FCC CLASS A COMPLIANCE REPORT

for

Electromagnetic Emissions

of

CPU Board

Trade Name	**:** N/A
Model Number	**:** GENE-4310(N)
Serial Number	**:** N/A
Report Number	**:** 000368-F
Date	**:** June 27, 2000

Prepared for **:**

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

Prepared by **:**

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VERIFICATION OF COMPLIANCE

Equipment Under Test:	CPU Board
Trade Name:	N/A
Model Number:	GENE-4310(N)
Serial Number:	N/A
Applicant:	**AAEON Technology Co., Ltd.** 5F, No.135, Lane 235, Pao Chiao Rd. Hsin-Tien City, Taipei, Taiwan, R.O.C.
Manufacturer:	**AAEON Technology Co., Ltd.** 5F, No.135, Lane 235, Pao Chiao Rd. Hsin-Tien City, Taipei, Taiwan, R.O.C.
Type of Test:	FCC Class A
Measurement Procedure:	ANSI C63.4: 1992
File Number:	000368-F
Date of test:	June 19-21, 2000
Deviation:	According applicant declaration this EUT is a class A product, and to market in Industrial environment only.
Condition of Test Sample:	Normal

The above equipment was tested by C&C Laboratory, Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, Subpart B and the measurement procedure according to ANSI C63.4, 1992. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Responsible Party

Kurt Chen

Authorized Signatory

Officer of the Responsible Party

SYSTEM DESCRIPTION

EUT Test Program:

1. EMI test program was loaded and executed in Windows 98 mode.
2. Data was sent to Monitor and filling the screens with upper case of "H" patterns.
3. Test program sequentially exercised all related I/O's and accessories of EUT, and sent "H" patterns to all applicable output ports of EUT.
4. Repeat 2 to 3. Test program is self-repeating throughout the test.

PRODUCT INFORMATION

Housing Type:	N/A		
EUT Power Rating:	+5VDC from Power Adapter		
AC Power during Test	120VAC/60Hz		
Power Adapter Manufacturer:	PHIHONG		
Power Adapter Model Number:	PSA-30U-050		
AC Power Cord Type:	Unshielded, 1.8m (Detachable) to Power Adapter		
Power Adapter Power Rating:	I/P:100-240V, 0.7A, 50-60Hz O/P:5VDC, 4A		
DC Power Cable Type:	Unshielded, 1m (Non-detachable) with a core at Power Adapter		
CPU Manufacture:	NS	**Type:**	Syrix GXM 233
OSC/Clock Frequencies:	33MHz		
Memory Capacity:		**Install:**	64MB
Case Manufacturer:	AAEON	**Model:**	MBPC-200-58201962002070
Chipset Type:			NS / CX5530

I/O Port of EUT

I/O PORT TYPES	Q' TY	TESTED WITH
1). Parallel Port	1	1
2). Serial Port	2	2
3). Video Port	1	1
4). PS/2 Keyboard/Mouse Port	1	1
5). LAN Port	1	1
6). USB Port	2	2

Note: 1.As per customer declaration, this EUT actual function is like a sub-compact board. Therefore, the EUT was installed at the internal of metal box, to simulation setup at the internal of industrial PC for all testing.

2.Actual power source of EUT is come from a 4-pin HDD type connector, but according to client request, it' s was used +5Vdc Power Adapter to simulation actual HDD type power at all testing.

3.The internal cables, one for RS-232 port and two for USB ports it' s connected between the EUT and metal box was attached with a core during all testing.

SUPPORT EQUIPMEN

No.	Equipment	Model #	Serial #	FCC ID	Trade Name	Data Cable	Power Cord
1	CRT Monitor	GDM-17SE2T	7145529	AK8GDM17SE2T	SONY	Shielded, 1.8m	Unshielded, 1.8m
2	Modem	2400	94-364-176272	DK467GSM24	Computer Peripherals	Shielded, 1.8m	Unshielded, 1.5m
3	Printer	2225C	3125S98198	DSI6XU2225	HP	Shielded, 1.8m	Unshielded, 1.5m
4	PS/2 Keyboard	6511-TW4C	16600704C83G00 671S0000	N/A	ACER	Shielded, 1.8m	N/A
5	Mouse	M-MM43	LZE94052771	DoC	LOGITECH	Shielded, 1.9m	N/A
6	USB Mouse	M-BB48	LZE93050165	DoC	LOGITECH	Shielded, 1.8m	N/A
7	USB Mouse	M-BB48	LZE93050187	DoC	LOGITECH	Shielded, 1.8m	N/A
8	HUB (Remote)	J2600A	SG43801953	N/A	HP	Shielded, 20m	Unshielded, 1.8m
9	Notebook (Remote)	365	TZ30518	DoC	Acer	Shielded, 10m	AC I/P: Unshielded, 1.2m DC O/P: Unshielded, 0.8m

Note: All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

Grounding: Grounding was in accordance with the manufacturer's requirements and conditions for the intended use.

