FCC Test Report

Issued Date : Apr. 08, 2009
Project No. : E0904007
Equipment : Mother Board
Model Name : EPIA-P710

Applicant : VIA Technologies, Inc.
Address : 1F, 531, Chung-Cheng Road Hsin-Tien, Taipei 231, Taiwan

Tested by:
Neutron Engineering Inc. EMC Laboratory
Date of Test:
Apr. 01, 2009 ~ Apr. 07, 2009

Testing Engineer: _____ (Pike Lee)

Technical Manager: _____ (Jeff Yang)

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ilac-MRA TAF Testing Laboratory 0659

VCCI R-2669 R-2829 C-2918

Declaration

Neutron represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**., or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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1. CERTIFICATION

Equipment :	Mother Board
Brand Name :	VIA
Model Name :	EPIA-P710
Applicant :	VIA Technologies, Inc.
Date of Test :	Apr. 01, 2009 ~ Apr. 07, 2009
Standards :	FCC Part 15, Subpart B, Class B CISPR 22: 1997+A1: 2000, Class B ICES-003: 2004, Class B ANSI C63.4-2003

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCE-1-E0904007) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15, Subpart B CISPR 22:1997+A1: 2000 ICES-003: 2004	Conducted Emission	Class B	PASS	
	Radiated Emission	Class B	PASS	

NOTE:

(1) ” N/A” denotes test is not applicable in this Test Report.

(2) According to FCC Part 15 Support B 15.32 (a)(1)(i), the EUT(CPU Board) should be tested under two conditions: Open case & Close case for Radiated test.
And the test data can’t be over 6dB against the limit under the Open case condition.
*Normal test condition is close case.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **C01/OS02/CB03** at the location of No.132-1, Lane 329, Sec. 2, Palian Road, Shijr City, Taipei, Taiwan.

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95**%。

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
C01	ANSI	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U，(dB)	NOTE
OS-01	ANSI	30MHz ~ 200MHz	V	2.86	
		30MHz ~ 200MHz	H	2.56	
		200MHz ~ 1,000MHz	V	2.88	
		200MHz ~ 1,000MHz	H	2.98	
OS-02	ANSI	30MHz ~ 200MHz	V	2.48	
		30MHz ~ 200MHz	H	2.16	
		200MHz ~ 1,000MHz	V	2.50	
		200MHz ~ 1,000MHz	H	2.66	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Mother Board
Brand Name	VIA
Model Name	EPIA-P710
OEM Brand/Model Name	N/A
Model Difference	N/A
Product Description	The EUT is a Mother Board (CPU: VIA C7 1GHz/FSB400; VIA Eden ULV 500MHz). Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Power Source	DC Voltage supplied from AC/DC Adapter.
Power Rating	I/P: DC 12V 5A
Connecting I/O Port(s)	Please refer to the User's Manual
Products Covered	CPU(1): VIA C7 1GHz/FSB400 CPU(2): VIA Eden ULV 500MHz
EUT Modification(s)	N/A

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

3.2 DESCRIPTION OF TEST MODES

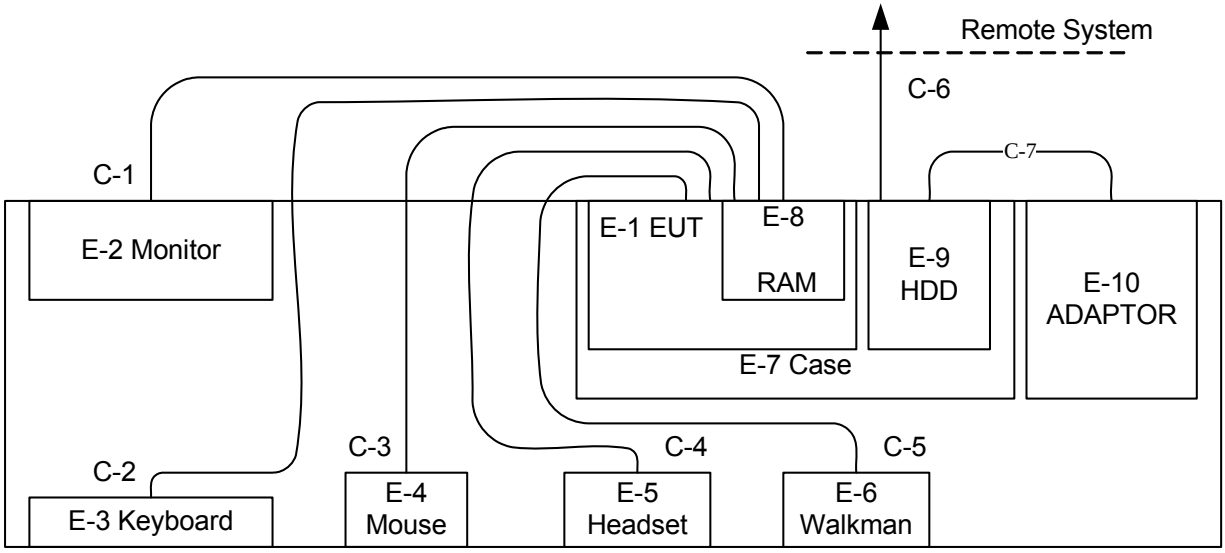
To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Test Mode	Description
MODE 1	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)
MODE 2	Full System 1280*1024/60Hz(VIA C7 CPU 1GHz)
MODE 3	Full System 800*600/60Hz(VIA C7 CPU 1GHz)
MODE 4	Full System 1920*1200/60Hz(VIA Eden ULV 500MHz)

For Conducted Test	
Final Test Mode	Description
MODE 1	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)

For Radiated Test	
Final Test Mode	Description
MODE 1	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



C-1 D-SUB Cable
C-2 PS/2 Cable
C-3 PS/2 Cable
C-4 Audio Cable
C-5 Audio Cable x2
C-6 RJ-45 Cable
C-7 Power Cable

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Mother Board	VIA	EPIA-P710	DOC	N/A	EUT
E-2	24" LCD Monitor	BenQ	Q24W5	DOC	ETH7713671SLO T	
E-3	PS/2 K/B	Logitech	Y-SJ17(ACK260A)	DOC	SYU44664880	
E-4	PS/2 Mouse	Logitech	M-SBF69	DOC	HCA44601156	
E-5	Headset	Shiern-Chiu	KHM-108	N/A	N/A	
E-6	Walkman	N/A	KT-V860	N/A	N/A	
E-7	Case	N/A	N/A	N/A	N/A	
E-8	RAM	transcend	DDR2-667 512MB	N/A	N/A	
E-9	HDD	HITACHI	IC25N020ATC04-0	DOC	N/A	
E-10	ADAPTOR	CWT	PAA040F	DOC	D0404	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	YES	1.8M	
C-2	YES	NO	1.5M	
C-3	YES	NO	1.7M	
C-4	YES	NO	1.7M	
C-5	YES	NO	1.7M	
C-6	NO	NO	10.0M	
C-7	YES	YES	1.5M	

