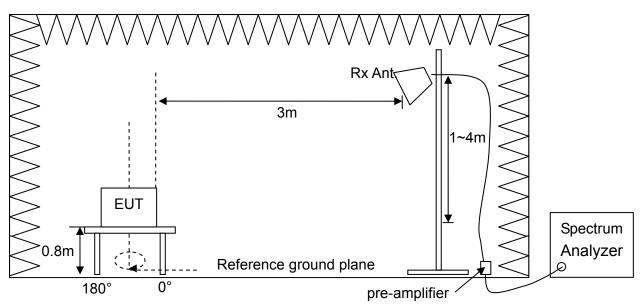
- a. The EUT was set up per the test configuration figured in the next section of this chapter to simulate the typical usage per the user's manual.
- b. If the EUT is tabletop equipment, it was placed on a non-conducted table with a height of 0.8 meters above the reference ground plane in the semi-anechoic chamber. If the EUT is floor-standing equipment, it was placed on a non-conducted support with a height of 12 millimeters above the reference ground plane in the semi-anechoic chamber.
- c. For the measurement of frequency below 1000MHz, the EUT was set 10m away from the interference receiving antenna for the limit of Class A equipment or CISPR 22. For Class B equipment and the measurement of frequency above 1000MHz, the EUT was set 3m away from the interference receiving antenna.
- d. Rapidly sweep the signal in the test frequency range by using the spectrum through the Maximum-peak detector.
- e. Rotate the EUT from 0° to 360° and position the receiving antenna at heights from 1 to 4 meters above the reference ground plane continuously to determine at least six frequencies associated with higher emission levels and record them.
- f. For measurement of frequency above 1000MHz, the beamwidth of receiving horn antenna should keep covering EUT when the receiving horn antenna height varied.
- g. Then measure each frequency found from step e. by using the spectrum with rotating the EUT and positioning the receiving antenna height to determine the maximum level.
- h. Finely tune the antenna and turntable around the recorded position of each frequency found from step f.
- i. For measurement of frequency below 1000MHz, set the receiver detector to be Quasi-Peak per CISPR 16-1 to find out the maximum level occurred.
- j. For measurement of frequency above 1000MHz, set the spectrum detector to be Peak or Average to find out the maximum level occurred, if any.
- k. Record frequency, azimuth angle of the turntable, height, and polarization of the receiving antenna and compare the maximum level with the required limit.
- I. Change the receiving antenna to another polarization to measure radiated emission by following step d. to k. again.
- m. If the peak emission level measured from step e. is 4dB lower than the limit specified, then the emission values presented will be the peak value only. Otherwise, accurate Q.P. value will be measured and presented.