MEASUREMENT PROCEDURE
(PRELIMINARY LINE CONDUCTED EMISSION TEST)

1) The equipment was set up as per the test configuration to simulate typical actual usage per the user' s manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4: 1992 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

2) Support equipment, if needed, was placed as per ANSI C63.4: 1992.

3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4: 1992.

4) The EUT received AC power through a Line Impedance Stabilization Network (LISN) which supplied power source of 120VAC/60Hz and was grounded to the ground plane.

5) All support equipment received power from a second LISN supplying power of 110VAC/60Hz.

6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.

7) Analyzer / Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.

8) During the above scans, the emissions were maximized by cable manipulation.

9) The following test mode(s) were scanned during the preliminary test:

Mode(s):

1. **1024 x 768**
2. **800 x 600**
3. **640 x 480**

10) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

Mode(s): 1.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

MEASUREMENT PROCEDURE
(FINAL LINE CONDUCTED EMISSION TEST)

1) EUT and support equipment was set up on the test bench as per step 10 of the preliminary test.

2) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Q.P. mode, then the emission signal was re-checked using an Average detector.

3) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Freq. MHz	Q.P. Raw dBuV	Average Raw dBuV	Q.P. Limit dBuV	Average Limit dBuV	Q.P. Margin dB	Average Margin dB	Note
x.xx	43.95	---	56	46	-12.05	---	L 1

Freq.	= Emission frequency in MHz
Raw dBuV	= Uncorrected Analyzer/Receiver reading
Limit dBuV	= Limit stated in standard
Margin dB	= Reading in reference to limit
Note	= Current carrying line of reading
"---"	= The emission level complied with the Average limits, with at least 2 dB margin, so no further recheck.

LINE CONDUCTED EMISSION LIMIT

Frequency	Maximum RF Line Voltage	
	Q.P.	AVERAGE
150kHz-500kHz	79dBuV	66dBuV
500kHz-5MHz	73dBuV	60dBuV
5MHz-30MHz	73dBuV	60dBuV

Note: The lower limit shall apply at the transition frequency.

MEASUREMENT PROCEDURE
(PRELIMINARY RADIATED EMISSION TEST)

1) The equipment was set up as per the test configuration to simulate typical actual usage per the user' s manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4: 1992 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2) Support equipment, if needed, was placed as per ANSI C63.4: 1992.
3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4: 1992.
4) The EUT received 120VAC/60Hz power source from the outlet socket under the turntable. All support equipment received 110VAC/60Hz power from another socket under the turntable.
5) The antenna was placed at 10 meter away from the EUT as stated in ANSI C63.4: 1992. The antenna connected to the analyzer via a cable and at times a pre-amplifier would be used.
6) The Analyzer quickly scanned from 30MHz to 2000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
7) The following test mode(s) were scanned during the preliminary test:

   Mode(s):
   1. **1024 x 768**
   2. **800 x 600**
   3. **640 x 480**

8) After the preliminary scan, we found the following test mode(s) producing the highest emission level.

   Mode(s): 1.

Then, the EUT and cable configuration, antenna position, polarization and turntable position of the above highest emission level were recorded for reference of final testing.

MEASUREMENT PROCEDURE
(FINAL RAIDATED EMISSION TEST)

1) EUT and support equipment were set up on the turntable as per step 8 of the preliminary test.

2) The Analyzer / Receiver scanned from 30MHz to 2000MHz. Emissions were scanned and measured rotating the EUT to 360 degrees, varying cable placement and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.

3) Recorded at least the six highest emissions. Emission frequency, amplitude, were recorded into a computer (The antenna position, polarization and turntable position were kept in raw data file) in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

4) The test data of the worst case condition(s) was reported on the Summary Data page.

Data Sample:

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m)	Limits	Margin (dB)
xx.xx	14.0	11.2	26.2	30	-3.8

Freq.	= Emission frequency in MHz
Raw Data (dBuV/m)	= Uncorrected Analyzer / Receiver reading
Corr. Factor (dB)	= Correction factors of antenna factor and cable loss
Emiss. Level	= Raw reading converted to dBuV/m and CF added
Limit dBuV/m	= Limit stated in standard
Margin dB	= Reading in reference to limit

RADIATED EMISSION LIMIT

Frequency (MHz)	Distance (m)	Maximum Field Strength Limit (dBuV/m)		
		Q.P.	AVERAGE	PEAK
30-230	10	40	/	/
230-1000	10	47	/	/
Above 1000	3	/	60	80

****Note:** "/" means the limit line is not applicable.

SUMMARY DATA

(LINE CONDUCTED TEST)

