VCCI CLASS B EMI TEST REPORT

of

Notebook Personal Computer

Model/ Type/ Machine Type

MS2102

Prepared for:

Acer Inc. 7 Hsin Ann Rd., Science-Based Industrial Park Hsinchu 30077 Taiwan, R. O. C.

Test Performed by:

VCCI Member No.:247

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Contents of Report

<u>1.</u> <u>General</u>	1
1.1 Certification of Accuracy of Test Data	1
1.2 Summary	2
1.2.1 Description of Equipment Under Test (EUT)	2
1.2.2 Description of EUT and Support Equipment Included in Tests	2
<u>1.2.3</u> <u>Test Procedure and Specification</u>	2
<u>1.2.4</u> <u>Tests Performed</u>	2
<u>2.</u> <u>Powerline Conducted Emissions</u>	3
2.1 <u>Configuration and Procedure</u>	
2.1.1 EUT Configuration	3
2.1.2 <u>Test Procedure</u>	3
2.1.3 <u>EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)</u>	
2.2 <u>Test Data: CPU: PIII 1.133G, LCD: Hitachi 15.0 TFT, Maximum Resolution</u>	<u>at Display</u>
LCD & CRT 1280x1024 Noninterlaced, Adapter: Delta (Model: ADP60DB)3 pins,	<u>, Hard</u>
Disk:IBM 30GB, DVD/CD-RW: KME, SDRAM: Infineon (Model: HYS64V1622)	<u>0GDL-7.5-C</u>
<u>) 128MB.</u>	4
<u>3.</u> Open Field Radiated Emissions	6
3.1 Configuration and Procedure	6
3.1.1 EUT Configuration	6
3.1.2 <u>Test Procedure</u>	6
3.1.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)	6
3.2 <u>Test Data:.CPU: PIII 1.133G, LCD: Hitachi 15.0 TFT, Maximum Resolution</u>	<u>at Display</u>
LCD & CRT 1280x1024 Noninterlaced, Adapter: Delta (Model: ADP60DB)3 pins,	<u>, Hard</u>
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) <u>128MB.</u>	7
<u>4.</u> <u>Appendix</u>	9
4.1 Appendix A: Test Equipment	9
4.1.1 Test Equipment List	9
4.1.2 Software for Controlling Spectrum/Receiver and Calculating Test Data	10
4.2 Appendix B: Label and Informations Requirements	
4.3 Appendix C: Layout of EUT and Support Equipments	
4.4 Appendix D: Description of Support Equipment	
4.4.1 Description of Support Equipment	
4.4.2 Software for Controlling Support Unit	16
4.4.3 I/O Cable Condition of EUT and Support Units	17
4.5 Appendix E: Description of Equipment Under Test	
4.6 Appendix F: Photographs of EUT Configuration Test Set Up	20

1. General

1.1 Certification of Accuracy of Test Data

The electromagnetic interference tests which this report describes were conducted by an independent electromagnetic compatibility consultant, International Standards Laboratory in accordance with the VCCI test Procedure.

The test results contained in this report accurately represent the radiated and power line conducted electromagnetic emissions generated by sample equipment under test at the time of the test.

Equipment Tested:	Notebook Personal Computer				
	Model/ Type/ Machine Type: MS2102				
	Manufactured by Acer Inc.				
Date of test: Temperature Humidity:	2001/08/02 26°C(Conduction Test); 51% (Conduction Test);	30°C (Radiation Test) 68% (Radiation Test)			
Test Engineer.	Chance Chan				

The results show that the sample equipment tested as described in this report is in compliance with the Class B conducted and radiated emission limits of VCCI regulations.

Approve & Signature

L. Y. Soong/Director

1.2 Summary

1.2.1 Description of Equipment Under Test (EUT)

Description:	Notebook Personal Computer
Model/ Type/ Machine Type:	MS2102
Company Name:	Acer Inc. 7 Hsin Ann Rd., Science-Based Industrial Park Hsinchu 30077 Taiwan, R. O. C.