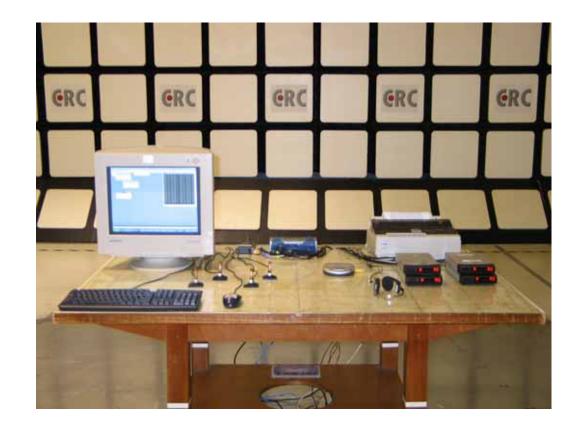
## 3.4 Test Configurations

## Radiated Emission Measurement below 2000MHz

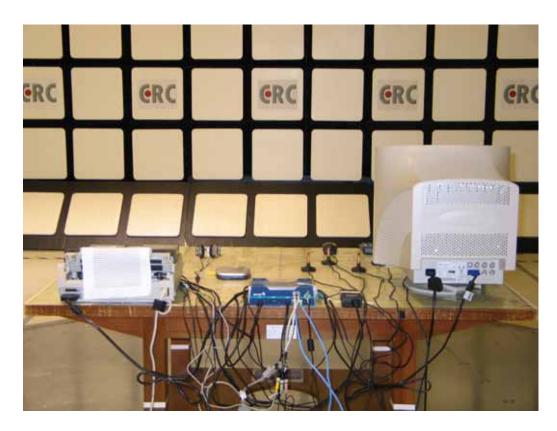


## Radiated Emission Measurement above 1000MHz (if any)





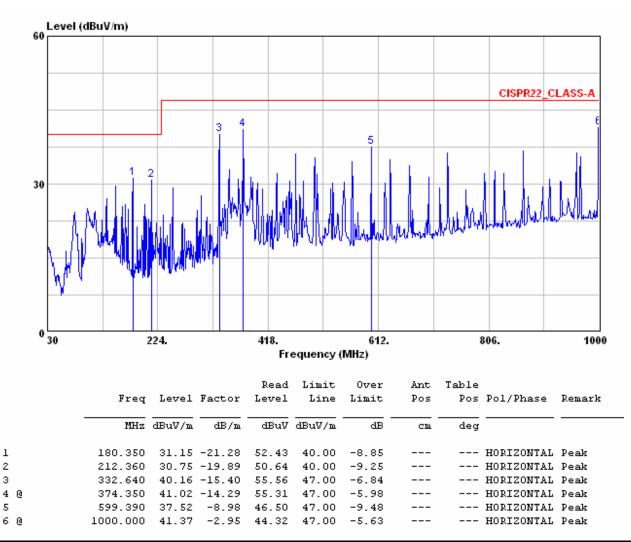
## 3.5 Photographs of the Test Configurations



## 3.6 Test Results

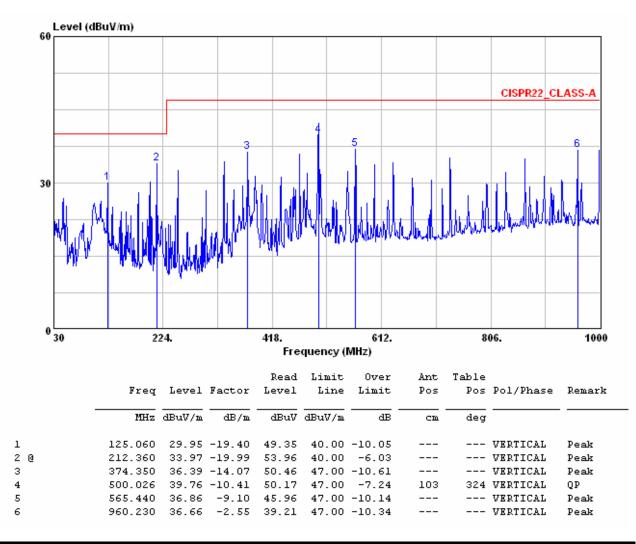
### Radiated Emission Measurement below 1000MHz

Test Mode	:	As description of section 1.2							
Test Voltage	:	120V/60Hz to	120V/60Hz to the adapter						
Tester	:	Meng Lin	Temperature	:	24°C				
Humidity	:	57%RH	Frequency Range	:	30MHz~1GHz				
IF Bandwidth	:	120kHz	Polarization	:	Horizontal				



- 1. Emission Level = reading value + correction factor.
- 2. Correction factor = cable loss + antenna factor gain of pre-amplifier.
- 3. Q.P is abbreviation of quasi-peak.

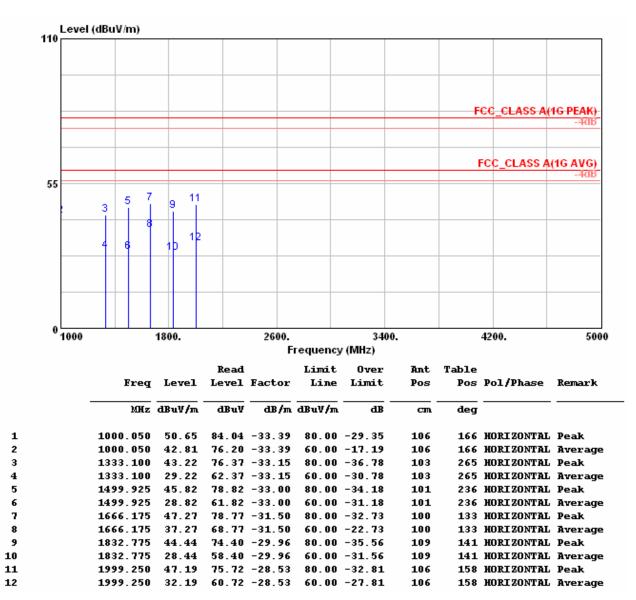
Test Mode	:	As description of section 1.2							
Test Voltage	:	120V/60Hz to	120V/60Hz to the adapter						
Tester	:	Meng Lin	Temperature	:	24°C				
Humidity	:	57%RH	Frequency Range	:	30MHz~1GHz				
IF Bandwidth	:	120kHz	Polarization	:	Vertical				



- 1. Emission Level = reading value + correction factor.
- 2. Correction factor = cable loss + antenna factor gain of pre-amplifier.
- 3. Q.P is abbreviation of quasi-peak.

