Test Report Application for Certification

On Behalf Of

Nature Worldwide Technology Corp.

Notebook

Model Number : 777S

FCC ID:OTW777X747X

Prepared for :

Nature Worldwide Technology Corp.
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1. CERTIFICATION

Applicant : Nature Worldwide Technology Corp.

EUT Description	: Notebook
Model Number	: 777S
Serial Number	: N/A
FCC ID	: OTW777X747X
Tested Power Supply	: 110V/60Hz

MEASUREMENT PROCEDURES USED:

☑ **CFR 47, Part 15**	Radio Frequency Device Subpart B Unintentional Radiators Class B: 1996
☑ **CISPR 22 3rd Edition:1997**	Limits and methods of measurement of radio disturbance Characteristics of information technology equipment: 1997
☑ **ANSI C63.4**	Methods of Measurements of Radio-Noise Emissions from Low- Voltage Electrical and Electronic Equipment in the range of 9kHz To 40GHz. 1992

THE MEASUREMENT SHOWN IN THE ATTACHMENT WAS MADE IN ACCORDANCE WITH THE PROCEDURES INDICATED, AND THE MAXIMUM ENERGY EMITTED BY THE EQUIPMENT WAS FOUND TO BE WITHIN THE ABOVE LIMITS APPLICABLE.

Sample Received Date : Sep. 03, 2001
Final Test Date : Oct. 31, 2001

In order to ensure the quality and accuracy of this document, the contents have been thoroughly reviewed by the following qualified personnel from GesTek Lab.

Documented By :	**Administrative Review By :**
Betty Tseng / adm. Dept.Technical Report Author	Joan Chein / adm. Dept. Supervisor
Technical Review By :	**Approved By :**
Tony Tsai / eng. Dept. Deputy Manager	Raymond Chang / Manager

This test data shown below is traceable to National or international standard such as NIST/USA, etc. The laboratory's NVLAP accreditation in no way constitutes or implies product certification, approval, or endorsement by NVLAP or the United States government.

2. SUMMARY OF TEST RESULTS

STANDARD	TEST ITEM	TEST RESULT	REMARKS	TESTED BY
(1) FCC Part 15 Class B (2) CISPR 22 3rd Edition:1997 (3) Canadian ICES-003. Class B	Conducted emissionTest (Mode 1)	PASS	The worst emission frequency is 0.43911 MHz. And minimum passing margin is -2.1 dB.	Robbie Huang
	Radiated emission Test (Mode 1)	PASS	The worst emission frequency is 250.014 MHz at Horizontal. And minimum passing margin is -3.10dB. Height of antenna is 4m, Angle of turntable is 125°.	Tony Tsai

3. GENERAL INFORMATION

3.1 PRODUCTION DESCRIPTION

Product Name : Notebook
Model Number : 777S
Serial Number : N/A
FCC ID : OTW777X747X
Applicant : Nature Worldwide Technology Corp.
Address : No. 1 Min-Chuan Street, Tu-Cherg Industrial Park, Taipei-Hsien, Taiwan, R.O.C.
Manufacturer : Nature Worldwide Technology Corp.
Address : No. 1 Min-Chuan Street, Tu-Cherg Industrial Park, Taipei-Hsien, Taiwan, R.O.C.
Power Supply : AC Input:100-240V, ~1.8A, 50~60Hz.
DC Output:15V, 4.0A.
Power Cord : Non-Shielded, Detachable, 1.8m, 2Pin.

3.2 TEST MODES & EUT COMPONENTS DESCRIPTION

EUT : Notebook

Test Mode	Mode 1
CPU	UltraSPARC IIe 500MHz 256KB L2 External Cache
LCD Panel	LG.PHILIPS, 15” TFT XGA, M/N:LP150X1(F21B), S/N:05K9647
H.D.D. (10GB)	IBM, M/N:DJSA-210, S/N:9ZQG7878, BSMI ID:3892I133
F.D.D.	Mitsumi, M/N:D353F3, S/N:6256568, BSMI ID:62007002
Battery	GP, Li-ion Smart Battery Pack, M/N:GPNTA2047
DVD-ROM	Toshiba, M/N:SD-C2502, S/N:164N019594, BSMI ID:3892B234
SDRAM	Nature, 256MB
Mother Board	Nature, S/N:400-NE100-2300 Ver:H
Inverter Board	SUMIDA, M/N:IV15145/T
Charger Board	Nature, P/N:400-908V0-2300 Rev:C
Adapter	ILAN, M/N:F1960D, AC Input: 100-240V ~1.8A, 50-60Hz. DC Output: 15V, 4.0A
Resolution	1024 x 768, H-Sync:50KHz,V-Sync:60Hz
Power Cord	Non-Shielded, Detachable, 1.8m, 2Pin.

Note :
1. According to pre-scan data, we determine the data shown in this test report, which reflects the worst-case data for each operation mode.
2. IEEE 1394 & Parallel Port not available now.

3.3 CONFIGURATION OF THE TESTED SYSTEM

The FCC IDs/Types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards, which have grants) are:

☒ **Far End Network Server**

Model Number	: Targa PC-2, Mother Board: Asus, P/I-P55T2P4
Serial Number	: AC644101338
Manufacturer	: ACTEBIS
F.D.D.	: Panasonic, M/N:JU-257A606P
H.D.D.	: Seagate, M/N:ST31621A
CD-ROM	: Sony, M/N:CDU311, S/N:5004428
Disk Ctrl Card	: On Board
I/O Card	: On Board
Graphic Card	: Diamond, M/N:Staelth 64Video 2MB Dram, S/N:3160300002342
S.P.S.	: Enhance, M/N:V520, S/N:96035126
Power Cord	: Non-Shielded, Detachable, 1.5m
Data Cable to HUB	: Type:RJ45(UTP/8P8C)Twisted Pairs, Non-Shielded, 12m

☒ **HUB H01-001**

Model Number	: DE-816TP (10BASE-T Ethernet Hub)
Serial Number	: AN68900072
FCC ID	: KA2OPCH16
Manufacturer	: D-Link.
Data Cable to EUT	: Type:RJ45(UTP/8P8C), Detachable, 12m, Twisted Pairs
Power Cord	: Non-Shielded, Detachable, 1.5m

☒ **Monitor M01-016**

Model Number	: CM815ET PLUS
Serial Number	: GT0D050374
Manufacturer	: HITACHI
Data Cable	: Shielded, Undetachable, 1.8m, VGA Cable
Power Cord	: Non-Shielded, Detachable, 2m

☒ **Modem M03-013**

Model Number	: 1414
Serial Number	: 960018044
FCC ID	: IFAXDM1414
Manufacturer	: ACEEX
Power Cord	: Non-Shielded, Detachable, 1.5m
Data Cable	: Type:RS232, Shielded, Detachable, 1.2m
Line	: Type:RJ11(4P2C), Detachable, 1.8m
Phone	: Type:RJ11(4P2C), Detachable, 1.8m

☒ **Headset & Microphone E01-041**

Model Number	: SX-M1
Serial Number	: N/A
Manufacturer	: TOKYO
Power Cord	: N/A
Data Cable	: Non-Shielded, Undetachable, 1.8m

☒ **Keyboard (USB)**

Model Number	: TYPE6 USB FCC DoC
Serial Number	: 3201273-01
Manufacturer	: Sun Microsystem
Data Cable	: Shielded, Undetachable, 1.5m

☒ **Mouse (USB)**

Model Number	: Crossbow USB
Serial Number	: 0Y17737M 03B
Manufacturer	: Sun Microsystem
Data Cable	: Shielded, Undetachable, 1.5m

3.4 TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4-1992.

Radiated testing was performed at an antenna to EUT distance of __10_meters.

(For frequencies below 1000MHz)

Radiated testing was performed at an antenna to EUT distance of __3_meters.

(For frequencies above 1000MHz)

3.5 TEST FACILITY

Ambient conditions in the laboratory:

ITEMS	REQIORED(IEC 68-1)	ACTUAL
TEMPERATURE (°C)	15-35	24-27
HUMIDITY (%RH)	25-75	50-65
BAROMETRIC PRESSURE (mbar)	860-1060	950-1000
FCC SITE DESCRIPTION	Aug. 10, 1995 /Aug. 25, 1998 File on FCC Engineering Laboratory Federal Communication Commission 7435 Oakland Mills Road Columbia, MD 21046 Reference 31040/SIT1300F2	
NVLAP LAB. CODE	200085-0 United Stated Department of commerce National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program Accreditation on NVLAP effective through Sep. 30,2001 For CISPR 22, FCC Method and AS/NZS 3548 Measurement.	

4. CONDUCTION EMISSION DATA

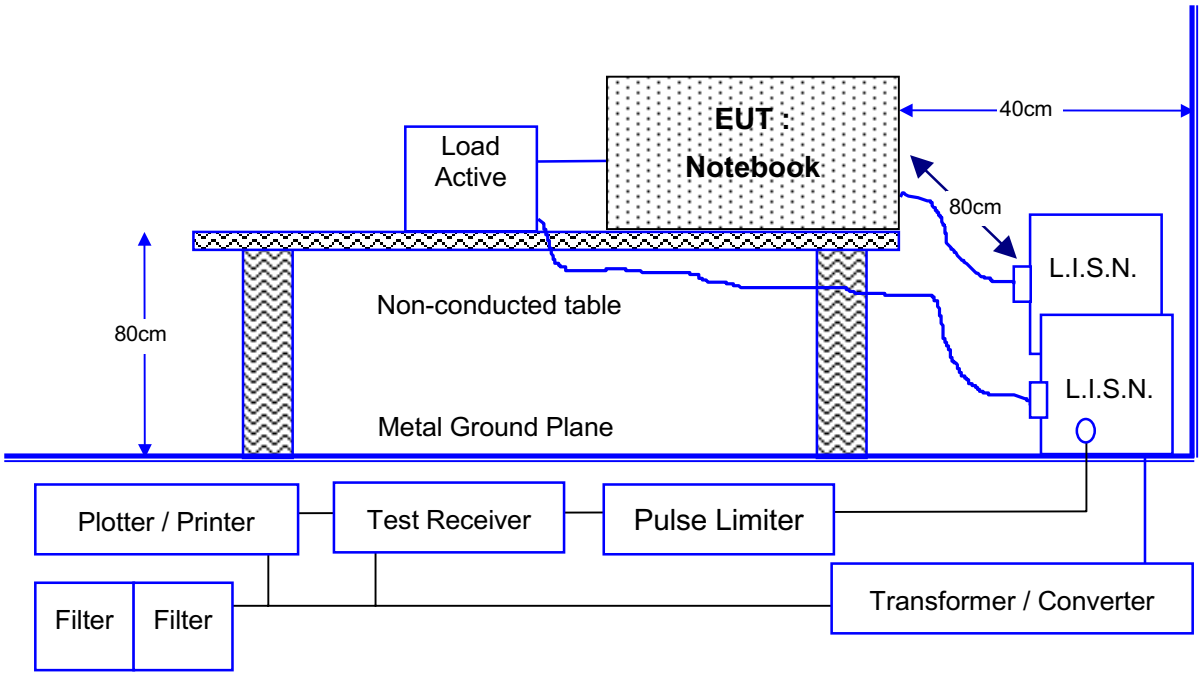
4.1 TEST EQUIPMENTS

The following test equipment are used during the conducted power line tests:

Item	Instrument	Manufacturer	Type / Serial No.	Last Cal. Date
1	Test Receiver	Rohde & Schwarz	ESHS 30 / 828109/010	Jan. 19, 2001
2	L.I.S.N.	Rohde & Schwarz	ESH3-Z5 / 840567/002	Nov. 07, 2000
3	L.I.S.N.	Rolf Heine	NNB-2/16Z / 98091	Jan. 29, 2001
4	Pulse Limiter	Rohde & Schwarz	ESH3-Z2/357.8810.52	Aug. 08, 2001
5	RF CABLE	GesTek	GTK-RF-C05	Aug. 08, 2001
6	50 Ohm Terminator	GesTek	GTK-RF-T01	Nov. 08, 2000
7	Shielded Room	GesTek	GTK-RF-S04	Aug. 08, 2001

Note: All measurement critical items of test instrumentation were within their calibration period of 1 year.