Note:

(1) The support equipment was authorized by Declaration of Conformity.
(2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION (FREQUENCY RANGE 150KHZ-30MHZ)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Test Cable	N/A	SR03_C_01 &02	N/A	Oct. 19, 2009
2	LISN	EMCO	3816/2	00042991	Jan. 21, 2010
3	Pulse Limiter	Electro-Metrics	EM-7600	112644	Dec. 28, 2009
4	50Ω Terminator	N/A	N/A	N/A	May 13, 2009
5	EMI Test Receiver	R&S	ESCI	100082	Mar. 17, 2010
6	LISN	EMCO	4825/2	00028234	Jul. 09, 2009

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

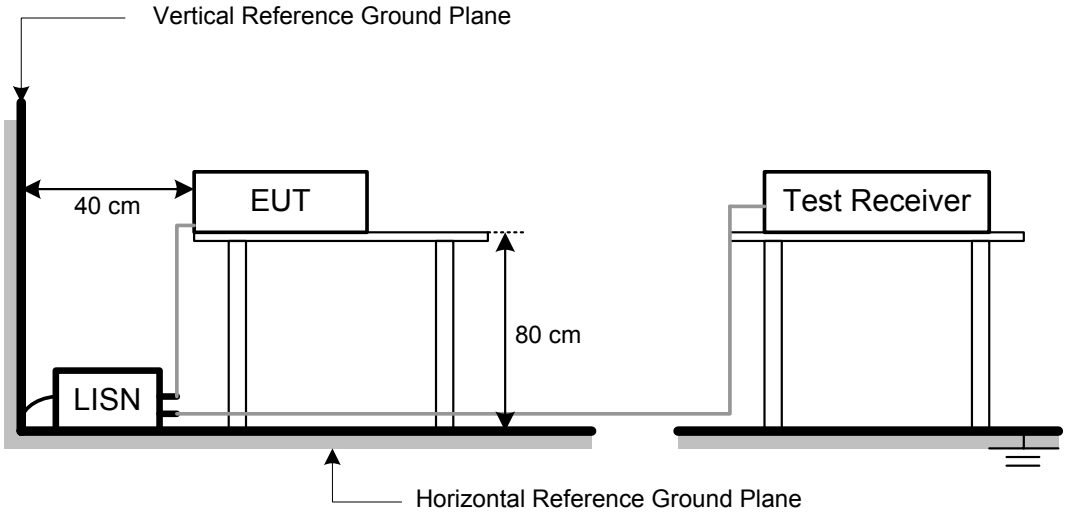
4.1.3 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



4.1.6 EUT OPERATING CONDITIONS

The EUT exercise program (EMC.exe) used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use. The program contained on a PC hard disk and is auto-starting on power-up. Once loaded, the program sequentially exercises each system component in turn. The sequence used is:

1. Read (write) from (to) mass storage device (Disk).
2. Send "H" pattern to video port device (Monitor).
3. Send/Receive audio to/from audio port device.
4. Send/Receive data to/from remote system.
5. Repeated from 2 to 4 continuously.

As the keyboard and mouse are strictly input devices, no data is transmitted to (from) them during test. They are, however, continuously scanned for data input activity.

4.1.7 TEST RESULTS

E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	25°C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)		

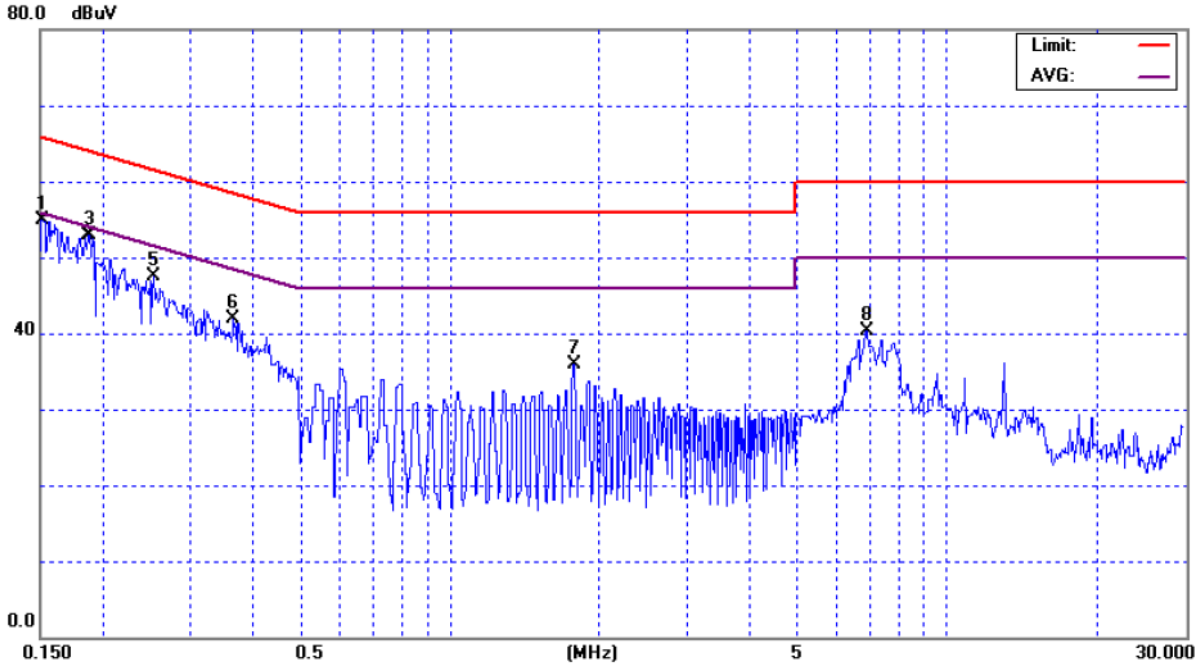
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.15	Line	54.92	25.85	65.92	55.92	-11.00	(QP)
0.19	Line	52.88	35.84	64.13	54.13	-11.25	(QP)
0.25	Line	47.49	*	61.66	51.66	-14.17	(QP)
0.37	Line	41.84	*	58.58	48.58	-16.74	(QP)
1.78	Line	35.95	*	56.00	46.00	-20.05	(QP)
6.90	Line	40.31	*	60.00	50.00	-19.69	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz；SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.2 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz,VBW=10KHz, Swp. Time =0.2 sec./MHz。