Model Number: GENE-4310(N) **Location:** Site # 4

Tested by: Tony Tsai

Test Mode: Mode 1

Test Results: Passed

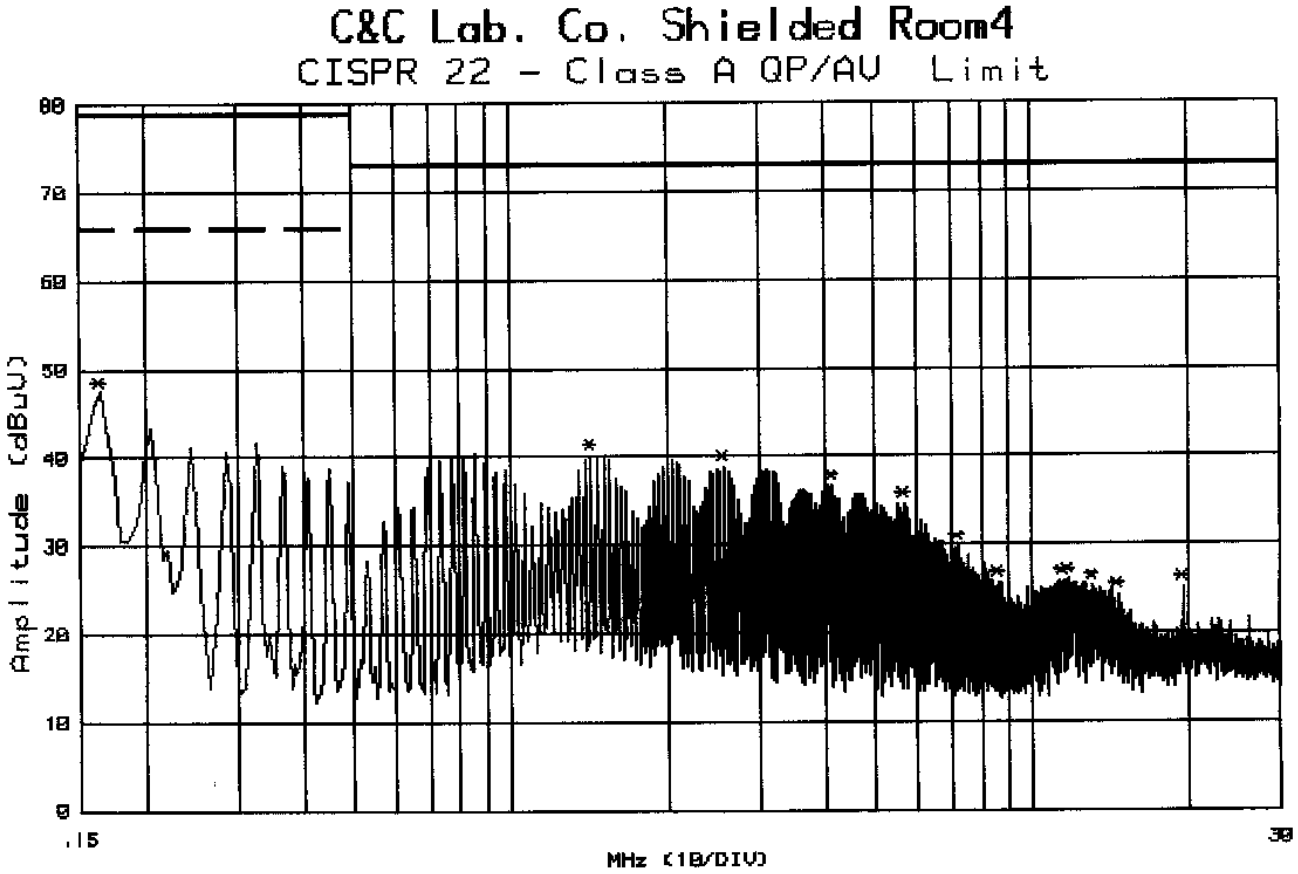
Temperature: 28^0C **Humidity:** 65%RH

(The chart below shows the highest readings taken from the final data)

FREQ MHz	Q.P. RAW dBuV	AVG RAW dBuV	Q.P. Limit dBuV	AVG Limit dBuV	Q.P. Margin dB	AVG Margin dB	NOTE
0.163	45.3	---	79.0	66.0	-33.7	---	L1
1.430	38.4	---	73.0	60.0	-34.6	---	L1
2.570	37.4	---	73.0	60.0	-35.6	---	L1
4.160	35.5	---	73.0	60.0	-37.5	---	L1
5.710	33.2	---	73.0	60.0	-39.8	---	L1
7.220	28.6	---	73.0	60.0	-44.4	---	L1
0.163	45.7	---	79.0	66.0	-33.3	---	L2
1.380	36.6	---	73.0	60.0	-36.4	---	L2
2.480	37.0	---	73.0	60.0	-36.0	---	L2
4.150	35.1	---	73.0	60.0	-37.9	---	L2
5.780	32.0	---	73.0	60.0	-41.0	---	L2
7.370	28.1	---	73.0	60.0	-44.9	---	L2

L1 = Line One (Hot side) / L2 = Line Two (Neutral side)