4.2 BLOCK DIAGRAM OF TEST SETUP



Note: This is a reprehensive setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.

4.3 CONDUCTED EMISSION LIMIT

☐FCC Limit

Frequency	Maximum RF Line Voltage			
	Class A		Class B	
MHz	μV	dBμV	μV	dBμV
0.45 to 1.705	1000	60.0	250	48.0
1.705 to 30	3000	69.5	250	48.0

Remarks : 1. RF Line Voltage (dBμV) = 20 log RF Line Voltage (μV).
2. In the Above Table, the tighter limit applies at the band edges.

☒CISPR Limit

Frequency	Maximum RF Line Voltage dB(μV)			
	Class A		Class B	
MHz	QUASI-PEAK	AVERAGE	QUASI-PEAK	AVERAGE
0.15 to 0.50	79	66	66 to 56	56 to 46
0.50 to 5.0	73	60	56	46
5.0 to 30	73	60	60	50

Remarks : In the Above Table, the tighter limit applies at the band edges.

4.4 EUT CONFIGURATION ON MEASUREMENT

The equipments that are listed 4.2 are installed on Conducted Power Line Test to meet the Commission requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 4.2, was placed on a non-conductive table whose total height equal to 80cm. Powered from one L.I.S.N. which signal output to receiver, and the other peripherals was powered from another L.I.S.N. which signal output was terminated by 50Ω.

4.5 CONDUCTED EMISSION DATA

The measurement range of conducted emission, which is from **0.15 MHz to 30 MHz,** was investigated. All readings are quasi-peak and average values with a resolution Bandwidth of 9 KHz. The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range for all the test modes. Then the worst modes were reported the following data pages.

The total uncertainty for this test is as follows:
- Uncertainty in the field strength measured: < ± 2.0 dB

The uncertainty is calculated in accordance with NAMAS document NIS 81, and is given as 2 standard deviations.

4.6 EUT OPERATING CONDITIONS

The EUT exercise program used during conducted testing was designed to exercise the EUT in a manner similar to a typical use. The exercise sequence is listed as below :

1. Setup the EUT and simulators as shown on 4.2.
2. Turn on the power of all equipments.
3. Adjust to appropriate video resolution.
4. Enter the SUN OS, active all devices.
5. Execute SUNVTS testing program.
6. Choose test USB Port, RS232 Port , F.D.D. H.D.D. and DVD-ROM.
7. Start test.
8. P.C. sent “H” pattern to monitor.
9. LAN Port connect to gestek server.
10. Repeat above steps.

4.7 CONDUCTED EMISSIONS MEASUREMENT RESULTS

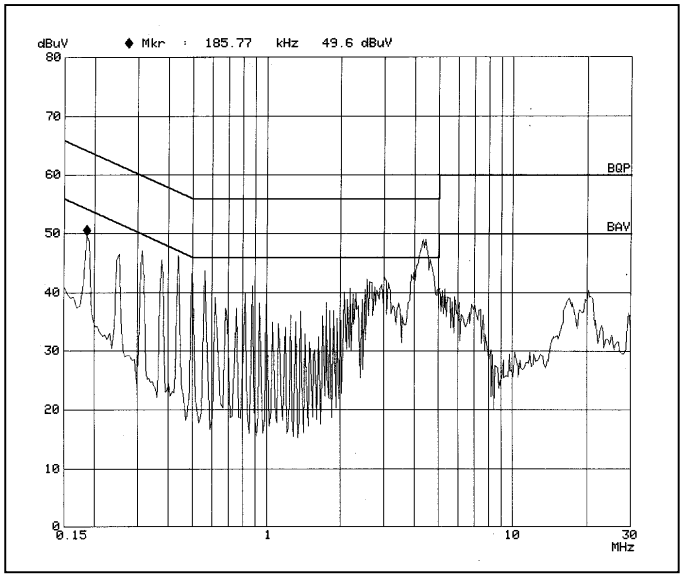
Date of Test	Oct. 18, 2001	Temperature	24 ℃
EUT	Notebook	Humidity	50 %
Test Mode	Mode 1	Display Pattern	H Pattern

No.	FREQUENCY	READING LEVEL dBμV				LIMIT	
	MHz	LINE1 Q.P.	LINE1 AV.	LINE2 Q.P.	LINE2 AV.	Q.P.	AV.
1	0.18826	49.0	47.5	47.0	43.2	64.1	54.1
2	0.31352	46.7	46.0	38.8	37.5	59.8	49.8
3	** 0.43911	46.0	44.9	37.8	35.9	57.0	47.0
4	0.56325	45.2	43.8	38.6	36.4	56.0	46.0
5	3.00937	41.3	36.2	42.8	38.9	56.0	46.0
6	4.45057	46.6	38.5	48.1	40.9	56.0	46.0

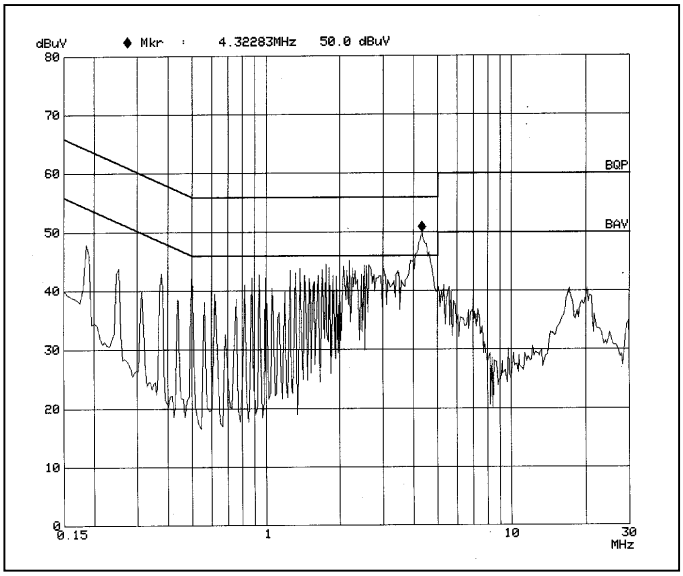
Remarks :

1. All readings are Quasi-peak and Average Values.
2. " * " means that the quasi-peak reading level is lower than the average limits; it is not necessary to measure the average level.
3. " ** " means that this data is the worse case emission level.
4. Final measurement = (Receiver reading) + (Correction factor if available).

Line 1



Line 2



4.8 TEST PHOTOGRAPHS FOR CONDUCTION

Mode 1

5. RADIATION EMISSION DATA

5.1 TEST EQUIPMENT

The following test equipments are used during the radiated emission tests:
Radiated test was performed on: ☐Site #1 ☐Site #2 ☐Site #3 ☒Site #4

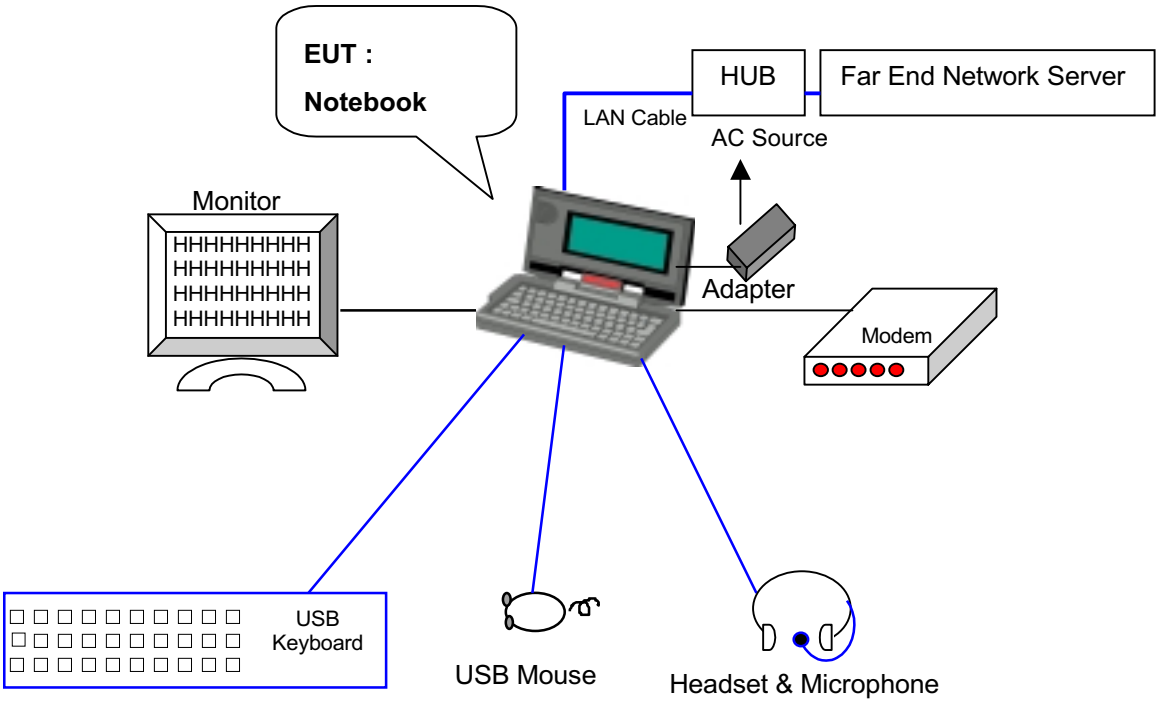
Item	Instrument	Manufacturer	Type / Serial No.	Last Cal.
1	Test Receiver	Rohde & Schwarz	ESCS 30 / 849650/023	Nov. 17, 2000
2	Spectrum Analyzer	ADVANTEST	R3162 / 91700161	N/A
3	Pre-Amplifier	HP	8347A / 3307A01401	N/A
4	Pre Amplifier	HP	8449B / 3008A01264	Jul. 26, 2001
5	BILOG ANTENNA	Chase	CBL6112B/2588	Dec. 15, 2000
6	Horn Antenna	Electro-Metrics	EM-6961 / 103329	Jul. 31, 2001
7	RF Cable	GesTek	GTK-RF-C04	Nov. 28, 2000
8	Open Site	GesTek	GTK-RF-SB2	Nov. 28, 2000
9	Test Program Software	GesTek	GTK-RF-P07	N/A