(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(3) Measuring frequency range from 150KHz to 30MHz。



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	25°C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)		

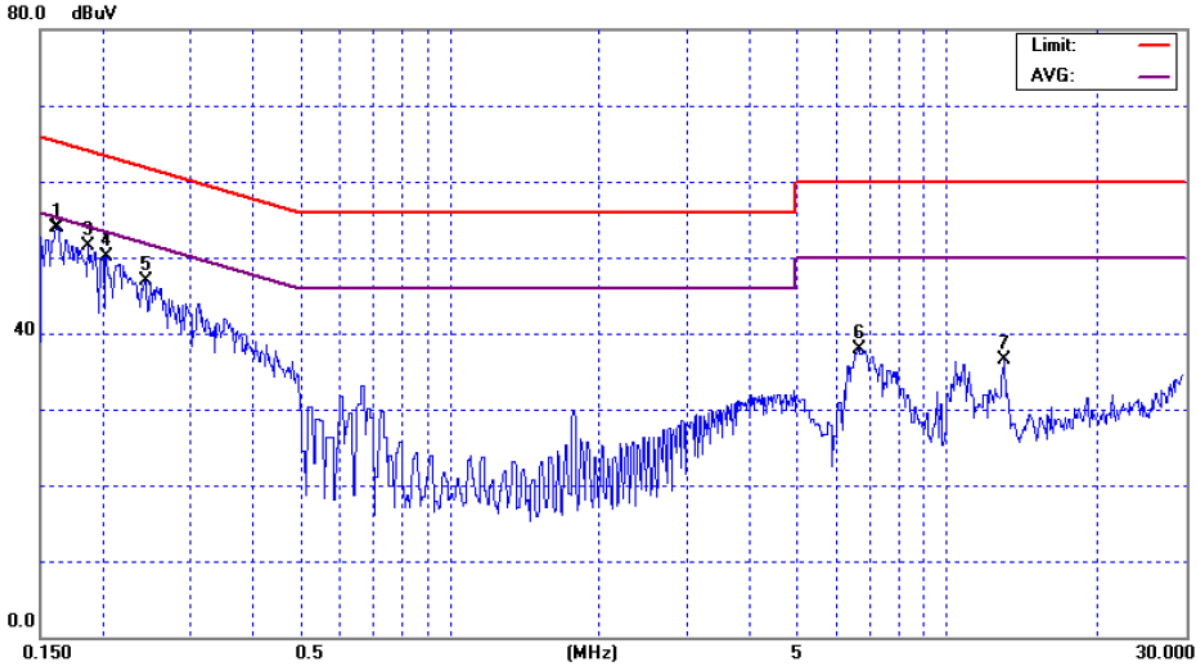
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.16	Neutral	53.98	37.78	65.37	55.37	-11.39	(QP)
0.19	Neutral	51.49	*	64.16	54.16	-12.67	(QP)
0.20	Neutral	50.04	*	63.48	53.48	-13.44	(QP)
0.24	Neutral	46.92	*	61.99	51.99	-15.07	(QP)
6.65	Neutral	37.92	*	60.00	50.00	-22.08	(QP)
13.05	Neutral	36.59	*	60.00	50.00	-23.41	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz；SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.2 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz,VBW=10KHz, Swp. Time =0.2 sec./MHz。

(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(3) Measuring frequency range from 150KHz to 30MHz。



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT (BELOW 1000MHZ)

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 10m)
	dBuV/m	dBuV/m
30 – 230	40	30
230 – 1000	47	37

Notes:

(1) The limit for radiated test was performed according to as following: CISPR 22/ FCC PART 15B /ICES-003.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (ABOVE 1000MHZ)

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15B.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

4.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Turn Table	Chance Most	CMTB-1.5	N/A	N/A
2	Log-Bicon Antenna	Schwarzbeck	VULB 9160	3173	Jul. 02, 2009
3	Test Cable	N/A	10M_OS02	N/A	Oct. 08, 2009
4	Test Cable	N/A	OS02	N/A	Oct. 08, 2009
5	Pre-Amplifier	Anritsu	MH648A	M98457	Nov. 26, 2010
6	EMI Test Receiver	R&S	ESCI	100082	Mar. 17, 2010
7	System Controller (OS02)	CT	SC100	N/A	N/A
8	Spectrum Analyzer (1G)	R&S	FSP-40	100129	Sep. 9, 2009
9	Horn Antenna (1G)	Schwarzbeck	BBHA 9120 D	9120D-325	Dec. 16, 2009
10	Microflex Cable (1G)	United Microwave	57793	1m	Jul. 30, 2009
11	Microflex Cable (1G)	United Microwave	A30A30-5006	4M	Jul. 23, 2009
12	Microflex Cable (1G)	N/A	N/A	6M	Jul. 23, 2009
13	Pre-Amplifier (1G)	Agilent	8449B	3008A01714	Apr 23, 2009

Remark: ” N/A” denotes No Model Name / Serial No. and No Calibration specified.

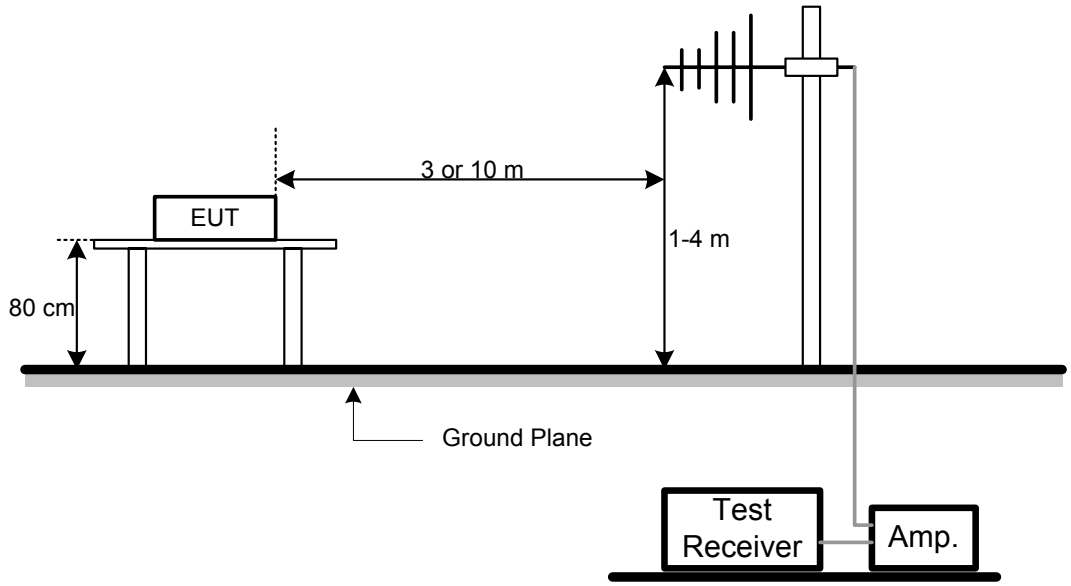
4.2.3 TEST PROCEDURE

a. The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m or 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting radiated emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.7 TEST RESULTS-BETWEEN 30MHZ AND 1000MHZ