****NOTE: "---" denotes the emission level was less –2 dB to the Average limit, so no re-check anymore.**

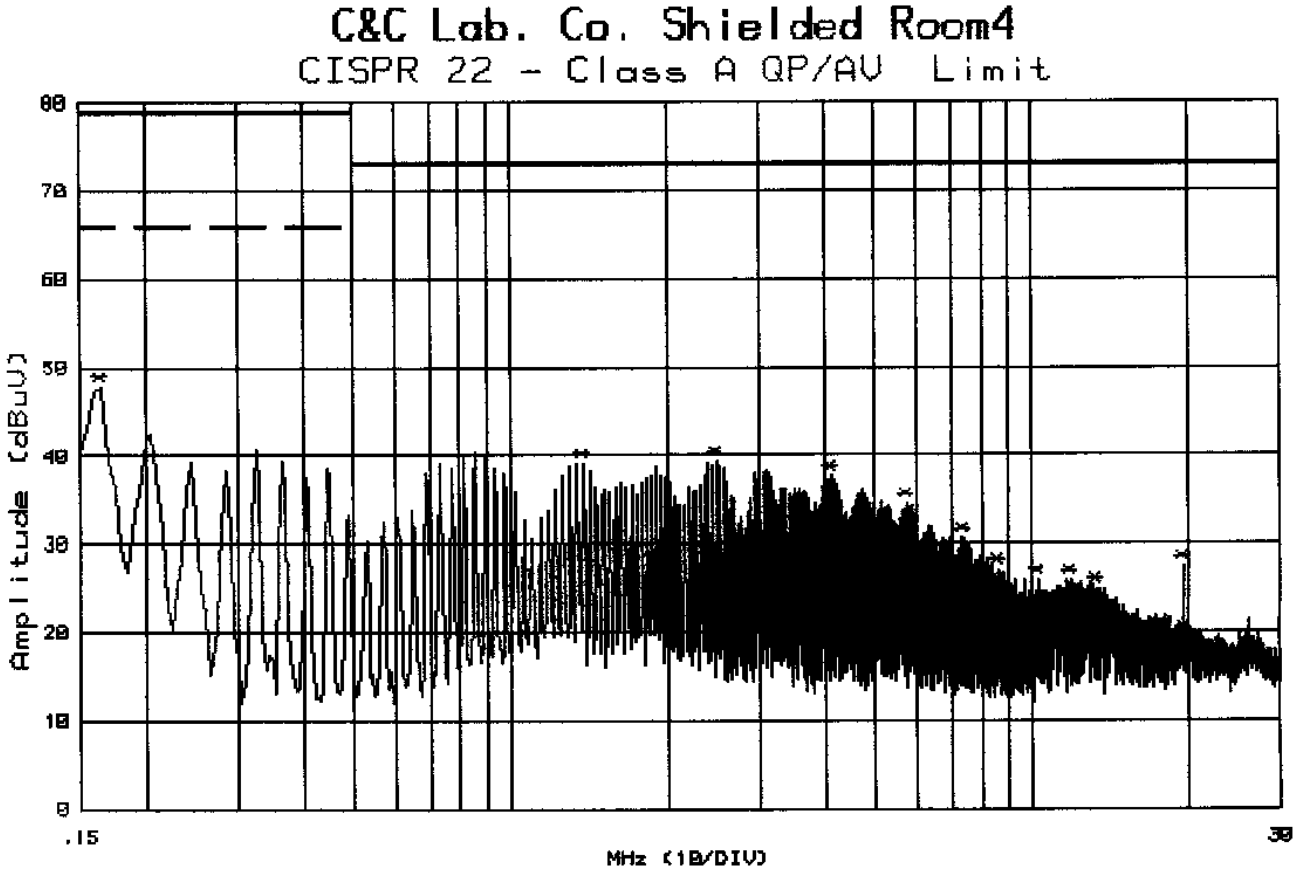


Customer:NA
Model :GENE-4310(N)
Mode :FULL SYSTEM
Reading :Peak(R&S Receiver)
Remark :IPC

File#: 587
Humd.:65 (%)
Port :L1

Date :20 Jun 2000 12:03:54
Temp. :28 (C)
Tester:TONY TSAI

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1	.165	47.3	.1	47.4	79.0	-31.6	
2	1.430	40.0	.2	40.2	73.0	-32.8	
3	2.570	38.5	.3	38.8	73.0	-34.2	
4	4.160	36.2	.5	36.7	73.0	-36.3	
5	5.710	34.1	.5	34.6	73.0	-38.4	
6	7.220	29.3	.5	29.8	73.0	-43.2	
7	8.650	25.2	.5	25.7	73.0	-47.3	
8	11.550	25.1	.8	25.9	73.0	-47.1	
9	11.790	25.2	.8	26.0	73.0	-47.0	
10	13.140	24.5	.8	25.3	73.0	-47.7	
11	14.650	23.5	.8	24.3	73.0	-48.7	
12	19.560	24.1	1.0	25.1	73.0	-47.9	



Customer:NA
Model :GENE-4310(N)
Mode :FULL SYSTEM
Reading :Peak(R&S Receiver)
Remark :IPC