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

5.2 TEST SETUP

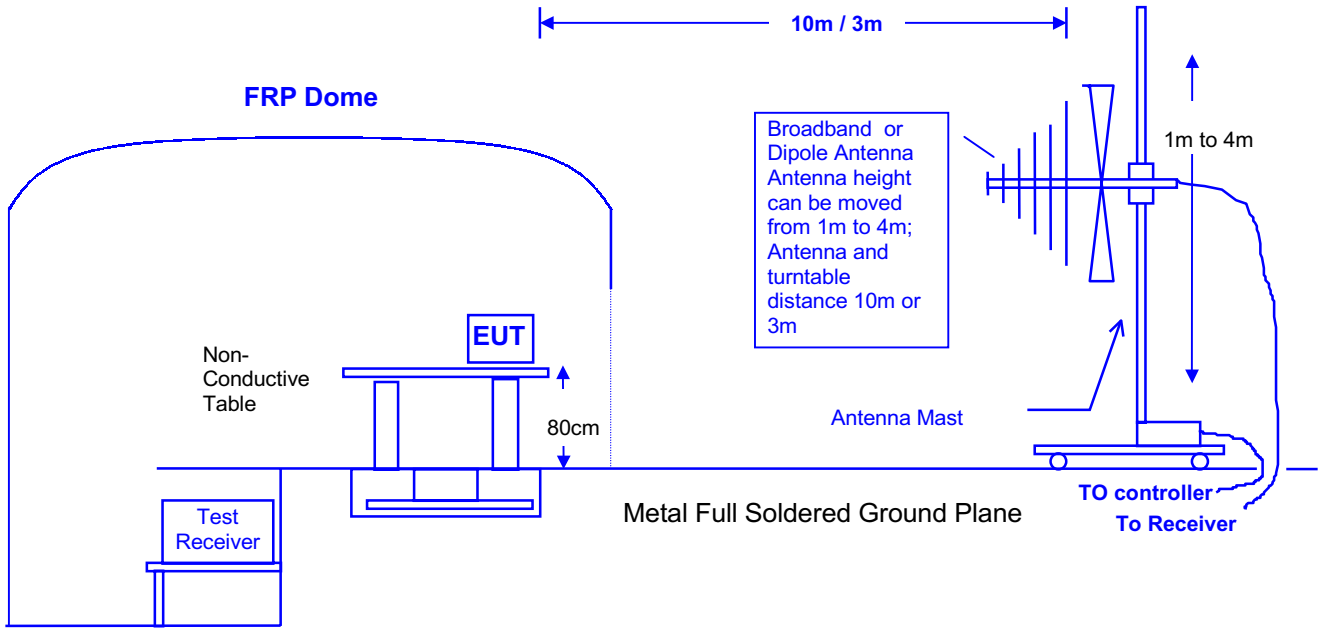
5.2.1 BLOCK DIAGRAM OF CONNECTIONS BETWEEN EUT AND SIMULATORS

Note: This is a reprehensive setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.



5.2.2 OPEN TEST SITE SETUP DIAGRAM

Note: This is a reprehensive setup diagram for Table-top EUT.
For Floor-standing EUT, the table will be removed with all others setup condition remain the same.



5.3 RADIATED EMISSION LIMIT

☒**FCC Class B Limit at 3m**

Frequency	Distance	Field Strength	
MHz	Meter	μV/M	dBμV/M
30 to 88	3	100	40.0
88 to 216	3	150	43.5
216 to 960	3	200	46.0
Above 960	3	500	54.0

Remark :1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note: The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit. **(Refer 47CFR Ch. 1 (10-1-98 Edition §15.35(b))**

☐**FCC Class A Limit at 10m**

Frequency	Distance	Field Strength	
MHz	Meter	μV/M	dBμV/M
30 to 88	10	90	39.0
88 to 216	10	150	43.5
216 to 960	10	210	46.4
Above 960	10	300	49.5

Remark :1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note: The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit. **(Refer 47CFR Ch. 1 (10-1-98 Edition §15.35(b))**

☒**CISPR Class B Limit at 10m**

Frequency	Distance	Field Strength
MHz	Meter	dB(μV/M)
30 to 230	10	30
230 to 1000	10	37

Remark :1. The tighter limit shall apply at the edge between two frequency bands.
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

5.4 EUT CONFIGURATION

The equipment which is listed 5.2.1 are installed on Radiated Emission Test to meet the Commission requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

The device under test, installed in a representative system as described in section 5.2.2, was placed on a non-conductive table whose total height equaled 80 cm. This table can be rotated 360 degree. The measurement antenna was mounted to a non-conductive mast capable of moving the antenna vertically. Antenna height was varied from 1 meter to 4 meters and the system under test was rotated from 0 degree through 360 degrees relative to the antenna position and polarization (Horizontal and Vertical). Also the I/O cable position was investigated to find the maximum emission condition.

5.5 OPERATING CONDITION OF EUT

Same as section 4.6.

5.6 RADIATED EMISSION DATA

The measurement range of radiated emission, which is from **30 MHz to 8 GHz,** was investigated. All readings are quasi-peak values with a resolution Bandwidth of 120 KHz. The initial step in collecting radiated emission data is a spectrum analyzer peak scans of the measurement range for all the test modes and then use test receiver for final measurement. Then the worst modes were reported the following data pages.

The total uncertainty for this test is as follows:
- Uncertainty in the field strength measured (3m antenna distance): < ± 4 dB
- Uncertainty in the field strength measured (10m antenna distance): < ± 4 dB

The uncertainty is calculated in accordance with NAMAS document NIS 81, and is given as 2 standard deviations.

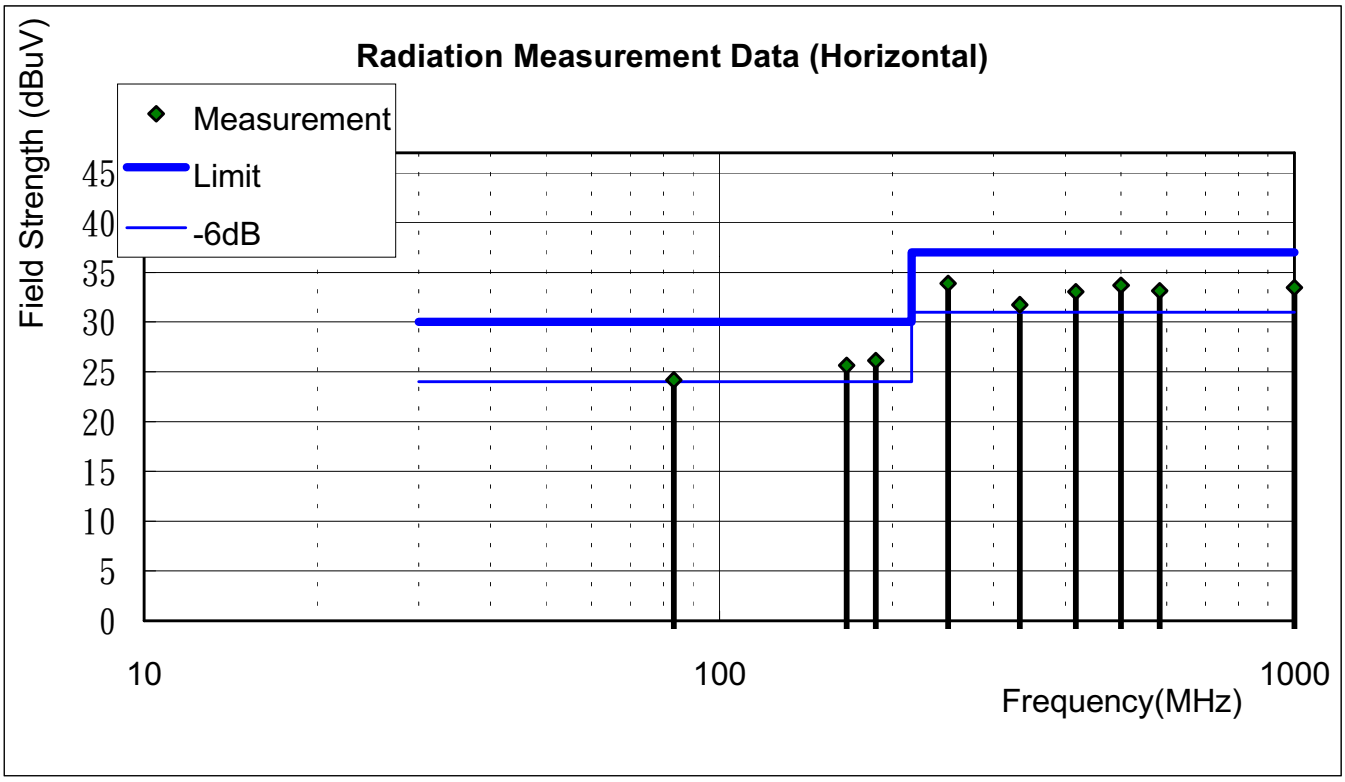
5.7 RADIATED EMISSIONS MEASUREMENT RESULTS

Date of Test	Oct. 24, 2001	**Temperature**	24 deg/C
EUT	Notebook	**Humidity**	50 %RH
Working Cond.	Mode 1	**Display Pattern**	H Pattern
Antenna distance	10m at **Horizontal**	**Frequency Range**	30-1000MHz

No.	Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level [dB(uV)]	Emission Level [dB(uV/m)]	Amp. Factor [dB]	Limit [dB(uV/m)]	Margin [dB]
1	83.305	1.13	7.95	15.10	24.18	0.00	30.00	-5.82
2	166.612	2.04	10.19	13.39	25.62	0.00	30.00	-4.38
3	187.248	2.31	10.02	13.80	26.13	0.00	30.00	-3.87
4	250.014	3.00	12.60	18.30	33.90	0.00	37.00	-3.10
5	333.225	3.69	14.89	13.17	31.75	0.00	37.00	-5.25
6	416.530	4.36	16.83	11.87	33.06	0.00	37.00	-3.94
7	499.838	5.10	17.70	10.90	33.70	0.00	37.00	-3.30
8	583.114	5.44	18.66	9.07	33.17	0.00	37.00	-3.83
9	999.665	7.90	21.40	4.19	33.49	0.00	37.00	-3.51

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Emission Level= Reading + Antenna Factor + Cable loss (Could have ± 0.01 tolerance due to computer automatically round off calculation).
3. Margin Value=Emission level-Limit value.