E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	15°C	Relative Humidity :	76%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
124.99	V	30.00	-6.51	23.49	30.00	- 6.51	(QP)
249.99	V	38.30	-6.25	32.05	37.00	- 4.95	
499.98	V	25.93	0.30	26.23	37.00	- 10.77	
731.90	V	22.23	5.31	27.54	37.00	- 9.46	
798.42	V	22.50	6.22	28.72	37.00	- 8.28	
933.90	V	24.72	8.68	33.40	37.00	- 3.60	

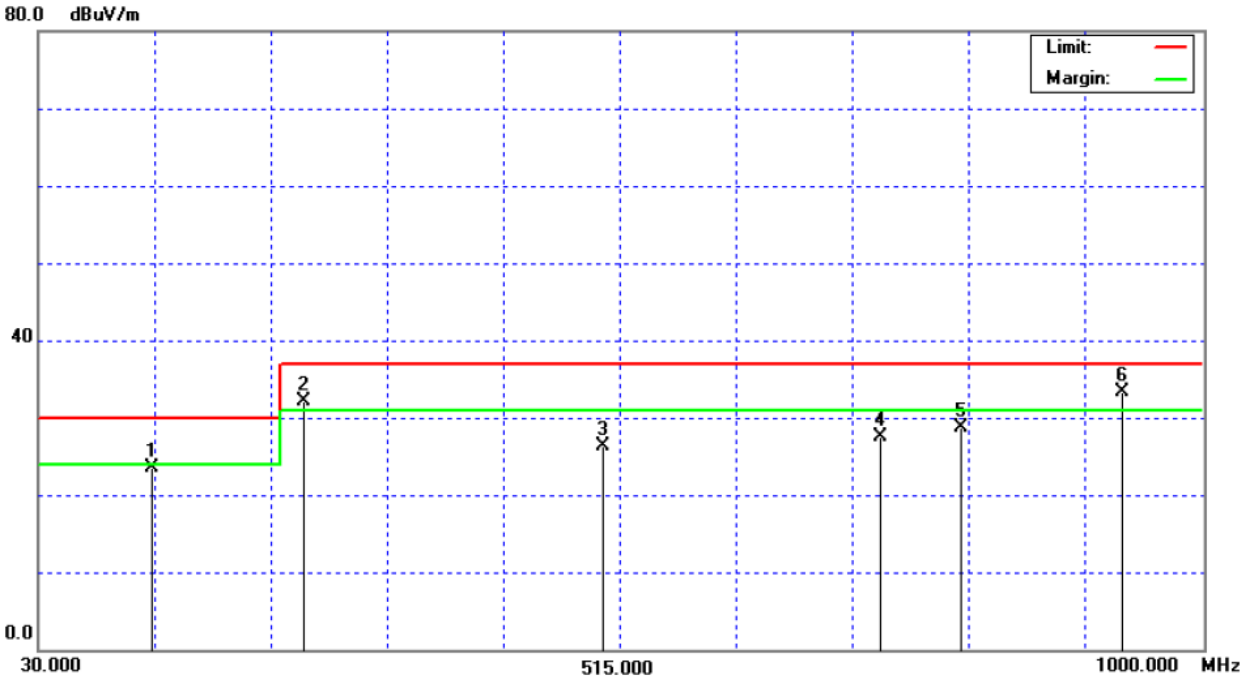
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value is under the limit for more than 20dB, the signal will not show in table。



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	15°C	Relative Humidity :	76%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
133.15	H	28.70	-6.08	22.62	30.00	- 7.38	
249.99	H	35.32	-6.25	29.07	37.00	- 7.93	
730.60	H	21.11	5.27	26.38	37.00	- 10.62	
799.30	H	24.55	6.23	30.78	37.00	- 6.22	
934.12	H	24.00	8.68	32.68	37.00	- 4.32	(QP)
951.80	H	23.10	9.06	32.16	37.00	- 4.84	

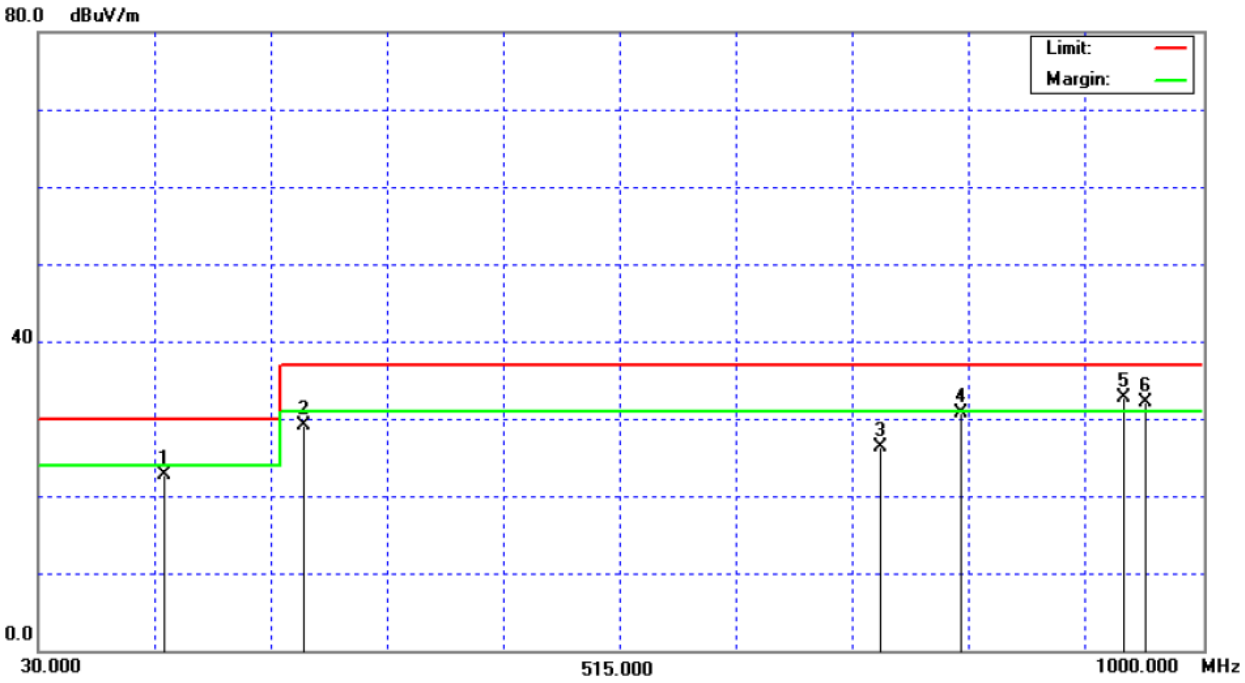
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value is under the limit for more than 20dB, the signal will not show in table。