### **Radiated Emission Measurement above 1000MHz**

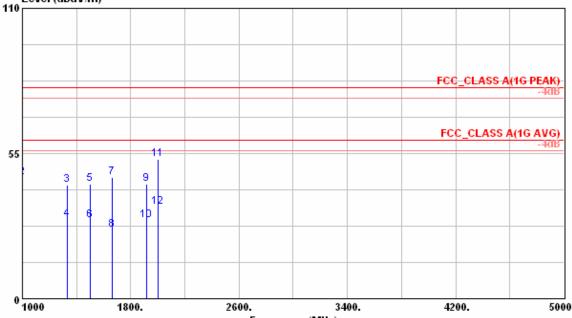
Test Mode	:	As description of section 1.2						
Test Voltage	:	120V/60Hz to	120V/60Hz to the adapter					
Tester	:	Meng Lin	Temperature	:	23°C			
Humidity	:	60%RH	Frequency Range	:	1GHz ~5GHz			
IF Bandwidth	:	1MHz	Polarization	:	Horizontal			



- 1. Emission Level = reading value + correction factor.
- 2. Correction factor = cable loss + antenna factor gain of pre-amplifier.
- 3. PK. and AV. are abbreviation of peak and average respectively.

Test Mode	:	As description of section 1.2						
Test Voltage	:	120V/60Hz to the adapter						
Tester	:	Meng Lin	Temperature	:	23°C			
Humidity	:	60%RH	Frequency Range	:	1GHz~5GHz			
IF Bandwidth	:	1MHz	Polarization	:	Vertical			





	Freq MHz	Level dBuV/m	Read Level dBuV	Factor 	Limit Line dBuV/m	Over Limit 	Ant Pos 	Table Pos deg	Pol/Phase	Remark
1	1000.050	50.65	84.04	-33.39	80.00	-29.35	100	95	VERTICAL	Peak
2 @	1000.050	46.11	79.50	-33.39	60.00	-13.89	100	95	VERTICAL	Average
3	1332.700	43.09	76.24	-33.15	80.00	-36.91	101	185	VERTICAL	Peak
4	1332.700	30.09	63.24	-33.15	60.00	-29.91	101	185	VERTICAL	Average
5	1499.750	43.52	76.52	-33.00	80.00	-36.48	101	223	VERTICAL	Peak
6	1499.750	29.52	62.52	-33.00	60.00	-30.48	101	223	VERTICAL	Average
7	1665.580	46.01	77.51	-31.50	80.00	-33.99	118	178	VERTICAL	Peak
8	1665.580	26.01	57.51	-31.50	60.00	-33.99	118	178	VERTICAL	Average
9	1920.137	43.49	72.65	-29.16	80.00	-36.51	139	348	VERTICAL	Peak
LO	1920.137	29.49	58.65	-29.16	60.00	-30.51	139	348	VERTICAL	Average
1	1999.700	52.91	81.43	-28.52	80.00	-27.09	150	155	VERTICAL	Peak
L2	1999.700	34.91	63.43	-28.52	60.00	-25.09	150	155	VERTICAL	Average

Frequency (MHz)

- 1. Emission Level = reading value + correction factor.
- 2. Correction factor = cable loss + antenna factor gain of pre-amplifier.
- 3. PK. and AV. are abbreviation of peak and average respectively.

## Attachment 1 Photographs of EUT



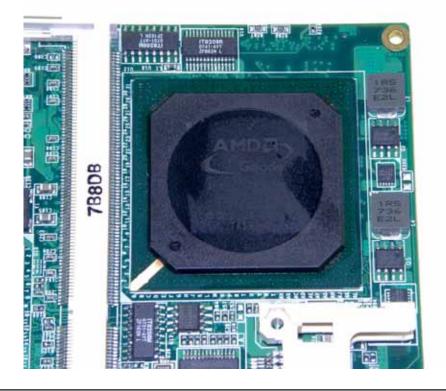
















Adapter







## Support units supplied by the manufacturer





## Attachment 2 Modifications of EUT

## **Statement of the EUT Modifications**

According to the rules of ANSI C63.4-2003 clause 10.1.13, the following equipment (EUT):

Product	:	Embbeded Controller
Model No.	:	xxxxxAEC-6821-xxxxxxx (where x is 0-9,A-Z,"-" or blank)
Manufacturer	:	AAEON Technology Inc.
Address	:	5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien City, Taipei
		231, Taiwan, R.O.C

□ should be <u>without</u> any modifications made

□ should be <u>with</u> some modifications made

to bring the EUT into compliance with the appropriate specifications (47CFR Part 15, Subpart B). If any, the details of the modifications including the complete descriptions, reasons and so on are described in next page of this report.

We , <u>AAEON Technology Inc.</u> hereby ensure that the product specified above will have all of the modifications incorporated in the product when manufactured and placed on the market.

The following importer or manufacturer is responsible for this statement:

Company Name	:		
Company Address	:		
Telephone	:	E-mail:	
Legal Signature of t	the responsible personal:		
Title / Na	ame (full name)	Date	

The details of the modifications:

ltem	Solution Component	Specifications	Manufacturer	Quantity	Reasons
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

If needed, some modification items are shown in the photographs in the following.