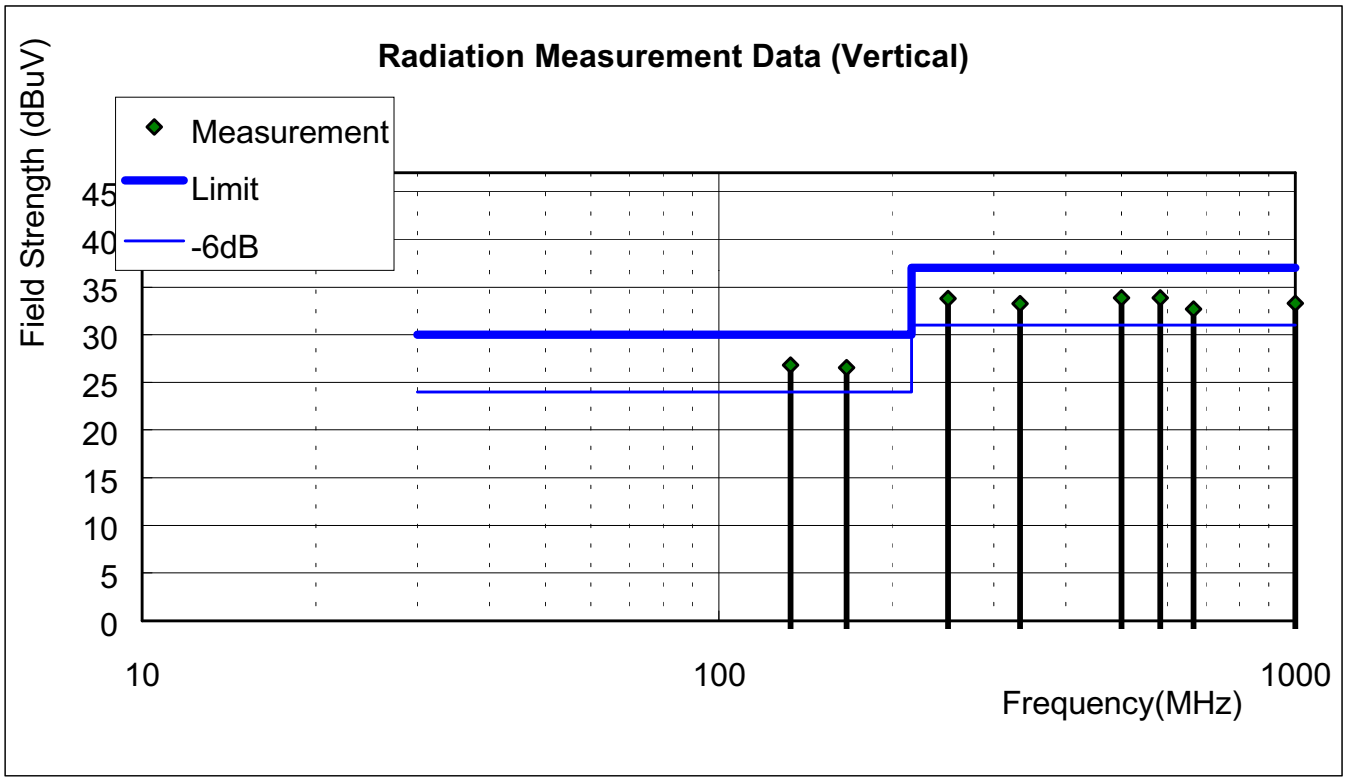


Date of Test	Oct. 24, 2001	**Temperature**	24 deg/C
EUT	Notebook	**Humidity**	50 %RH
Working Cond.	Mode 1	**Display Pattern**	H Pattern
Antenna distance	10m at **Vertical**	**Frequency Range**	30-1000MHz

No.	Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level [dB(uV)]	Emission Level [dB(uV/m)]	Amp. Factor [dB]	Limit [dB(uV/m)]	Margin [dB]
1	133.304	1.86	12.32	12.61	26.79	0.00	30.00	-3.21
2	166.612	2.04	10.19	14.30	26.53	0.00	30.00	-3.47
3	250.016	3.00	12.60	18.20	33.80	0.00	37.00	-3.20
4	333.225	3.69	14.89	14.67	33.25	0.00	37.00	-3.75
5	499.838	5.10	17.70	11.06	33.86	0.00	37.00	-3.14
6	583.144	5.44	18.66	9.78	33.88	0.00	37.00	-3.12
7	666.452	5.91	19.10	7.68	32.69	0.00	37.00	-4.31
8	999.665	7.90	21.40	3.98	33.28	0.00	37.00	-3.72

Remarks:

1. All Readings below 1GHz are Quasi-Peak.
2. Emission Level= Reading + Antenna Factor + Cable loss (Could have ± 0.01 tolerance due to computer automatically round off calculation).
3. Margin Value=Emission level-Limit value.

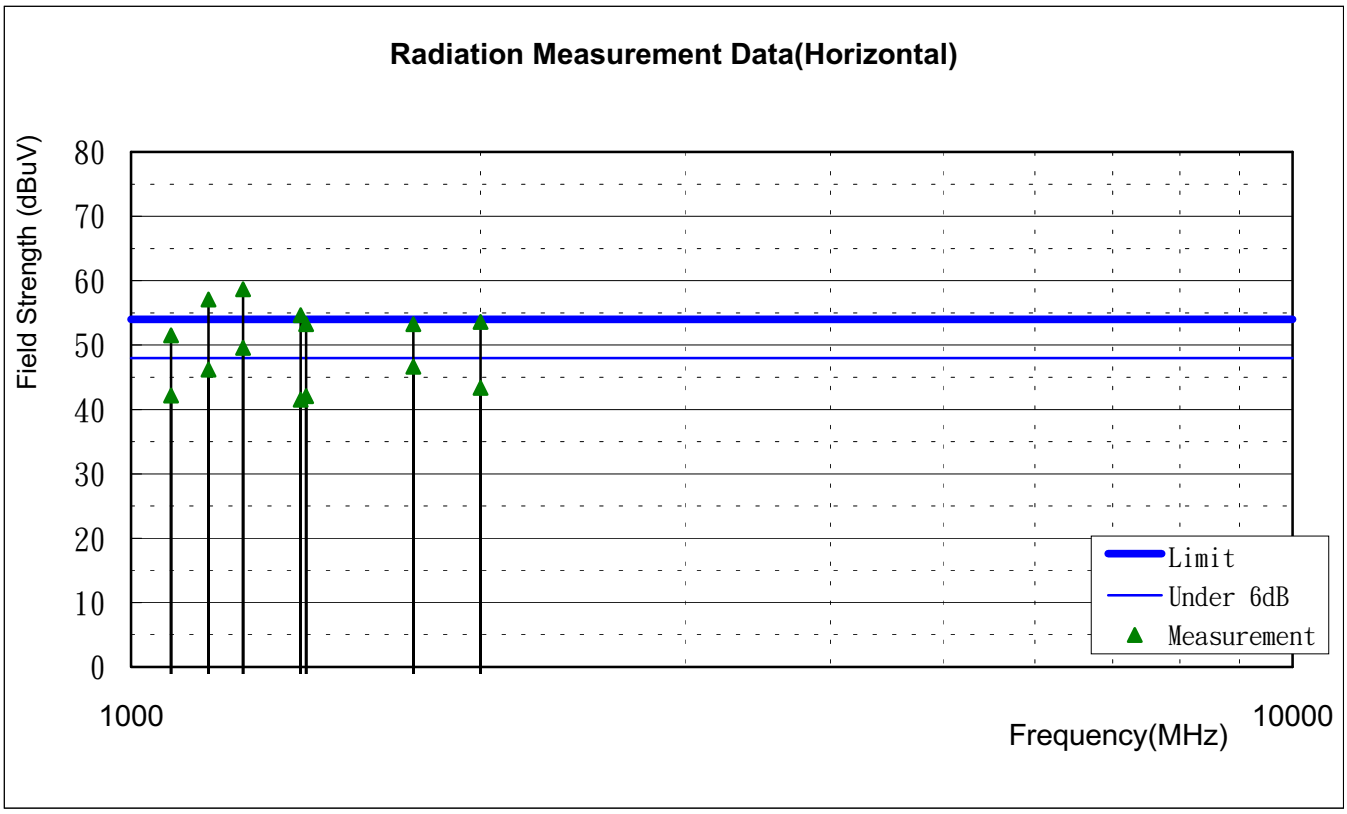


Date of Test	Oct. 31, 2001	**Temperature**	24 deg/C
EUT	Notebook	**Humidity**	50 %RH
Working Cond.	Mode 1	**Display Pattern**	H Pattern
Antenna distance	3m at **Horizontal**	**Frequency Range**	1GHz ~ 8GHz

No.	Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level [dB(uV)]	Emission Level [dB(uV/m)]	Emission Level (uV/m)	Amp. Factor [dB]	Limit [dB(uV/m)]	Limit (uV/m)
1	1082.660	4.12	24.94	52.48	51.53	377.14	-2.47	54.00	500 (PK)
2	1082.660	4.12	24.94	43.10	42.15	128.09	-11.85	54.00	500 (AV)
3	1166.010	4.23	25.07	57.78	57.07	713.67	3.07	54.00	500 (PK)
4	1166.010	4.23	25.07	46.92	46.21	204.41	-7.79	54.00	500 (AV)
5	1248.700	4.33	25.18	59.18	58.69	860.00	4.69	54.00	500 (PK)
6	1248.700	4.33	25.18	50.05	49.56	300.61	-4.44	54.00	500 (AV)
7	1399.800	4.50	25.38	54.77	54.65	540.13	0.65	54.00	500 (PK)
8	1399.800	4.50	25.38	41.62	41.50	118.85	-12.50	54.00	500 (AV)
9	1415.300	4.51	25.40	53.33	53.24	459.20	-0.76	54.00	500 (PK)
10	1415.300	4.51	25.40	42.13	42.04	126.47	-11.96	54.00	500 (AV)
11	1749.686	5.19	26.84	51.22	53.25	459.73	-0.75	54.00	500 (PK)
12	1749.686	5.19	26.84	44.60	46.63	214.54	-7.37	54.00	500 (AV)
13	1999.850	5.70	28.00	49.88	53.58	477.53	-0.42	54.00	500 (PK)
14	1999.850	5.70	28.00	39.65	43.35	377.14	-10.65	54.00	500 (AV)

Remarks:

1. All Readings are Peak and Average value.
2. Emission Level = Reading Level + Antenna Factor + Cable loss–Amp Factor (Could have ± 0.01 tolerance due to computer automatically round off calculation).
3. The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.