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	15°C	Relative Humidity :	76%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz) (OPEN CASE)		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr. Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
665.73	V	28.90	3.92	32.82	37.00	- 4.18	(QP)
675.09	V	33.40	4.05	37.45	37.00	0.45	(QP)
732.00	V	28.00	5.31	33.31	37.00	- 3.69	(QP)
799.52	V	27.60	6.23	33.83	37.00	- 3.17	(QP)
935.46	V	30.80	8.71	39.51	37.00	2.51	(QP)
941.90	V	26.30	8.84	35.14	37.00	- 1.86	(QP)

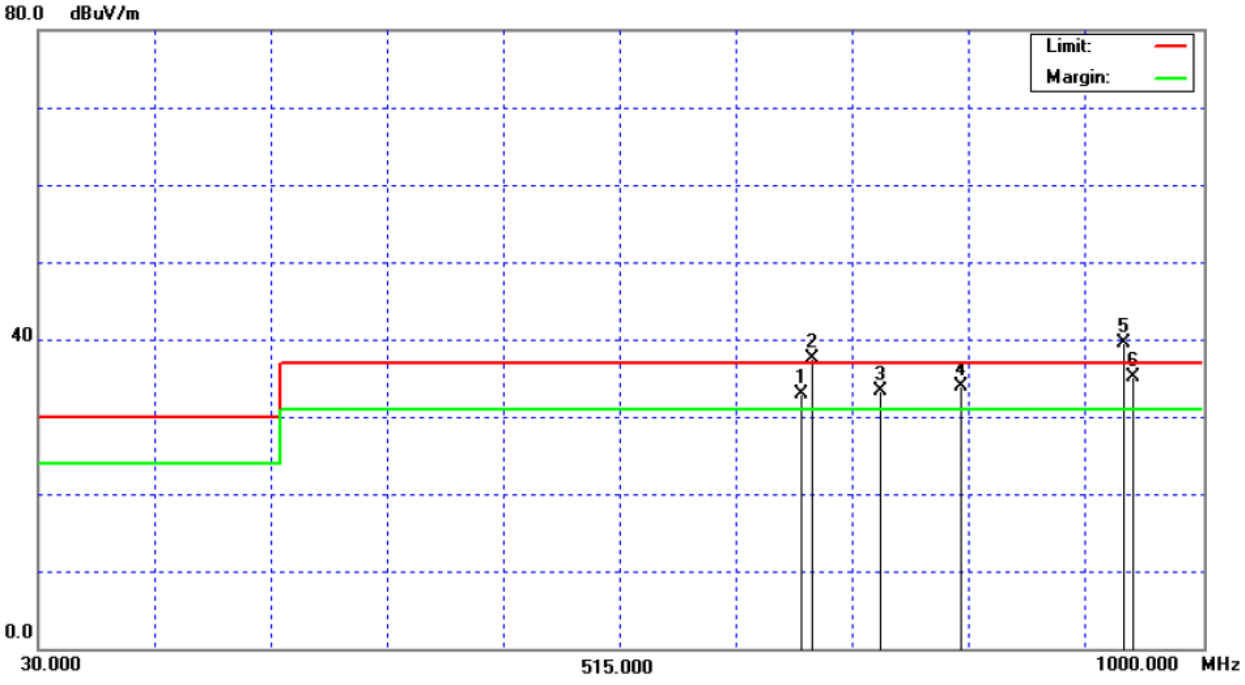
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value is under the limit for more than 20dB, the signal will not show in table。



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	15°C	Relative Humidity :	76%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz) (OPEN CASE)		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr. Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
400.57	H	35.67	-1.89	33.78	37.00	- 3.22	
529.70	H	28.30	1.00	29.30	37.00	- 7.70	(QP)
731.50	H	27.07	5.30	32.37	37.00	- 4.63	
798.30	H	24.20	6.22	30.42	37.00	- 6.58	(QP)
934.42	H	29.30	8.69	37.99	37.00	0.99	(QP)
942.04	H	24.60	8.85	33.45	37.00	- 3.55	(QP)