A more detailed, technical description of the EUT is contained in appendix D.

1.2.2 Description of EUT and Support Equipment Included in Tests

The EUT is a Notebook Personal Computer (Model/ Type/ Machine Type: MS2102), which was tested with the following support units:

1. Acer USB Mouse	Model: MUSXT
2. Acer USB Keyboard	Model: 6511-P
3. KOKA Microphone	Model: DM-510
4. Acer Speaker	Model: PS033761
5. SONY radio cassette player	Model: WM-FX50
6. HP Printer	Model: 2225C
7. Logitech Mouse	Model: M-S34
8. Aceex Modem	Model: DM1414
9. Acer Monitor	Model: 7377xe
10.IBM Personal Computer	Model: IBM2170

A more detailed technical description of the support equipment is contained in Appendix C and D.

1.2.3 Test Procedure and Specification

The tests were performed in accordance with VCCI regulations as detailed in the individual test sections. The test instrument used is detailed in Appendix A. The specification used was the Class B limits of VCCI regulations.

1.2.4 Tests Performed

- 1. Powerline conducted emissions in shielded room. See Part 2 of this report for full details.
- 2. Radiated emissions in 10 meter open area. See Part 3 of this report for full details.

2. Powerline Conducted Emissions

2.1 Configuration and Procedure

2.1.1 EUT Configuration

The equipment under test was set up in the shielded room with the EUT 40cm away from the wall of the room. The EUT was placed on a non-conductive test table which is 80cm in height. Excess power cord was folded back and forth to form a 30cm by 40cm bundle. The distance between EUT and LISN is 80cm.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

2.1.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. The powerline conducted EMI tests were run on the hot and neutral conductors of the power cord and the results were recorded.

At the frequencies where the peak values of the emissions were higher than 6dß below the applicable limits, the emissions were also measured with the quasi-peak detectors.

The highest emissions were analyzed in details by operating the spectrum analyzer in fixed tuned mode to determine the nature of the emissions and to provide information which could be useful in reducing their amplitude.

2.1.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range: Detector Function: Resolution Bandwidth (RBW): 150KHz--30MHz Quasi-Peak / Average Mode 9KHz **2.2 Test Data:** CPU: PIII 1.133G, LCD: Hitachi 15.0 TFT, Maximum Resolution at Display LCD & CRT 1280x1024 Noninterlaced, Adapter: Delta (Model: ADP60DB)3 pins, Hard Disk:IBM 30GB, DVD/CD-RW: KME, SDRAM: Infineon (Model: HYS64V16220GDL-7.5-C) 128MB.

	LISN		Quasi-Peak			Average	
Frequency	Insertion Loss	Amplitude	Limit	Margin	Amplitude	Limit	Margin
(KHz/MHz)	(dB)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
212.08KHz	0.19	53 <i>.</i> 38	64.23	-10.65	42.43	54 <i>.</i> 23	-11.60
282.43KHz	0.21	45.60	62.22	-16.41	36.08	52.22	-15 <i>.</i> 93
353.48KHz	0.23	37 <i>.</i> 02	60.19	-22 <i>.</i> 94	26.12	50.19	-23.84
423.7KHz	0.25	36.45	58.18	-21.48	31 <i>.</i> 47	48.18	-16.46
494 <i>.</i> 95KHz	0.26	33.74	56.14	-22.14	30.61	46.14	-15.27
21.284MHz	1.71	39 <i>.</i> 82	60.00	-18.47	36 <i>.</i> 54	50.00	-11.75
21.581MHz	1.72	40.33	60.00	-17 <i>.</i> 95	37 . 43	50.00	-10.85
21 <i>.</i> 874MHz	1.73	39.29	60.00	-18.98	34.92	50.00	-1 <i>3.</i> 35
22.166MHz	1.74	38 <i>.</i> 67	60.00	-19.59	28.81	50.00	-19 . 45
22.461MHz	1.75	37.93	60.00	-20.32	30.91	50.00	-17 <i>.</i> 34