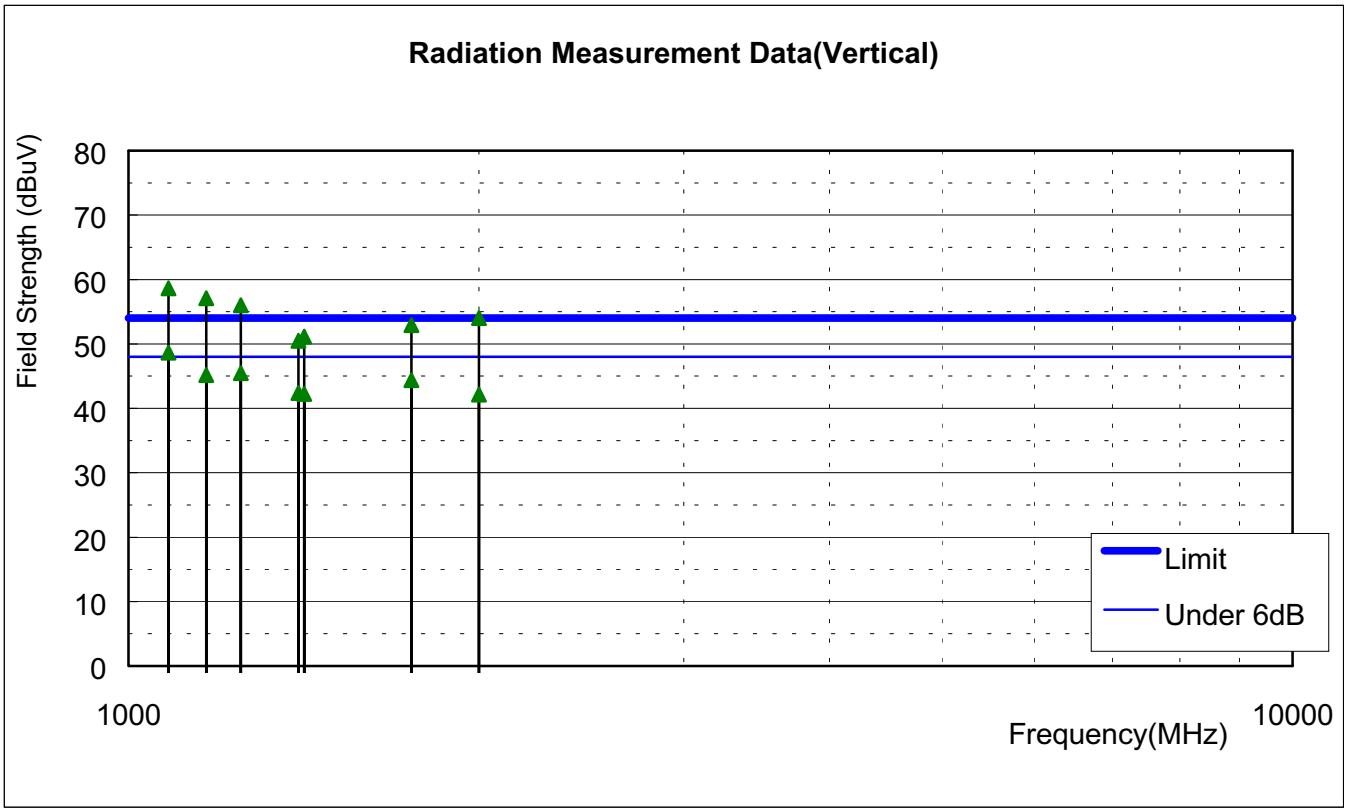


Date of Test	Oct. 31, 2001	**Temperature**	24 deg/C
EUT	Notebook	**Humidity**	50 %RH
Working Cond.	Mode 1	**Display Pattern**	H Pattern
Antenna distance	3m at **Vertical**	**Frequency Range**	1GHz ~ 8GHz

No.	Frequency [MHz]	Cable Loss [dB]	Antenna Factor [dB/m]	Reading Level [dB(uV)]	Emission Level [dB(uV/m)]	Emission Level (uV/m)	Amp. Factor [dB]	Limit [dB(uV/m)]	Limit (uV/m)
1	1082.660	4.12	24.94	59.59	58.64	855.07	4.64	54.00	500 (PK)
2	1082.660	4.12	24.94	49.59	48.64	270.40	-5.36	54.00	500 (AV)
3	1166.000	4.23	25.07	57.78	57.07	713.67	3.07	54.00	500 (PK)
4	1166.000	4.23	25.07	45.87	45.16	181.13	-8.84	54.00	500 (AV)
5	1248.698	4.33	25.18	56.47	55.98	629.51	1.98	54.00	500 (PK)
6	1248.698	4.33	25.18	45.98	45.49	188.15	-8.51	54.00	500 (AV)
7	1399.800	4.50	25.38	50.62	50.50	334.97	-3.50	54.00	500 (PK)
8	1399.800	4.50	25.38	42.50	42.38	131.52	-11.62	54.00	500 (AV)
9	1415.268	4.51	25.40	42.35	42.26	129.72	-11.74	54.00	500 (AV)
10	1415.268	4.51	25.40	51.24	51.15	360.99	-2.85	54.00	500 (PK)
11	1749.700	5.19	26.84	50.88	52.91	442.08	-1.09	54.00	500 (PK)
12	1749.700	5.19	26.84	42.35	44.38	165.58	-9.62	54.00	500 (AV)
13	1999.800	5.70	28.00	50.32	54.02	502.34	0.02	54.00	500 (PK)
14	1999.800	5.70	28.00	38.42	42.12	127.64	-11.88	54.00	500 (AV)

Remarks:

1. All Readings are Peak and Average value.
2. Emission Level = Reading Level + Antenna Factor + Cable loss–Amp Factor (Could have ± 0.01 tolerance due to computer automatically round off calculation).
3. The frequencies above 1000MHz, as measured using instrumentation with a peak detector function was corresponding to 20dB above the maximum permitted average limit.



5.8 TEST PHOTOGRAPHS FOR RADIATION

Mode 1

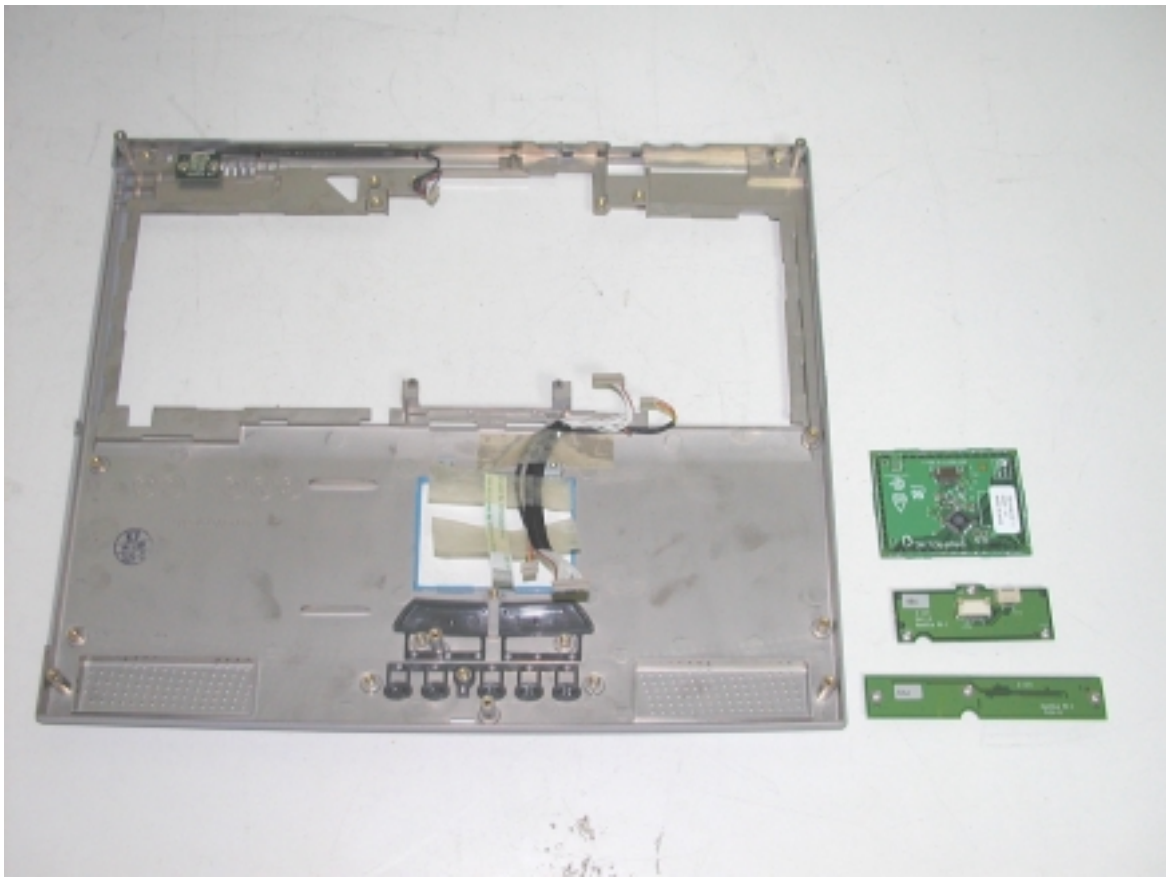
6. PHOTOGRAPHS FOR PRODUCT

1. Front View Of Notebook (EUT)
2. Back View Of Notebook (EUT)

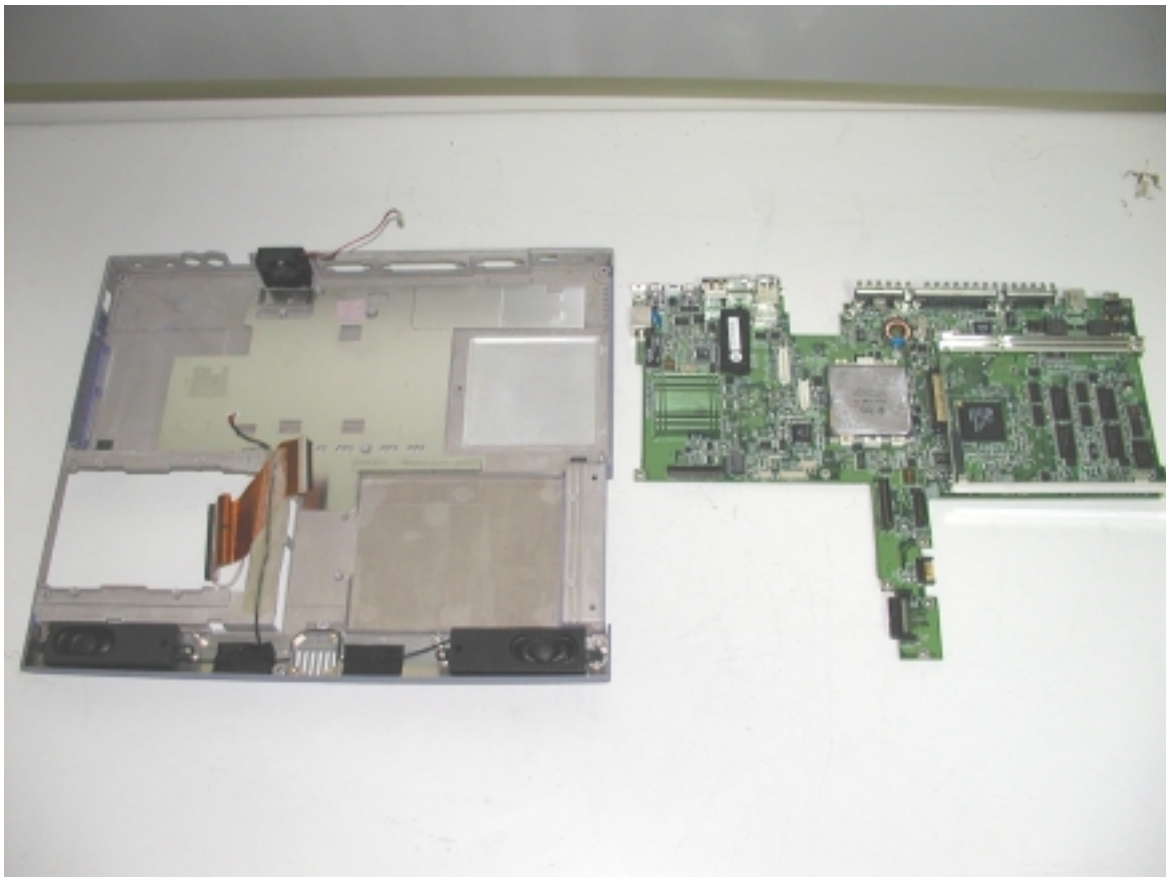
3. Inner View Of Notebook (EUT)
4. Inner View Of Notebook (EUT)