File#: 586
Humd.:65 (%)
Port :L2

Date :20 Jun 2000 11:52:28
Temp. :28 (C)
Tester:TONY TSAI

No.	Freq. (MHz)	Reading (dBuV)	I_Loss (dB)	Total (dBuV)	QP.Lmt (dBuV)	Margin (dB)	Warning Mark
1	.165	47.7	.1	47.8	79.0	-31.2	
2	1.380	38.9	.2	39.1	73.0	-33.9	
3	2.480	39.1	.2	39.3	73.0	-33.7	
4	4.150	37.3	.3	37.6	73.0	-35.4	
5	5.780	34.2	.3	34.5	73.0	-38.5	
6	7.370	30.2	.3	30.5	73.0	-42.5	
7	8.630	26.7	.3	27.0	73.0	-46.0	
8	10.260	25.4	.4	25.8	73.0	-47.2	
9	11.930	25.4	.4	25.8	73.0	-47.2	
10	13.360	24.4	.4	24.8	73.0	-48.2	
11	19.560	26.8	.6	27.3	73.0	-45.7	

SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: GENE-4310(N) **Location:** Site # 3

Tested by: Gimmy Tsai

Test Mode: Mode 1 **Polar:** Vertical -- 10m

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 30^0C **Humidity:** 68%RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m)	Limits	Margin (dB)
33.40	7.5	17.6	25.1	40.0	-14.9
176.16	22.0	12.8	34.8	40.0	-5.2
214.37	20.5	12.7	33.2	40.0	-6.8
226.10	10.6	13.7	24.3	40.0	-15.7
299.99	5.6	18.6	24.2	47.0	-22.8
501.11	12.7	23.2	35.9	47.0	-11.1
676.52	10.5	26.1	36.6	47.0	-10.4

SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: GENE-4310(N) **Location:** Site # 3

Tested by: Gimmy Tsai

Test Mode: Mode 1 **Polar:** Horizontal -- 10m

Detector Function: Quasi-Peak **Test Results:** Passed

Temperature: 30^0C **Humidity:** 68%RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m)	Limits	Margin (dB)
33.23	8.2	17.7	25.9	40.0	-14.1
176.31	18.9	12.8	31.7	40.0	-8.3
214.37	17.2	12.7	29.9	40.0	-10.1
226.57	12.0	13.8	25.8	40.0	-14.2
500.11	13.1	23.2	36.3	47.0	-10.7
676.00	11.2	26.1	37.3	47.0	-9.7

SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: GENE-4310(N) **Location:** 3 meter chamber

Tested by: Gimmy Tsai **Polar:** Vertical ---3 m

Test Mode: Mode 1

Detector Function: Pk / A.V. **Test Results:** Passed

Temperature: 30^0C **Humidity:** 68%RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m)	Limits (A.V.)	Margin (dB)
1450.00	13.4	28.2	41.6	53.9	-12.3
1471.00	9.5	28.3	37.8	53.9	-16.1
1774.00	12.1	29.7	41.8	53.9	-12.1
1970.00	10.9	30.7	41.6	53.9	-12.3

Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no measurement with A.V. detector required.

SUMMARY DATA

(RADIATED EMISSION TEST)

Model Number: GENE-4310(N) **Location:** 3 meter chamber

Tested by: Gimmy Tsai **Polar:** Horizontal ---3 m

Test Mode: Mode 1

Detector Function: Pk / A.V. **Test Results:** Passed

Temperature: 30^0C **Humidity:** 68%RH

(The chart below shows the highest readings taken from the final data)

Freq. (MHz)	Raw Data (dBuV/m)	Corr. Factor (dB)	Emiss. Level (dBuV/m)	Limits (A.V.)	Margin (dB)
1041.00	12.2	27.1	39.3	53.9	-14.6
1173.00	13.9	27.4	41.3	53.9	-12.6
1501.00	13.2	28.4	41.6	53.9	-12.3
1993.00	9.8	30.8	40.6	53.9	-13.3

Note: In case of peak reading complied with the A.V. limit at least 2dB margin, no measurement with A.V. detector required.

APPENDIX 1

TEST FACILITY

TEST FACILITY

Location: No. 15, 14 Line, Chin Twu Chi, Lu Chu Hsiang, Taoyuan, Taiwan, R.O.C.

Description: There are three 3/10m open area test sites and three line conducted labs for final test, and one 3/10m open area test site for engineering lab.
The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 1992 and CISPR 22/EN 55022 requirements.

Site Filing: A site description is on file with the Federal Communications Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Registration also was made with Voluntary Control Council for Interference (VCCI).

Site Accreditation: Accredited by NEMKO (Authorization #: ELA 124) for EMC & A2LA (Certificate #: 824.01) for Emission

Also accredited by BSMI for the product category of Information Technology Equipment.