Table 2.2.1 Power Line Conducted Emissions (Hot)

* NOTE: Margin = Amplitude + Insertion Loss- Limit

A margin of -8dB means that the emission is 8dB below the limit

Tested by: hance Chen 16/01

Chance Chan

	LISN		Quasi-Peak			Average	
Frequency	Insertion Loss	Amplitude	Limit	Margin	Amplitude	Limit	Margin
(KHz/MHz)	(dB)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
211.03KHz	0.20	52 <i>.</i> 89	64.26	-11.17	41.11	54.26	-12.95
281.45KHz	0.25	44.39	62.24	-17.60	34.93	52.24	-17.06
352.65KHz	0.30	36.02	60.21	-23.89	24.76	50.21	-25.14
423.4KHz	0.34	37.29	58.19	-20.56	30.99	48.19	-16.86
493 <i>.</i> 9KHz	0.34	34.56	56.17	-21.27	30.53	46.17	-15 <i>.</i> 30
20.695MHz	1.39	40.41	60.00	-18.20	37 <i>.</i> 39	50.00	-11.23
21.282MHz	1.41	40.28	60.00	-18.31	34.22	50.00	-14 <i>.</i> 37
21.586MHz	1.42	40.33	60.00	-18.25	34.52	50.00	-14.06
21 <i>.</i> 874MHz	1.43	39.76	60.00	-18.81	36.64	50.00	-11 <i>.</i> 93
22.168MHz	1.44	39.29	60.00	-19.27	31.44	50.00	-17.11

Table 2.2.1 Power Line Conducted Emissions (Neutral)

* NOTE: Margin = Amplitude + Insertion Loss- Limit A margin of -8dB means that the emission is 8dB below the limit

Tested by:

Chance Chan hen 1/5/01

3. Open Field Radiated Emissions

3.1 Configuration and Procedure

3.1.1 EUT Configuration

The radiated emissions test setups are in accordance with Figs 10(c) and 10(d) of ANSI C63.4-1992, CFR 47 Part 15 Subpart B, or EN55022:1994/ A1:1995 / A2: 1997 / CISPR 22:1993/ A1:1995 / A2: 1997..

The equipment under test was set up on the 10 meter open field test non-conductive table 80cm above ground, same as conducted Excess data cable was folded back and forth to form a 30cm by 40cm bundle.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

If the EUT is a Personal Computer or a peripheral of personal computer, and the personal computer has an auxiliary AC outlet which can be used for providing power to an external monitor, then all measurements will be made with the monitor power from first the computer-mounted AC outlet and then a floor-mounted AC outlet.

3.1.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. The maximum readings were found by varying the height of antenna and then rotating the turntable. Both polarization of antenna, horizontal and vertical, are measured. The effect of varying the position of the interface cables has been investigated to find the configuration that produces maximum emission.

The highest emissions were also analyzed in details by operating the spectrum analyzer in fixed tuned quasi-peak mode to determine the precise amplitude of the emissions. While doing so, the antenna height was varied between one and four meters, and the turntable was slowly rotated, to maximize the emission.

3.1.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range: Detector Function: Resolution Bandwidth (RBW): 30MHz--1000MHz Quasi-Peak Mode 120KHz **3.2 Test Data:**.CPU: PIII 1.133G, LCD: Hitachi 15.0 TFT, Maximum Resolution at Display LCD & CRT 1280x1024 Noninterlaced, Adapter: Delta (Model: ADP60DB)3 pins, Hard Disk:IBM 30GB, DVD/CD-RW: KME, SDRAM: Infineon (Model: HYS64V16220GDL-7.5-C) 128MB.