5. Inner View Of Notebook (EUT)
6. Inner View Of Notebook (EUT)

7. Inner View Of Notebook (EUT)
8. Inner View Of Notebook (EUT)

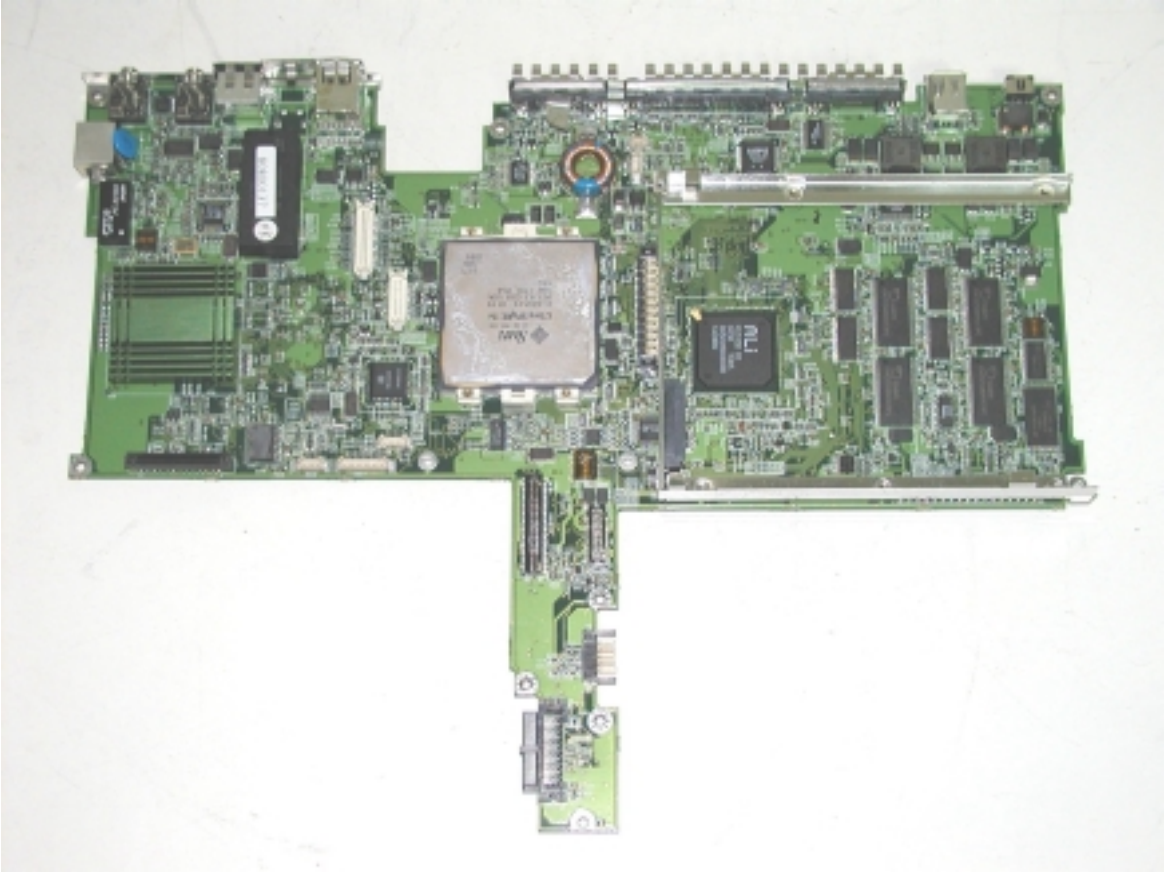


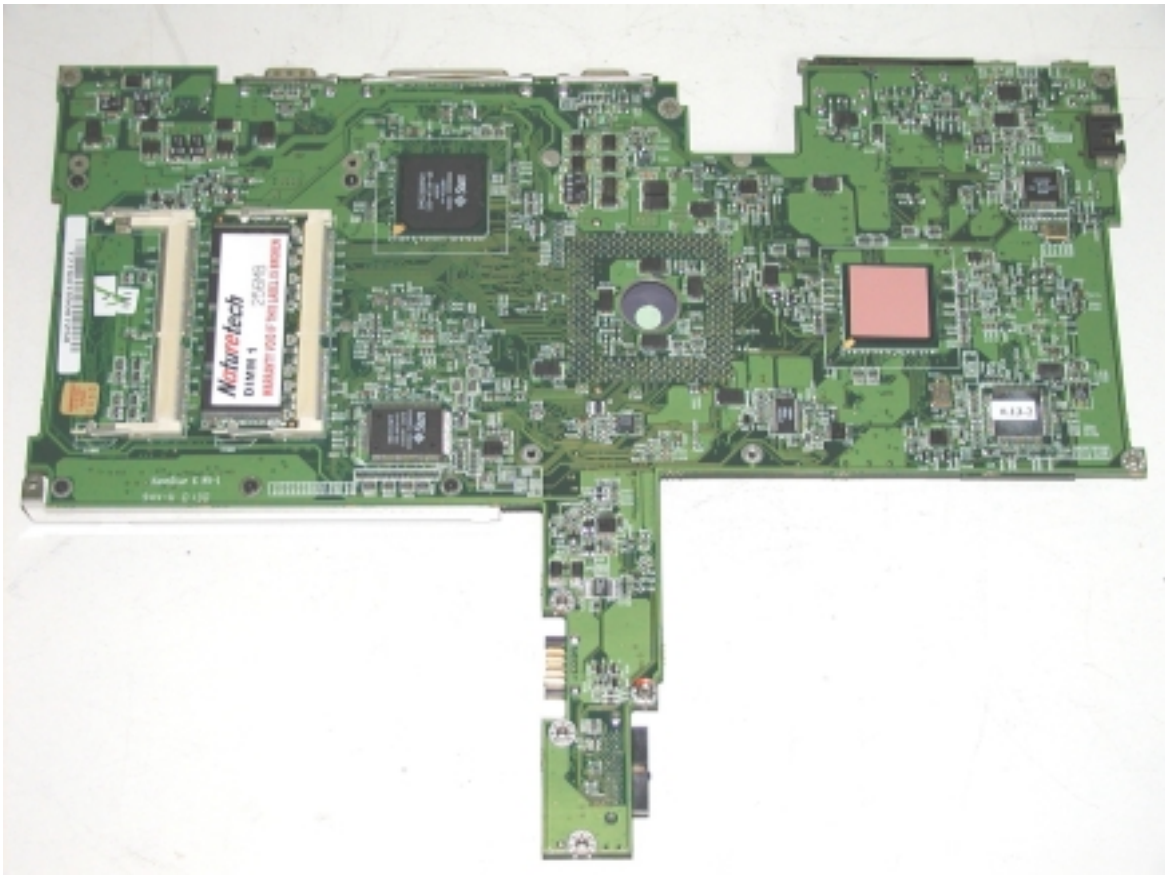
9. Inner View Of Notebook (EUT)
10. Inner View Of Notebook (EUT)



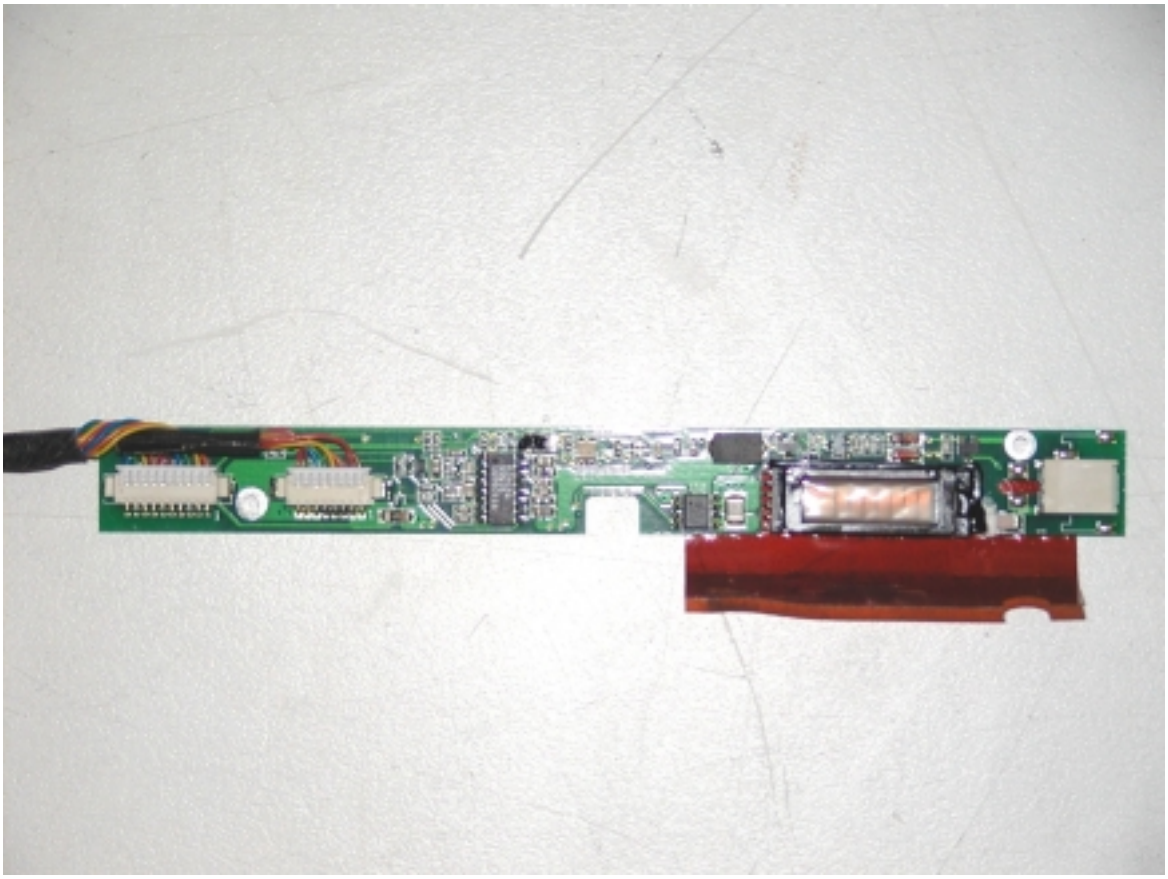
11. Component Side Of SDRAM & CPU
12. Solder Side Of SDRAM & CPU