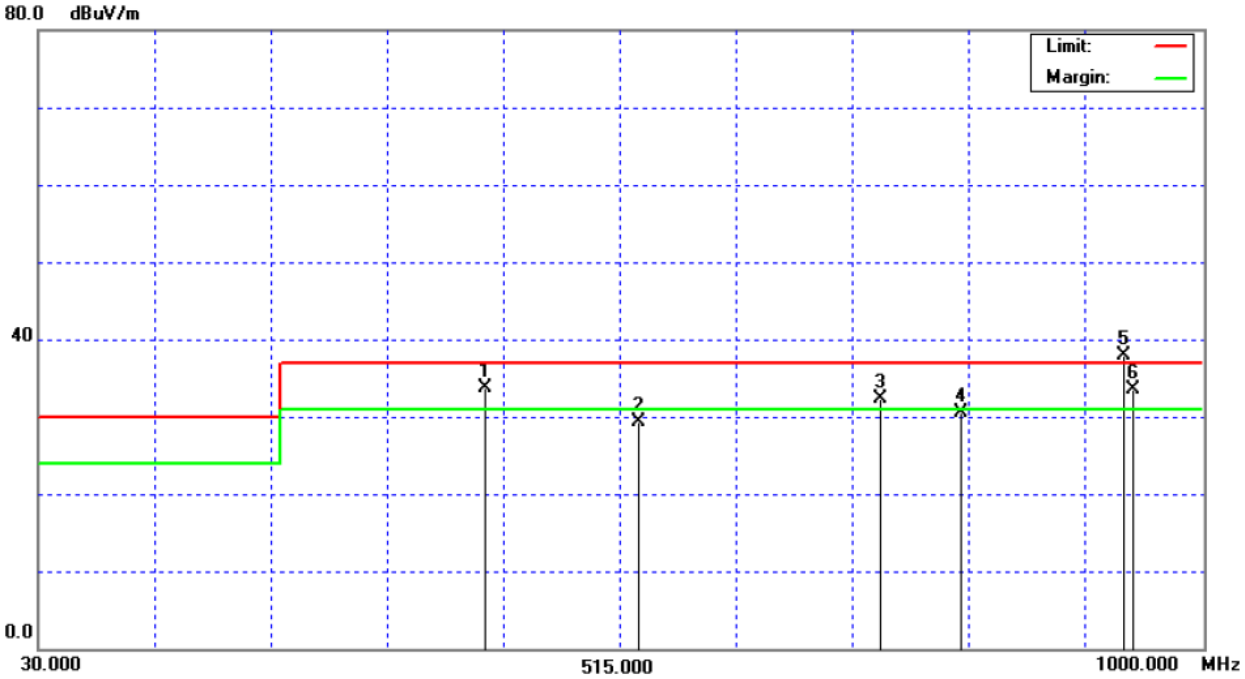
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value is under the limit for more than 20dB, the signal will not show in table。



4.2.8 TEST RESULTS-ABOVE 1000MHZ

E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	26°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)		

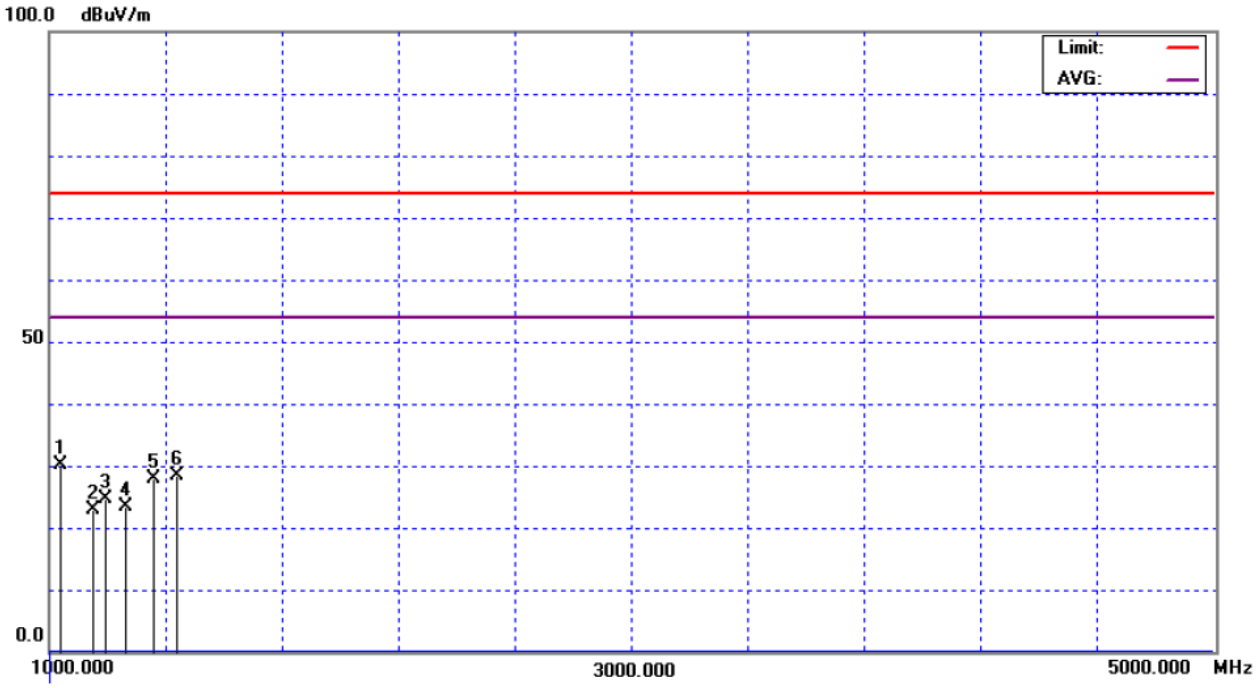
Freq. (MHz)	Ant.Pol. (H/V)	Reading(dBuV)		Ant./CF CF(dB)	Act.(dBuV/m)		Limit(dBuV/m)		Note
		Peak	AV		Peak	AV	Peak	AV	
1040.00	V	37.70	-	-7.57	30.13	-	74.00	54.00	
1152.00	V	30.00	-	-7.21	22.79	-	74.00	54.00	
1192.00	V	31.79	-	-7.09	24.70	-	74.00	54.00	
1264.00	V	30.30	-	-6.86	23.44	-	74.00	54.00	
1360.00	V	34.46	-	-6.55	27.91	-	74.00	54.00	
1440.00	V	34.55	-	-6.29	28.26	-	74.00	54.00	

Remark：

(1) Reading in which marked as PK means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.

(2) All readings are PK Mode value unless otherwise stated AVG in column of『Note』. If the PK Mode Measured value compliance with the PK Limits and lower than AVG Limits, the EUT shall be deemed to meet both PK & AVG Limits and then only PK Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.

(3) Measuring frequency range above 1000MHz.



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	26°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz)		