Meter F	Meter Reading		Correction Factor		Corrected Emissions		Antenna	Turntable	
Freq.	Ampl.	Ant.	Cable	Pre-Ampl.	Ampl.	Limit	Margin*	Height	Position
(MHz)	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(?)
133.75	13.63	10.97	1.60	0.00	26.20	30.00	-3.80	357 <i>.</i> 00	292.00
155 <i>.</i> 98	12.29	9.66	1.80	0.00	23.75	30.00	-6.25	400.00	354.00
199.16	15 <i>.</i> 89	8.29	2.15	0.00	26.33	30.00	-3.67	400.00	322.00
221.04	15 <i>.</i> 64	8.30	2.29	0.00	26.24	30.00	-3.76	329.00	338.00
251 <i>.</i> 29	15.18	11.73	2.50	0.00	29.40	37.00	-7.60	351.00	111.00
532 <i>.</i> 54	10.91	18.42	4.35	0.00	33.67	37.00	-3 . 33	310.00	249.00
669.08	9.41	19.40	5 <i>.</i> 28	0.00	34.09	37.00	-2.91	133.00	141.00

Table 3.2.1 Open Field Radiated Emissions (Horizontal)

* NOTE: Margin = Corrected Amplitude – Limit

Corrected Amplitude = Radiated Amplitude + Antenna Correction Factor + Cable Loss – Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limitBILOG Antenna Distance: 10 meter,Frequency: under 1000MHzHorn AntennaDistance: 3 meter,Frequency: 1000MHz—18GHz

Tested by:

hance hen % /01

Meter H	Meter Reading		rrection Fac	tor	Corrected Emissions		Antenna	Turntable	
Freq.	Ampl.	Ant.	Cable	Pre-Ampl.	Ampl.	Limit	Margin*	Height	Position
(MHz)	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(?)
66.913	20.18	4.99	0 <i>.</i> 97	0.00	26.14	30.00	-3.86	137.00	154.00
164.53	1 <i>3.</i> 58	9.12	1.84	0.00	24.54	30.00	-5.46	100.00	4.00
168.04	14.34	8.98	1.83	0.00	25.14	30.00	-4.86	202.00	336.00
169.53	13.94	8.92	1.82	0.00	24.68	30.00	-5.32	231.00	219.00
203.71	13.66	8.49	2.18	0.00	24.33	30.00	-5.67	400.00	57 <i>.</i> 00
535.2	6.52	18 . 47	4.36	0.00	29.35	37.00	-7.65	183.00	134.00
578.98	10.19	18.68	4.64	0.00	33.51	37.00	-3.49	198.00	280.00

Table 3.2.2 Open Field Radiated Emissions (Vertical)

* NOTE: Margin = Corrected Amplitude – Limit

Corrected Amplitude = Radiated Amplitude + Antenna Correction Factor + Cable Loss - Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit BILOG Antenna Distance: 10 meter, Frequency: under 1000MHz Horn Antenna Distance: 3 meter,

Frequency: 1000MHz—18GHz

Tested by:

hance Chan \$6/01

Chance Chan

4. Appendix

4.1 Appendix A: Test Equipment

4.1.1 Test Equipment List

Use For	Equipment	Brand	Model	Start Service Date	Last Cal. Date	Next Cal. Date
R	EMI Receiver	R&S	ESMI; rev. 02.80 S/N: 849182/003	Nov. 09, 1999	May. 24, 2001	May. 24, 2002
R	BILOG Antenna	Chase	CBL6112B S/N: 2487	Nov. 23, 1998	Nov. 03, 2000	Nov. 02, 2001
R	Horn Antenna	EMCO	3115 S/N: 9504-4462	Nov. 06, 1999	Dec. 02, 2000	Dec.01, 2001
R	Pre Amplifier	R&S	ESMI-Z7	Nov. 09, 1999	May. 08, 2001	May. 08, 2002
R	Coaxial Cables	RICHTEC	TWB4001 S/N: 3F-10M	Aug. 31, 1995	Jul. 24, 2001	Jul. 24, 2002
R	Coaxial Cables	RICHTEC	9913 S/N: 3F-3M	Dec. 20, 1998	Jan. 18, 2001	Jan. 18, 2002
R	Thermo-Hygro Meter	CRECER	HD-30 S/N: ISL-C-001	Nov. 26, 1999	Nov. 28, 2000	Nov. 27, 2001
С	EMI Receiver	HP	8546A; S/N: 3520A00236	Sep. 08, 1997	Dec. 13, 2000	Dec. 13, 2001
С	LISN 1	R & S	ESH2-Z5 S/N: 890485/013	Dec. 15, 1988	May. 07, 2001	May. 07, 2002
С	LISN 2	EMCO	3825/2 S/N: 1407	Oct. 20, 1990	May. 07, 2001	May. 07, 2002
С	Terminator	RICHTEC	S/N: ISL-T-001	Oct. 19, 1999	May. 07, 2001	May. 07, 2002
С	Terminator	RICHTEC	S/N: ISL-T-002	Oct. 19, 1999	May. 07, 2001	May. 07, 2002
С	Terminator	RICHTEC	S/N: ISL-T-003	Mar. 13, 2001	May. 07, 2001	May. 07, 2002
С	ISN	Schaffner	ISN T400	Mar. 13, 2001	Sep. 11, 2000	Sep. 11, 2001
С	Coaxial Cables	RICHTEC	RG400 S/N: 1F-C1	Aug. 31, 1995	Jun. 01, 2001	Jun. 01, 2002
С	Coaxial Cables	RICHTEC	RG400 S/N: 1F-C2	Aug. 31, 1995	Jun. 01, 2001	Jun. 01, 2002
С	Digital Thermo- Hygro Meter	MICROLIFE	S/N: ISL-C-002	Nov. 26, 1999	Nov. 28, 2000	Nov. 27, 2001

Note:

Calibration traceable to NIST or national or international standards.

The Use For column with C means the equipment is used for the measurement of conducted emission.

The Use For column with R means the equipment is used for the measurement of radiated emission.

4.1.2 Software for Controlling Spectrum/Receiver and Calculating Test Data

Radiation/Conduction Filename		Version	Issued Date
Conduction	Tile.exe	1.13Z	4/5/2001
Radiation	Tile.exe	1.13Z	4/5/2001

4.2 Appendix B: Label and Informations Requirements

1. Label Requirement

A registered Class B information technology equipment (ITE) shall carry an identified label shown as below at a conspicuous location:



2. Information Requirement

Instruction manuals supplied to users of Class B ITE shall contain the following information or its equivalent:

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準 に基づくクラスB情報技術装置です。この装置は、家庭環境で使用すること を目的としていますが、この装置がラジオやテレビジョン受信機に近接して 使用されると、受信障害を引き起こすことがあります。 取扱説明書に従って正しい取り扱いをして下さい。

* Notice: Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

4.3 Appendix C: Layout of EUT and Support Equipments

Equipment Tested:

Product: Notebook Personal Computer

Model/ Type/ Machine Type: MS2102



Note: Please refer to Appendix D & E for detailed information of EUT and Support Units.

-13-

Acer USB Mouse

(comply with FCC DOC)

Acer USB Keyboard

9152P0701183I31025S00000

MUSXT 81130159

N/A

N/A

6511-P

JVP6511-P

N/A

N/A

4.4 Appendix D: Description of Support Equipment

4.4.1 Description of Support Equipment

Support Unit 1.

Description: Model Number: Serial Number: Power Supply Type: Power Cord: FCC ID:

Support Unit 2.

Description: Model Number: Serial Number: Power Supply Type: Power Cord: FCC ID:

Support Unit 3.

Description: Model Number: Serial Number: Power Supply Type: Power Cord: FCC ID: KOKA Microphone DM-510 N/A N/A N/A N/A

Support Unit 4.

Description: Model Number: Serial Number: Power Supply Type: Power Cord: FCC ID: Acer Speaker PS033761 970701496 N/A N/A N/A

Support Unit 5.

Description: Model Number: Serial Number: Power Supply Type: Power Cord: SONY radio cassette player WM-FX50 N/A N/A N/A

Support Unit 6.

Description:

Model Number: Serial Number: Power Supply Type:

Power Cord:

FCC ID:

Support Unit 7.