13. Component Side Of Mother Board
14. Solder Side Of Mother Board

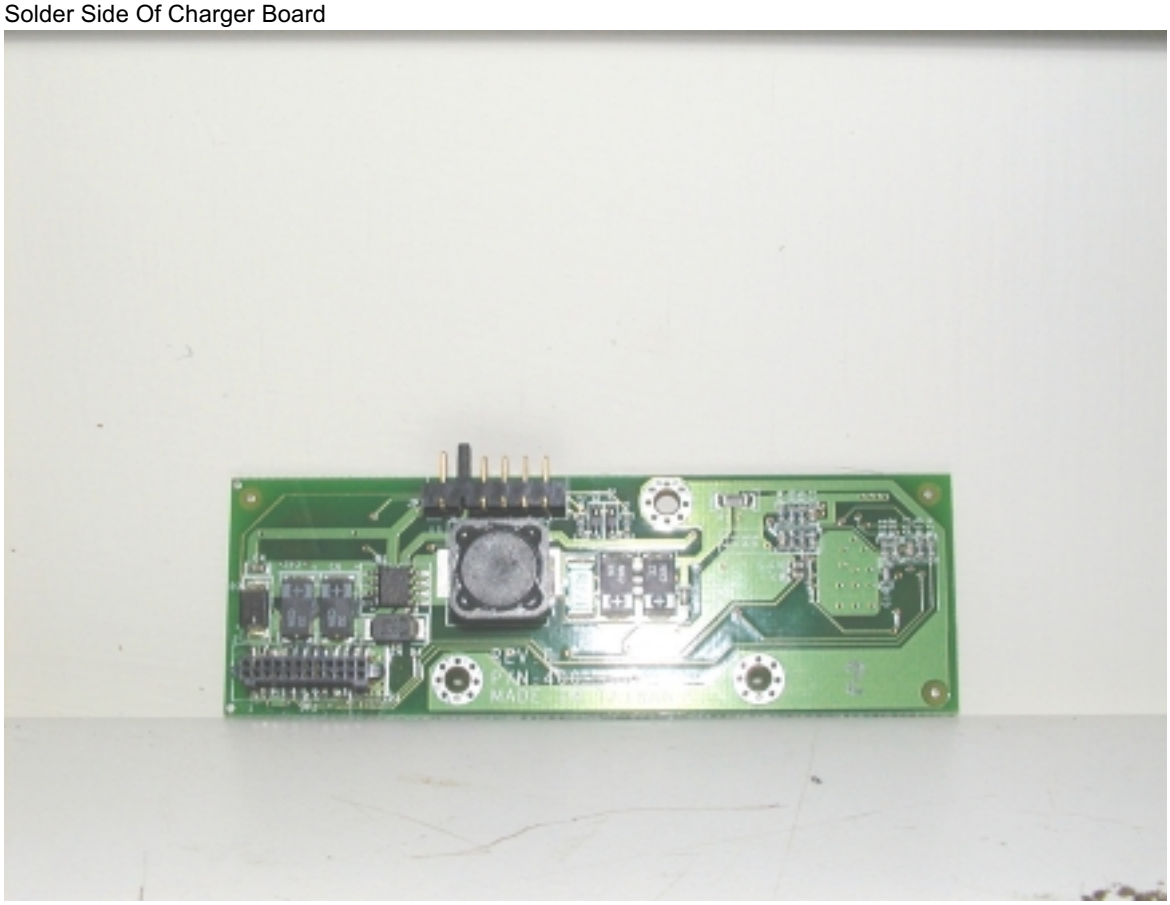


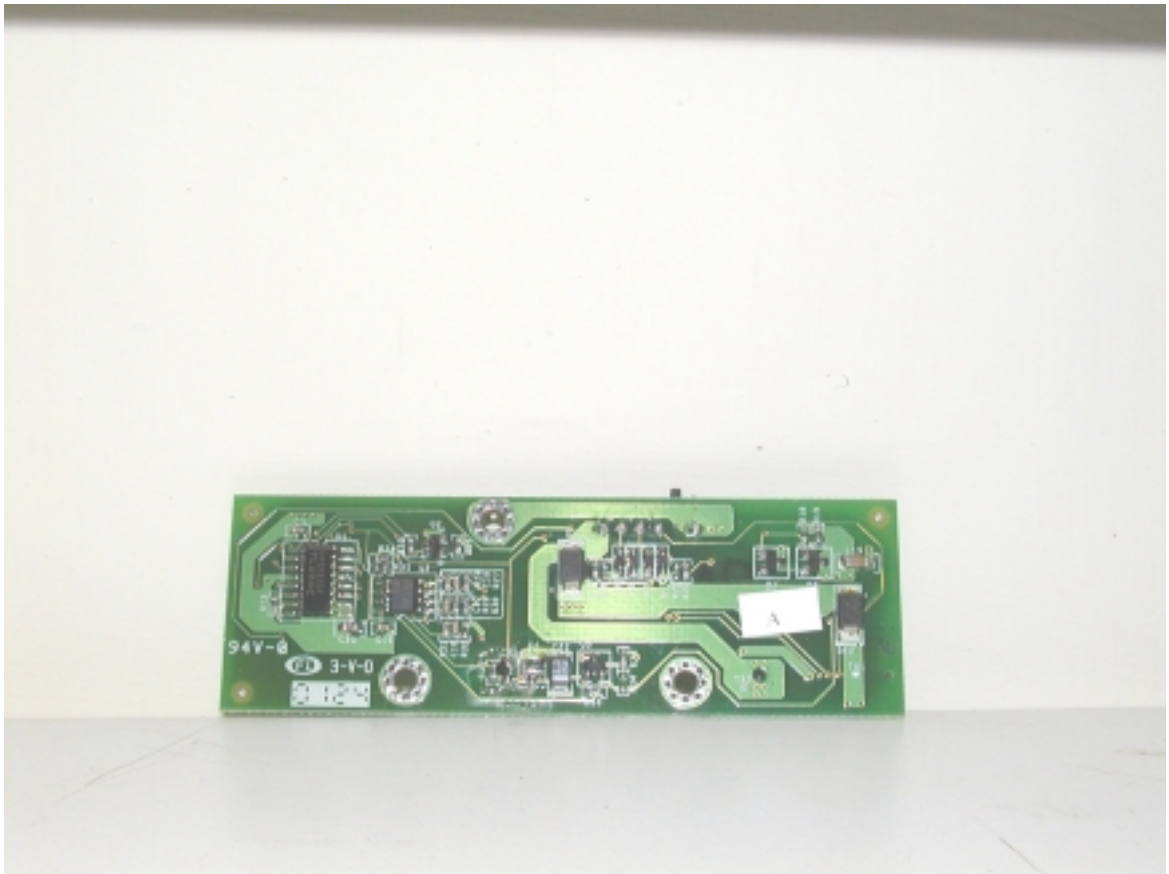


15. Component Side Of Inverter Board
16. Solder Side Of Inverter Board

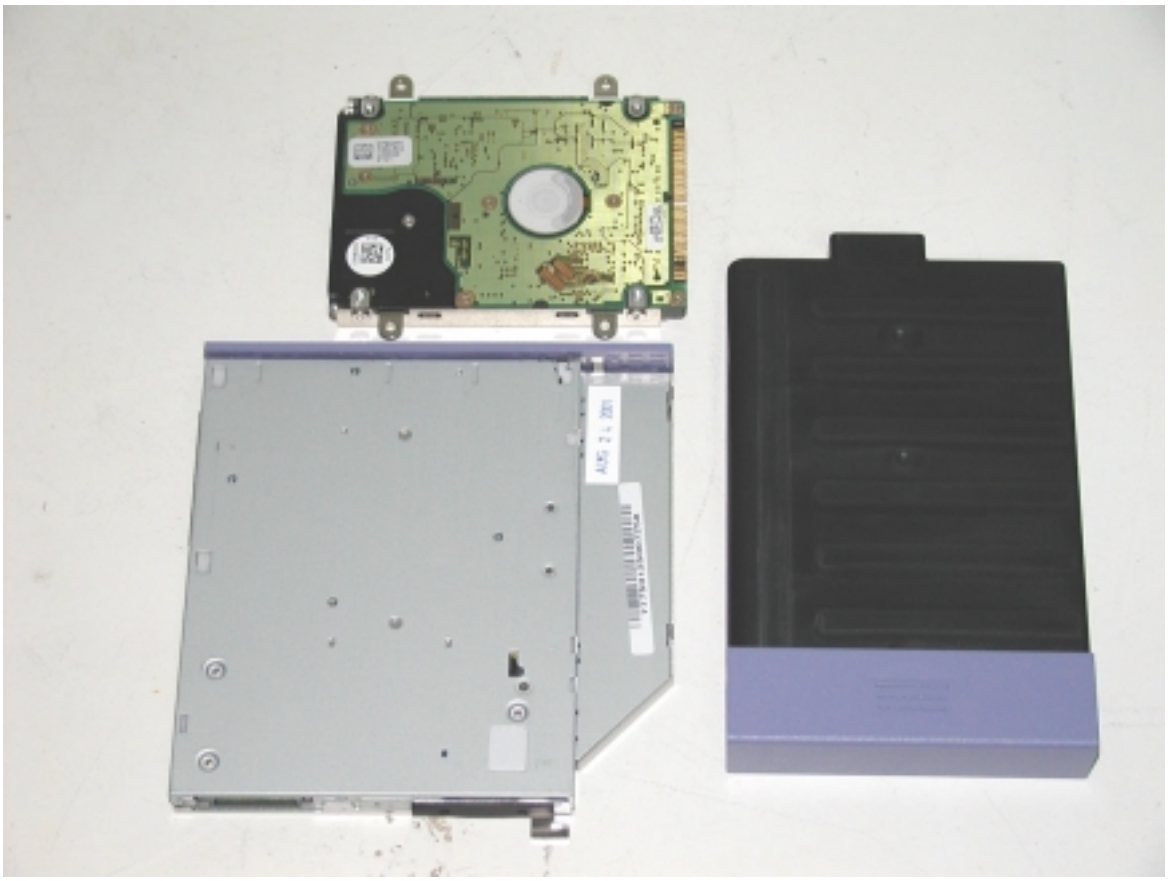


17. Component Side Of Charger Board
18. Solder Side Of Charger Board

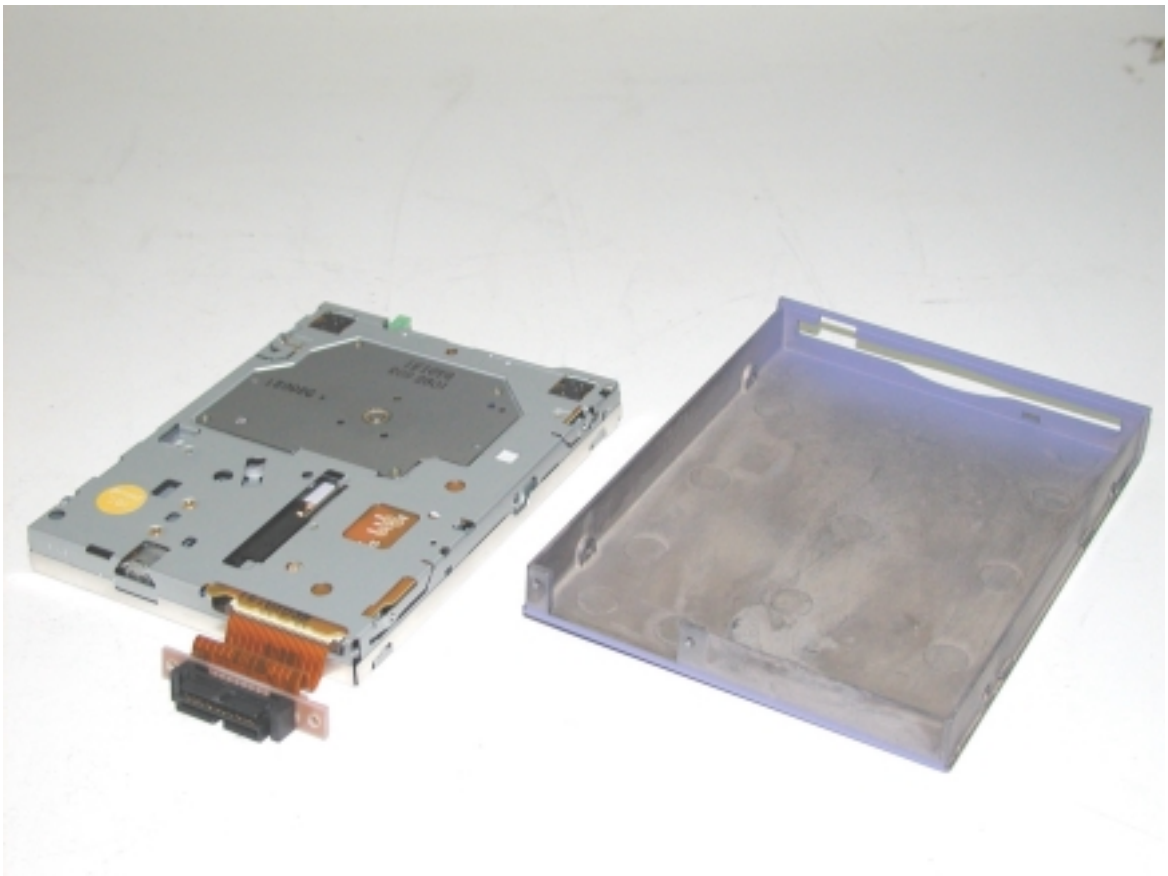




19. Front View Of H.D.D. & DVD-ROM & Battery