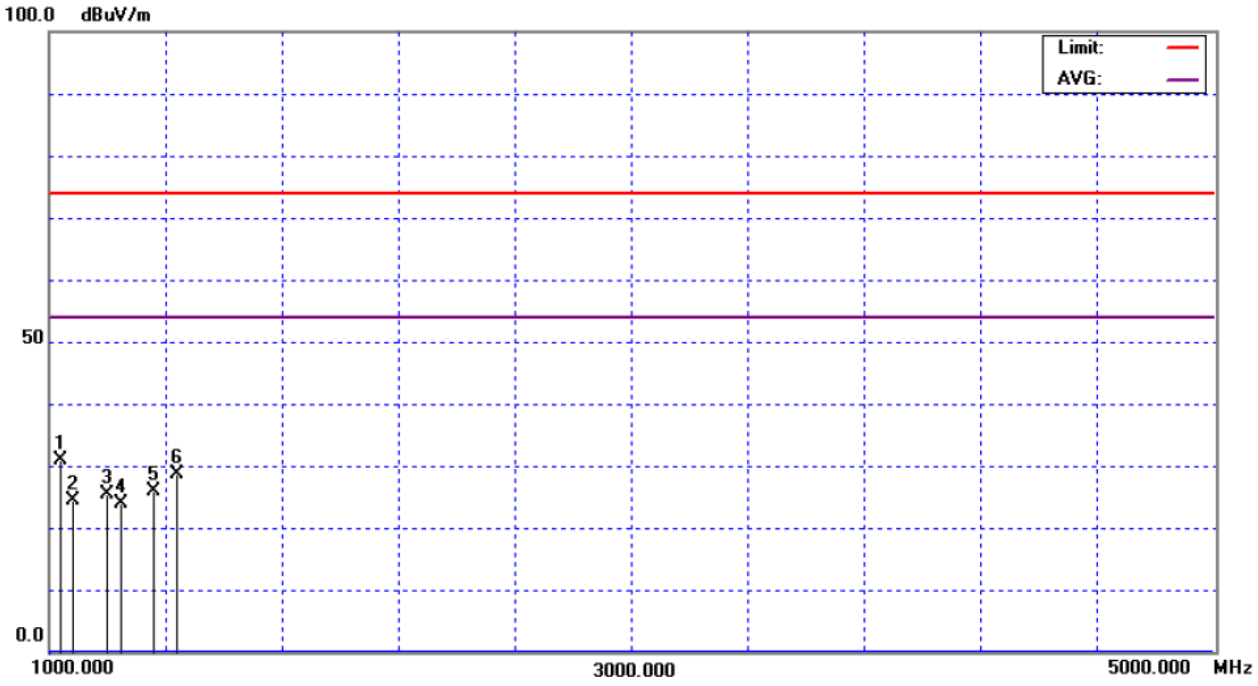
Freq.	Ant.Pol.	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
(MHz)	(H/V)	Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1040.00	H	38.53	-	-7.57	30.96	-	74.00	54.00	
1080.00	H	31.85	-	-7.44	24.41	-	74.00	54.00	
1200.00	H	32.53	-	-7.06	25.47	-	74.00	54.00	
1248.00	H	30.76	-	-6.91	23.85	-	74.00	54.00	
1360.00	H	32.31	-	-6.55	25.76	-	74.00	54.00	
1440.00	H	34.96	-	-6.29	28.67	-	74.00	54.00	

Remark：

(1) Reading in which marked as PK means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.

(2) All readings are PK Mode value unless otherwise stated AVG in column of『Note』. If the PK Mode Measured value compliance with the PK Limits and lower than AVG Limits, the EUT shall be deemed to meet both PK & AVG Limits and then only PK Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.

(3) Measuring frequency range above 1000MHz.



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	26°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz) (OPEN CASE)		

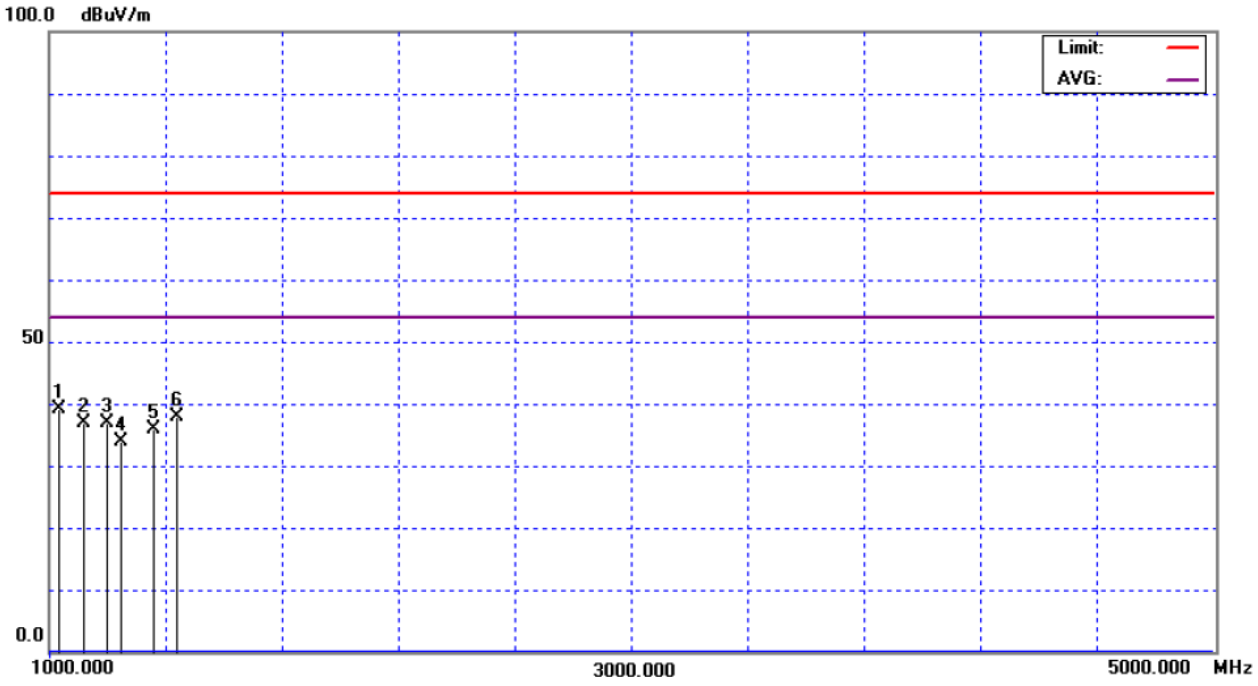
Freq.	Ant.Pol.	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
(MHz)	(H/V)	Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1032.00	V	46.69	-	-7.60	39.09	-	74.00	54.00	
1120.00	V	44.26	-	-7.32	36.94	-	74.00	54.00	
1200.00	V	43.86	-	-7.06	36.80	-	74.00	54.00	
1248.00	V	40.76	-	-6.91	33.85	-	74.00	54.00	
1360.00	V	42.37	-	-6.55	35.82	-	74.00	54.00	
1440.00	V	44.13	-	-6.29	37.84	-	74.00	54.00	

Remark：

(1) Reading in which marked as PK means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.

(2) All readings are PK Mode value unless otherwise stated AVG in column of『Note』. If the PK Mode Measured value compliance with the PK Limits and lower than AVG Limits, the EUT shall be deemed to meet both PK & AVG Limits and then only PK Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.

(3) Measuring frequency range above 1000MHz.