Description: Model Number: Serial Number: Power Supply Type: Power Cord: FCC ID:

Support Unit 8.

Description:

Model Number: Serial Number: Power Supply Type:

Power Cord: FCC ID:

Support Unit 9.

Description: Model: Serial Number: Power Supply Type: Power Cord: FCC ID: HP Printer (for parallel interface port) 2225C N/A Switching (AC to AC Xfmr, Wall Mounted Type) Nonshielded, Detachable With Grounding Pin DSI6XU2225

Logitech Mouse M-SAH LZB81251703 N/A N/A DZL211029

Aceex Modem (for serial interface port) DM1414 960063771 Linear, Power Adapter (AC to AC Xfmr, Wall Mounted Type) Nonshielded, Without Grounding Pin IFAXDM1414

Acer Monitor 7377xe 999027100501700055P644E1 P Switching Nonshielded, Detachable (Comply with FCC DOC)

Support Unit 10.

Description: Model: Serial No.: Power Supply Type : Hard Disk Drive: Floppy Driver: **CD-ROM** Drive: ZIP Driver: LAN Card FDD/HDD Controller and VGA port/ Parallel/ Serial port: VGA port: Parallel Port: Serial Port: Keyboard Connector: Mouse Connector: **USB** Connector: Game Port: Speaker Port: Microphone Port: Line In Port: Power Cord: FCC ID:

Personal Computer IBM 2170 N/A Switching Delta (Model: DPS-145PB-80A) Maxtor (Model: 91303D6) 13.3GB Panasonic (Model: JU256A276P) AOpen (Model: CD-940E/TKU PRO) Iomega (Model:Z100ATAPI) Accton (Model: EN1207D-TX1)

Built on Motherboard one 15-pin one 25-pin one 9-pin 6-pin two 4-pin one 15-pin one one one Nonshielded, Detachable N/A (comply witch FCC DOC) A test program which generates a complete line of continuously repeating "H" pattern is used as the software test program. The program was executed as follows:

- A. Read and write to the disk drives.
- B. Receive audio signal from the microphone.
- C. Send audio signal to the speaker.
- D. Receive audio signal from walkman.
- E. Send H pattern to the parallel port device (Printer).
- F. Send H pattern to the serial port device (Modem).
- G. Send H pattern to the video port device (Monitor).
- H. Send signal form EUT to server through LAN port.
- A. Send signal form EUT to server through Telephone port.
- I. Repeat the above steps.

	Filename	Issued Date
I AN	FMC eye	11/22/1996
		11/22/1770
Monitor	HH.bat	8/20/1991
Modem 1	Hm.bat	8/20/1991
Printer1	Wordpad.exe	11/11/1999
Telephone	Hypertrm.exe	06/08/200

Description	Path	Cable Length	Cable Type	Connector Type
AC Power Cord	110V (~240V) to AC Power Cord Inlet (3-pin)	1.8M	Nonshielded, Detachable	Plastic Head Plastic Hood
Server Data Cable	Server to EUT LAN port	33 feet	Nonshielded, Detachable	RJ-45, with Metal Head, Metal Hood
Monitor Data Cable	Monitor to PC VGA port	1.6M	Shielded, Detachable	Metal Head Plastic Hood
Modem Data Cable	Modem to PC COM 1 port	1.5M	Shielded, Detachable	Metal Head Metal Hood
Mouse Data Cable	Mouse to PC Mouse port	1.8M	Shielded, Undetachable	Metal Head without Hood
Printer Data Cable	Printer to PC Parallel port	1.5M	Shielded, Detachable	Metal Head Plastic Hood
Audio-in Data Cable	Walkman to PC Audio-In Port	1.5M	Nonshielded, Detachable to PC	Metal Head Plastic Hood
Speaker Data Cable	Speaker to PC Line out port	1.5M	Nonshielded, Detachable	Metal Head without Hood
Microphone Data Cable	Microphone to Mic Jack of PC	1.5M	Nonshielded, Undetachable	Metal Head Plastic Hood
USB Keyboard Data Cable	Keyboard to PC USB port	1.8M	Shielded, Undetachable	Metal Head Plastic Hood
USB Mouse Data Cable	Mouse to PC USB port	1.8M	Shielded, Undetachable	Metal Head without Hood
Telephone Line	with 600 .dummy load	1.2M	Nonshielded, Detachable to PC	Plastic Head Plastic Hood