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4 and CISPR 22 requirements that meet industry regulatory agency and accreditation agency requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

Site # 1 & # 3 Line Conducted Test Site: Vertical ground plane (2.2m x 2.2m)
Horizontal ground plane (2.5m x 2.5m)

Site # 4 Line Conducted Test Site: At Shielding Room

APPENDIX 2

TEST EQUIPMENT

TEST EQUIPMENT LIST

Instrumentation: The following list contains equipment used at C & C Laboratory, Co., Ltd. for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2-1988 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10kHz to 1.0 / 2.0 GHz.

Equipment used during the tests:

Open Area Test Site: ☐ # 1 ; ☑ # 3 ; ☐ # 4

Open Area Test Site # 1					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL. DUE**
Spectrum Analyzer	ADVANTEST	R3261A	N/A	03/08/2000	03/07/2001
EMI Test Receiver	R&S	ESCS30	847793/012	11/06/1999	11/05/2000
PRE-AMP.	HP	8447F	2944A03748	10/22/1999	10/21/2000
Precision Dipole	R&S	HZ-12	846932/0004	07/13/1999	07/12/2000
Precision Dipole	R&S	HZ-13	846556/0008	07/13/1999	07/12/2000
Bilog Antenna	CHASE	CBL6112A	2309	02/13/2000	02/12/2001
Turn Table	EMCO	2081-1.21	N/A	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2604	N.C.R	N.C.R
Controller	EMCO	2090	N/A	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	N/A	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	11/10/1999	11/09/2000

Open Area Test Site # 3					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL. DUE**
Spectrum Analyzer	ADVANTEST	R3261C	71720533	10/25/1999	10/24/2000
Pre-Amplifier	HP	8447D	2944A09173	02/01/2000	01/31/2001
EMI Test Receiver	R&S	ESVS20	838804/004	12/24/1999	12/23/2000
Precision Dipole	R&S	HZ-12	846932/0004	07/13/1999	07/12/2000
Precision Dipole	R&S	HZ-13	846556/0008	07/13/1999	07/12/2000
Bilog Antenna	CHASE	CBL6112A	2179	11/27/1999	11/26/2000
Turn Table	EMCO	2081-1.21	9709-1885	N.C.R	N.C.R
Antenna Tower	EMCO	2075-2	9707-2060	N.C.R	N.C.R
Controller	EMCO	2090	9709-1256	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	N/A	N.C.R	N.C.R
Site NSA	C&C	N/A	N/A	01/30/2000	01/30/2001

Open Area Test Site # 4					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL. DUE**
Spectrum Analyzer	ADVANTEST	R3132	91700456	02/15/2000	02/14/2001
Pre-Amplifier	HP	8447F	2944A03748	10/22/1999	10/21/2000
EMI Test Receiver	R&S	ESVS10	846285/016	12/17/1999	12/16/2000
Precision Dipole	R&S	HZ-12	846932/0004	07/13/1999	07/12/2000
Precision Dipole	R&S	HZ-13	846556/0008	07/13/1999	07/12/2000
Bilog Antenna	CHASE	CBL 6112B	2462	01/13/2000	01/12/2001
Turn Table	Chance most	N/A	N/A	N.C.R	N.C.R
Antenna Tower	Chance most	N/A	N/A	N.C.R	N.C.R
Controller	Chance most	N/A	N/A	N.C.R	N.C.R
RF Switch	ANRITSU	MP59B	N/A	N.C.R	N.C.R
Site NSA	C&C Lab.	N/A	N/A	12/26/1999	12/25/2000

3 meter chamber					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL. DUE**
Spectrum Analyzer	ADVANTEST	R3271A	85060321	01/12/2000	01/11/2001
Pre-Amplifier	HP	8449B	3008A00965	03/03/2000	03/02/2001
Horn Antenna	EMCO	3115	9602-4659	04/06/2000	04/05/2001
Coaxial Cable	ANOREW	LDF-2-50	79027	04/17/2000	04/16/2001
Turn Table	HD	DS 415	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA 240	N/A	N.C.R	N.C.R
Controller	HD	HD 100	N/A	N.C.R	N.C.R

Conducted Emission Test Site:

Conducted Emission Test Site # 4					
EQUIPMENT TYPE	**MFR**	**MODEL NUMBER**	**SERIAL NUMBER**	**LAST CAL.**	**CAL. DUE**
EMI Test Receiver	R&S	ESHS10	843743/015	12/10/1999	12/09/2000
LISN	EMCO	3825/2	9003/1382	01/10/2000	01/09/2001
LISN	R&S	ESH2-Z5	843250/010	12/06/1999	12/05/2000