E.U.T :	Mother Board	Model Name :	EPIA-P710
Temperature :	26°C	Relative Humidity :	57%
Test Voltage :	AC 120V/60Hz		
Test Mode :	Full System 1920*1200/60Hz(VIA C7 CPU 1GHz) (OPEN CASE)		

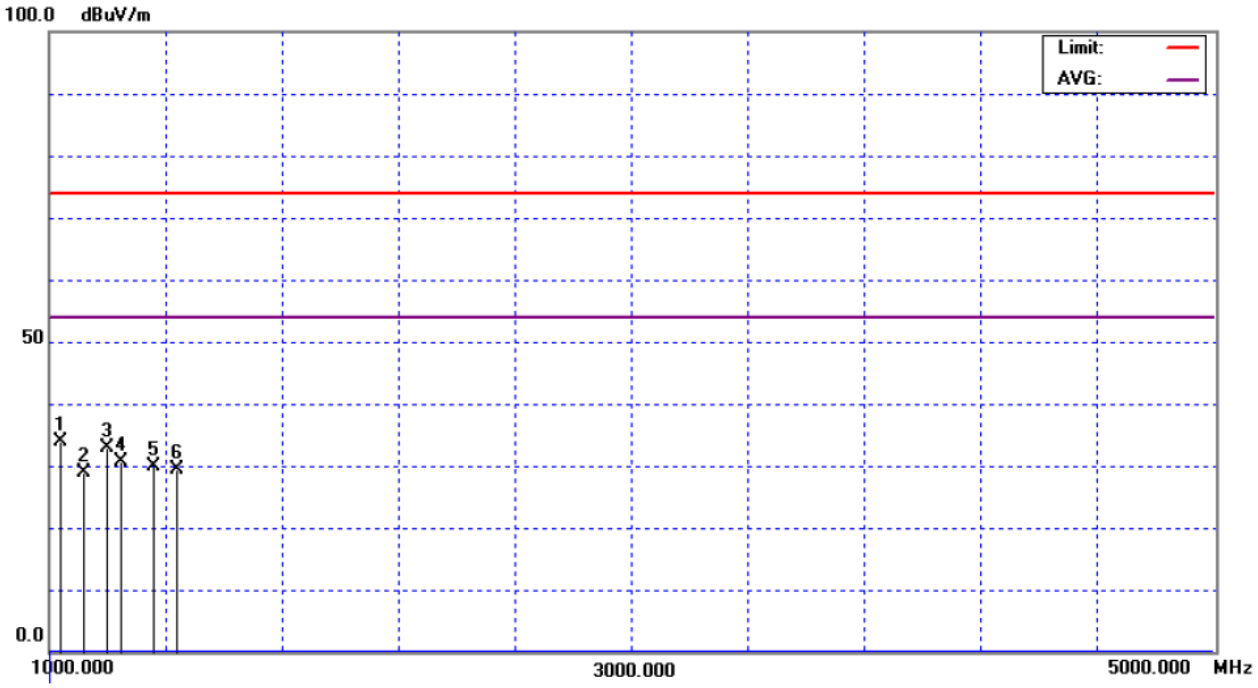
Freq.	Ant.Pol.	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
(MHz)	(H/V)	Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1040.00	H	41.49	-	-7.57	33.92	-	74.00	54.00	
1120.00	H	36.25	-	-7.32	28.93	-	74.00	54.00	
1200.00	H	39.84	-	-7.06	32.78	-	74.00	54.00	
1248.00	H	37.55	-	-6.91	30.64	-	74.00	54.00	
1360.00	H	36.42	-	-6.55	29.87	-	74.00	54.00	
1440.00	H	35.71	-	-6.29	29.42	-	74.00	54.00	

Remark：

(1) Reading in which marked as PK means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.

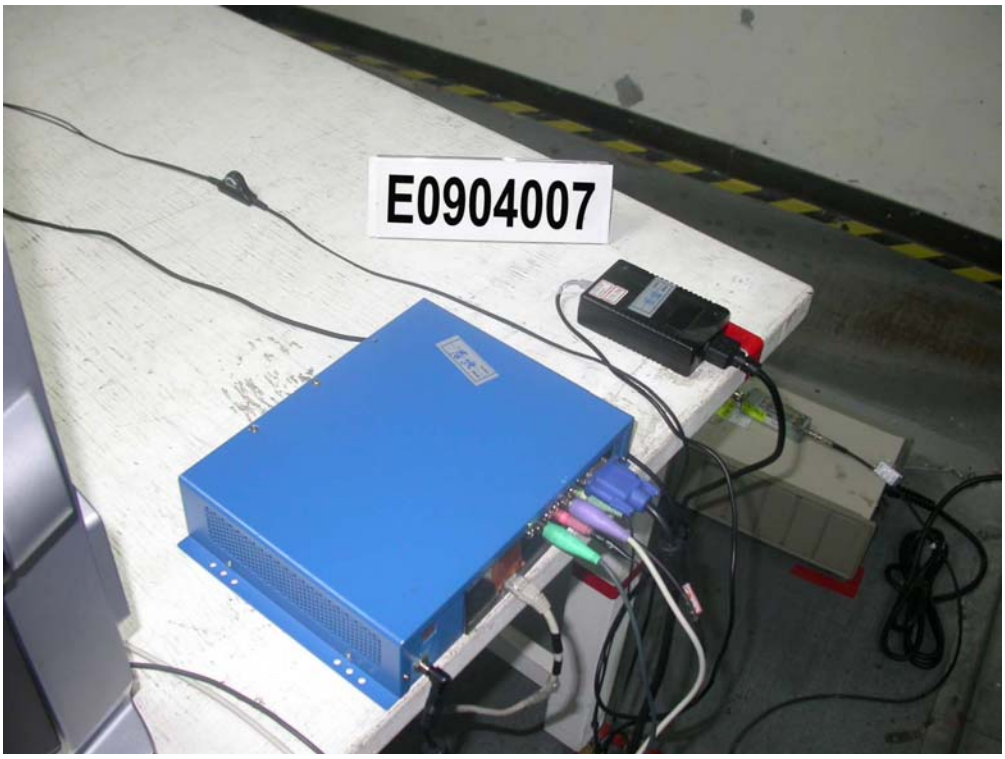
(2) All readings are PK Mode value unless otherwise stated AVG in column of『Note』. If the PK Mode Measured value compliance with the PK Limits and lower than AVG Limits, the EUT shall be deemed to meet both PK & AVG Limits and then only PK Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.

(3) Measuring frequency range above 1000MHz.



5. EUT TEST PHOTO

Conducted Measurement Photos



Radiated Measurement Photos

Radiated Measurement Photos

OPEN CASE