4.4.3 I/O Cable Condition of EUT and Support Units

4.5 Appendix E: Description of Equipment Under Test

EUT

Description:	Notebook Personal Computer		
Condition:	Pre-Production		
Model:	MS2102		
Serial Number:	N/A		
Power Supply Type :	Switching		
	Delta (Model: ADP60DB BB) 3 pins		
	Delta (Model: ADP60DH BN) 3 pins		
	LiteOn (Model: PA-1600-02AE) 3 pins		
CPU Type :	Pentium III Tualatin 1.133G		
	Pentium III Tualatin 1.066G		
Hard Disk Driver:	IBM (Model: IC25N030ATDA04) 30GB		
	IBM (Model: IC25N020ATDA04) 20GB		
SDRAM:	Infineon (Model: HYS64V16220GDL-7.5-C)		
	128MB		
	FDD Driver: Mitsuni (Model: D353G)		
DVD/CD-RW Combo Driver:	KME (Model: UJDA710)		
DVD-ROM Driver:	MKE (Model: SR-8175)		
	MKE (Model: SR-8176)		
Modem Card:	Ambit (Model: T60M283)		
Docking	Acer (Model: ADSV)		
FDD/HDD Controller and			
Parallel/Serial ports:	Built on Motherboard		
Parallel Port:	one 25-pin		
Serial Port:	one 9-pin		
Docking Connector	one 203-pin		
PS-2 Connector:	one 6-pin		
USB Connector:	two 4-pin		
LAN Connector:	one 8-pin		
Speaker Port:	one		
Microphone Port:	one		
Line In Port:	one		
Power Cord:	Shielded, Detachable		
LCD	Hitachi 15" SXGA+ TFT (Model:		
TX38D95VC1CAM)			
Maximum display Resolution:	1280X1024 Noninterlaced		

Speed & CPU

Speed	CPU	Docking
133 MHz	Tualatin 1.133G	No
133MHz	Tualatin 1.066G	Yes

All types of CPU & LCD have been tested, only shown the worst data using CPU: PIII 1.133G, LCD: Hitachi 15.0"TFT (Model: TX38D95VC1CAM), LCD & CRT Resolution at 1280x1024 Noninterlaced, SPS: Delta (Model: ADP60DB BB) 3 pins, HDD:IBM 30GB (Model: IC25N9030ATDA04), DVD/CD-RW: KME (Model: UJDA710), SDRAM: Infineon(Model: HYS64V16220GDL-7.5-C) 128MB in this test report.

EMI Noise Source: Crystal:X-14.318MHz(X1),XTAL-27MHz(X2),X-24.576MHz(X3),XTAL-25MHz(X4) RESON-8MHz(X5),X4P-32.768K(X6) Clock Generator: One Clock Generator U8 (Model: IMI C9827)

EMI Solution:

- Added one gasket on the GND bar of LCD coaxial cable near LCD connector to contact the LCD panel.
- Added one gasket on the Connector of LCD coaxial cable near Main Board connector to contact the keyboard.
- 3. Added one gasket on USB port to contact upper case.
- 4. Added one gasket on FAN to contact VGA heat sink.
- 5. Added one gasket on PCMCIA socket to contact VGA heat sink.
- 6. Added one gasket on lower case to contact USB port.
- 7. Added three gaskets on the heat sink of Charger board to contact with upper case.
- 8. Added one gasket on upper case to contact HDD bracket.
- 9. Added two gaskets on upper case to contact heat sink of Charger board.
- 10. Added four gaskets on upper case to contact the I/O bracket.