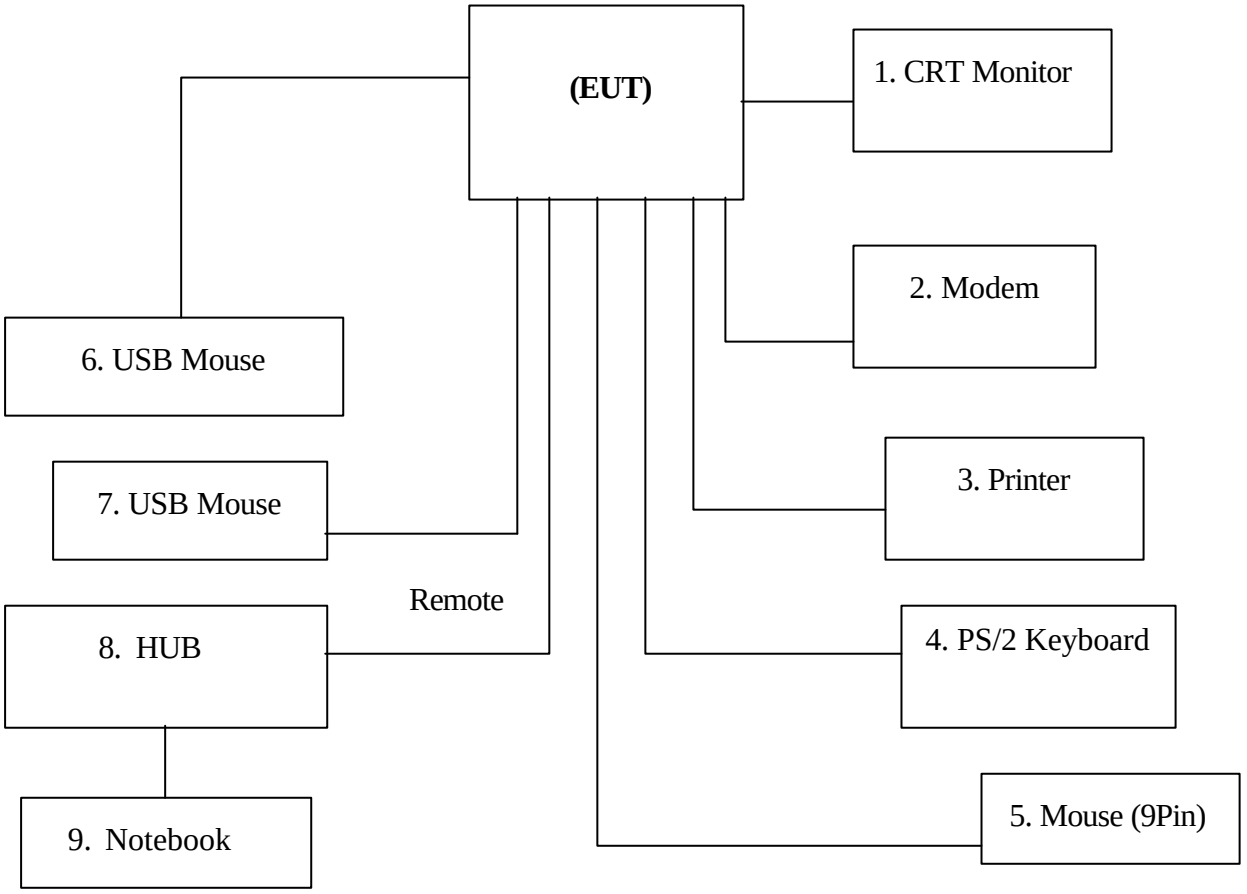
The calibrations of the measuring instruments, including any accessories that may effect such calibration, are checked frequently to assure their accuracy. Adjustments are made and correction factors applied in accordance with instructions contained in the manual for the measuring instrument.

APPENDIX 3

BLOCK DIAGRAM OF TEST SETUP

System Diagram of Connections between EUT and Simulators

EUT: IPC
Trade Name: N/A
Model Number: GENE-4310(N)
Power Cord: Unshielded, 1.8m to power Adapter



APPENDIX 4

PHOTOGRAPHS
(TEST SETUP OF LINE CONDUCTED EMISSION TEST)

LINE CONDUCTED EMISSION TEST

APPDENDIX 5

PHOTOGRAPHS
(TEST SETUP OF RADIATED EMISSION TEST)

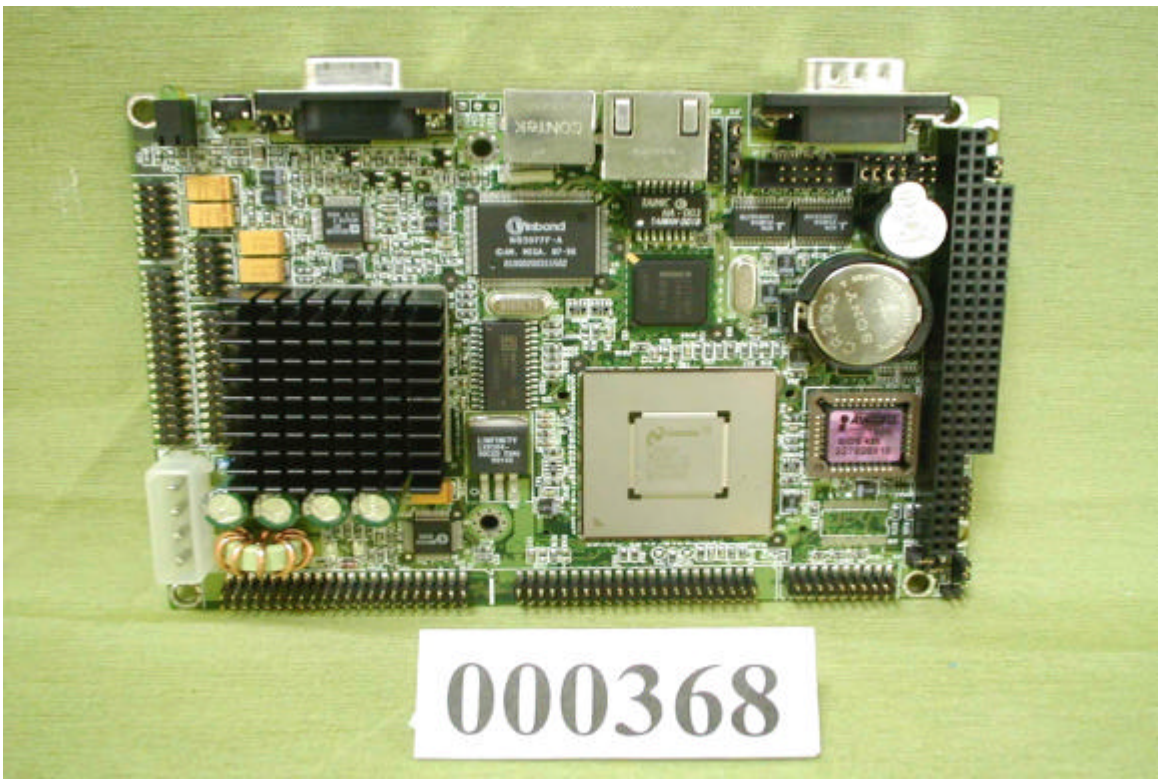
TEST SETUP OF RADIATED EMISSION TEST

APPENDIX 6

PHOTOGRAPHS OF EUT


000368


MODEL
S/N
000368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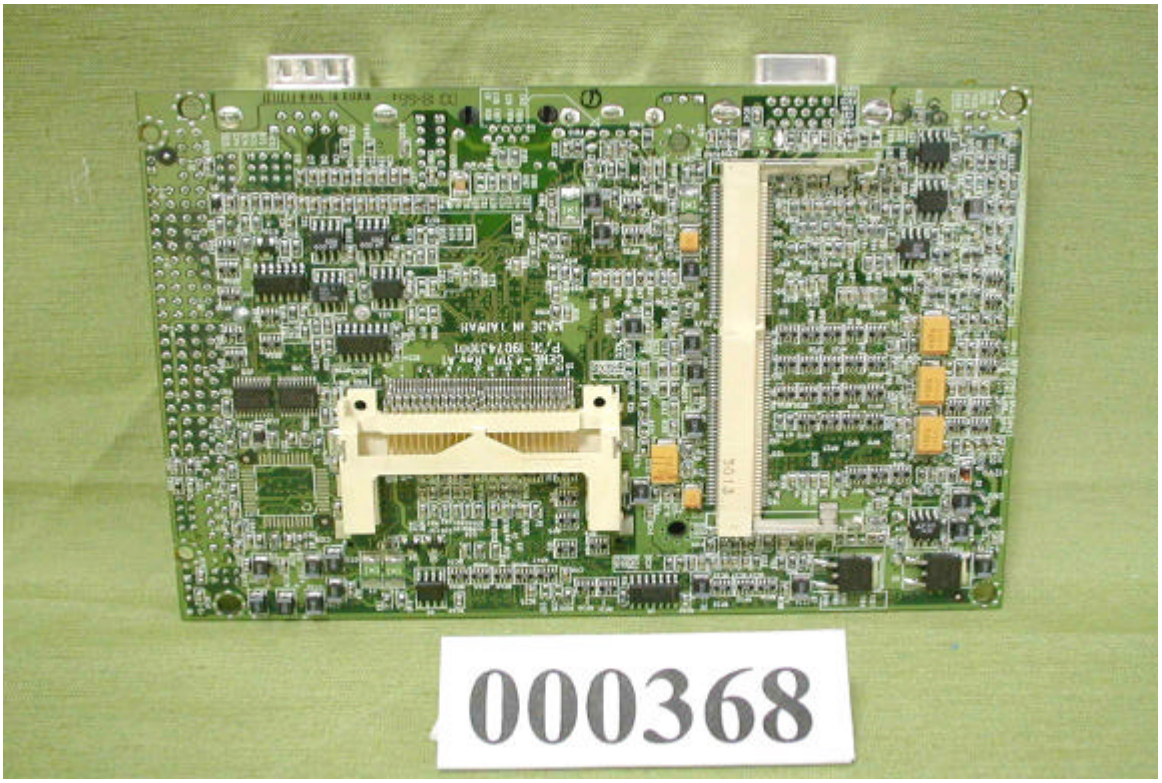
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