4.6 Appendix F: Photographs of EUT Configuration Test Set Up



The Front View of Highest Conducted Set-up For EUT

-21-



The Front View of Highest Radiated Set-up For EUT

The Back View of Highest Radiated Set-up For EUT



End of this Report

To: Voluntary Control Council for Interference by Information Technology Equipment

CONFORMITY VERIFICATION REPORT

Company Name: <u>Acer Inc.</u> Address: <u>7 Hsin Ann Rd., Science-Based Industrial Park</u> <u>Hsinchu 30077, Taiwan, R. O. C.</u> Responsible Person: <u>Angus Hsieh</u> Contact Department: <u>EMC & Safety Engineering Department</u> Person in Charge: <u>Andy Chang</u> Phone: <u>886-2-26961234</u> Ext: 1996 Fax: 886-2-86912641

We hereupon notify the Council that the equipment described below is in conformance with the technical standards of the Council regarding radio interference from information technology equipment.

Type of ITE:	Notebook Personal Computer
Classification of ITE:	. Class A . Class B
ITEs Classification Code (See the reverse side.):	e
Type, etc. (Model No.): (When an OEM manufacturer submits the report in place of the brand manufacturer, the type name and the brand name of the brand manufacturer must be written here.)	MS2102
Test configuration:	A system diagram (type of machine, interface cable used, and connection system) attached on a separate sheet.
Name of testing agency or company:	International Standards Laboratory
Measurement facility registration Number:	Field Strength Measurement FacilityR-341Conducted InterferenceMeasurement FacilityC-354
Date of testing	2001/08/02
Serial No. of certificate of test result	ISL-01A062V

Acceptance No .:

CERTIFICATE OF ACCEPTANCE

The Conformity Verification Report from your company has been accepted.

Date:

Voluntary Control Council for Interference by Information Technology Equipment

- 1. This conformance report has been accepted as satisfactory. However, if any problem arises concerning this, your company must take the proper measures on your own responsibility.
- 2. Two copies of this form must be submitted, with one set of a system diagram.
- 3. A return mail envelope, clearly indicating the destination address, should be enclosed.

Document - 1

To: Voluntary Control Council for Interference by Information Technology Equipment

CONFORMITY VERIFICATION (ADDITION/MODIFICATION) REPORT

Company Name: Acer Inc.

Address: 7 Hsin Ann Rd., Science-Based Industrial Park

Hsinchu 30077, Taiwan, R. O. C.

Responsible Person: Angus Hsieh

Contact

Department: EMC & Safety Engineering Department

Person in Charge: <u>Andy Chang</u> Phone: <u>886-2-26961234</u> Ext: <u>1996</u> Fax: <u>886-2-86912641</u>

We hereupon notify the Council of . addition/ . modification of the following contents.

Acceptance No. of original report			
Type of ITE:	Notebook Personal Computer		
Classification of ITE:	. Class A . Class B		
ITEs Classification Code (See the reverse side.):			
Type, etc. (Model No.):	Type already notified	Type to be added/modified	
(When an OEM manufacturer submits the report in place of the brand manufacturer, the type name and the brand name of the brand manufacturer must be written here.)	MS2102	MS2102	
Test configuration:	A system diagram (type of machine, interface cable used, and connection system) attached on a separate sheet.		
Name of testing agency or company (in case of retesting):	X		
Measurement facility registration Number (in case of retesting):	Х		
Date of testing (in case of retesting):	Х		
Serial No. of certificate of test result (in case of retesting):	Х		
Reason for addition or modification/Reason for non-retesting:	OEM multiple listing		

CERTIFICATE OF ACCEPTANCE

The Conformity Verification (Addition/Modification) Report from your company has been accepted.

Voluntary Control Council for Interference by Information Technology Equipment

- 1. This conformance report has been accepted as satisfactory. However, if any problem arises concerning this, your company must take the proper measures on your own responsibility.
- 2. Two copies of this form must be submitted, with one set of a system diagram.
- 3. A return mail envelope, clearly indicating the destination address, should be enclosed.

Document - 3