20. Back View Of H.D.D. & DVD-ROM & Battery



21. Front View Of F.D.D.
22. Back View Of F.D.D.



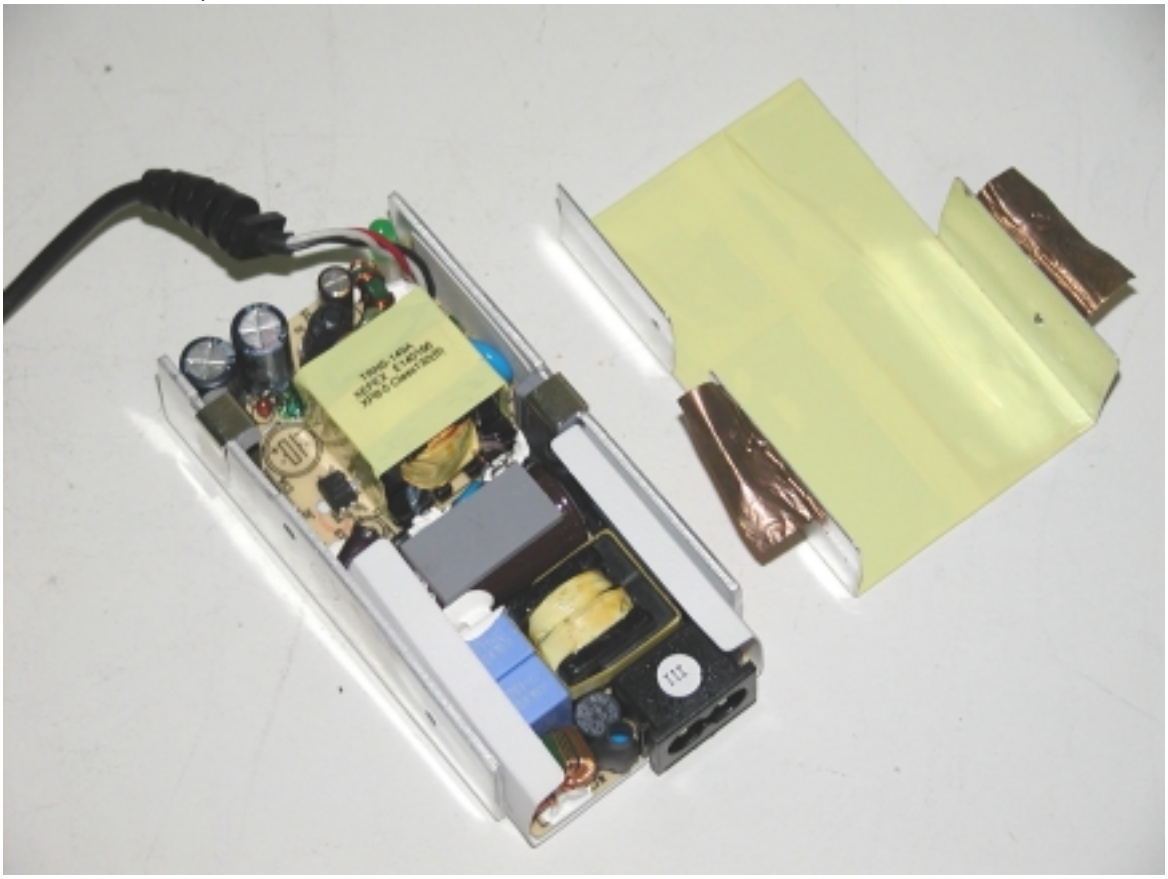
23. Inner View Of LCD Panel
24. Inner View Of LCD Panel

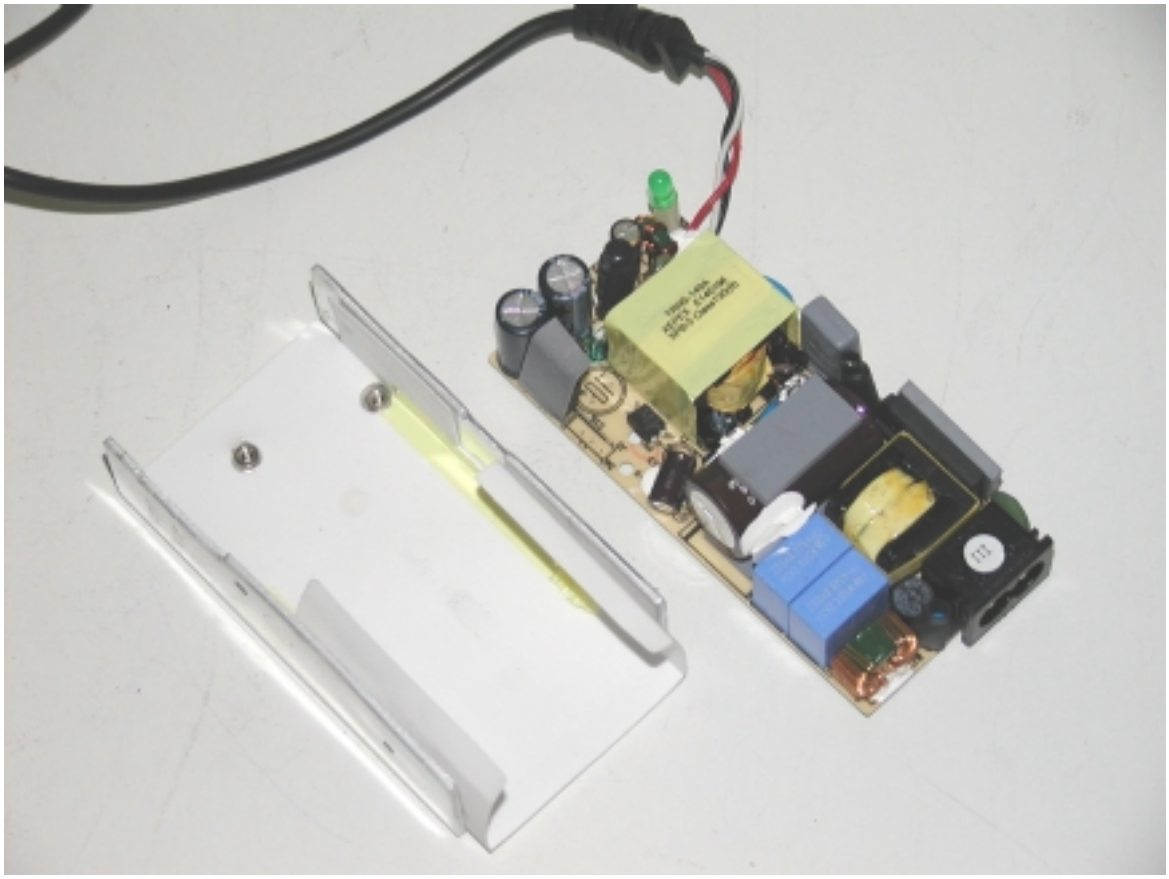
25. Inner View Of LCD Panel
26. Inner View Of LCD Panel

27. Front View Of Adapter
28. Back View Of Adapter

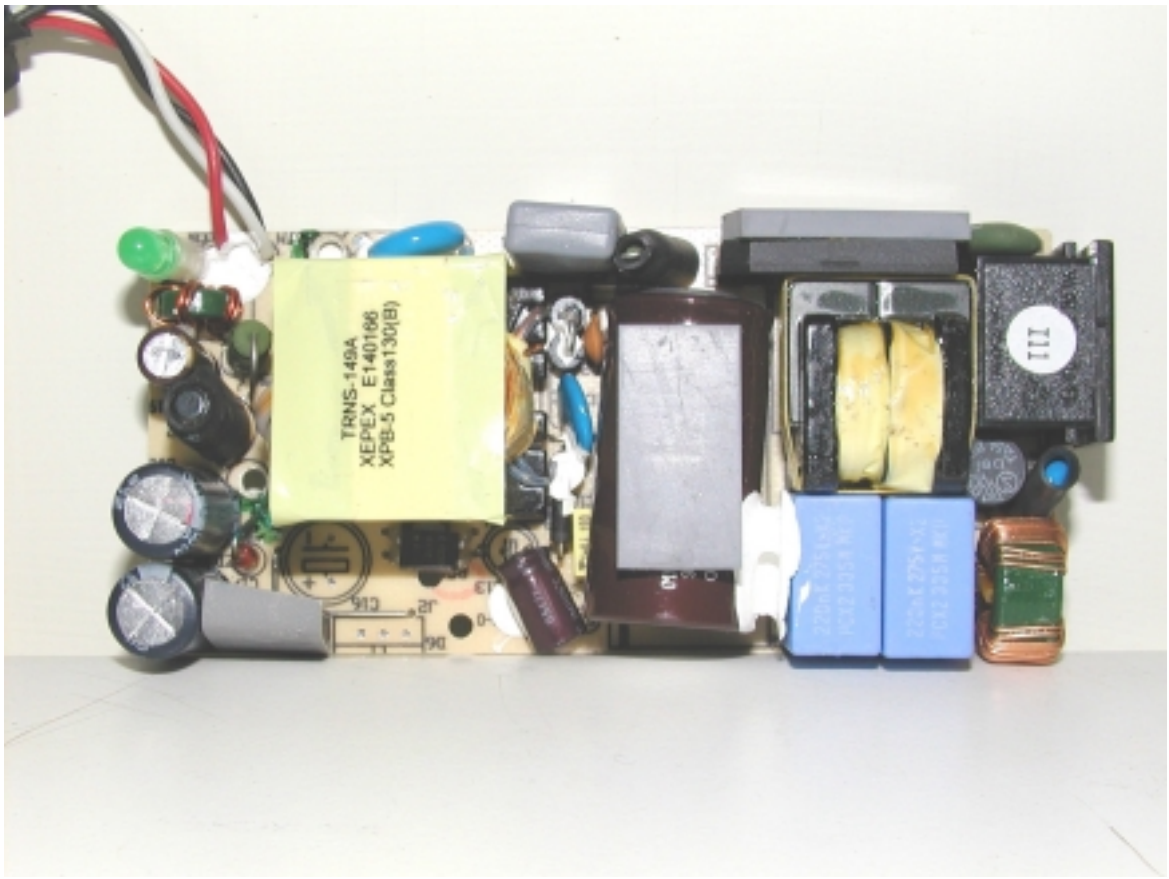
29. Inner View Of Adapter
30. Inner View Of Adapter

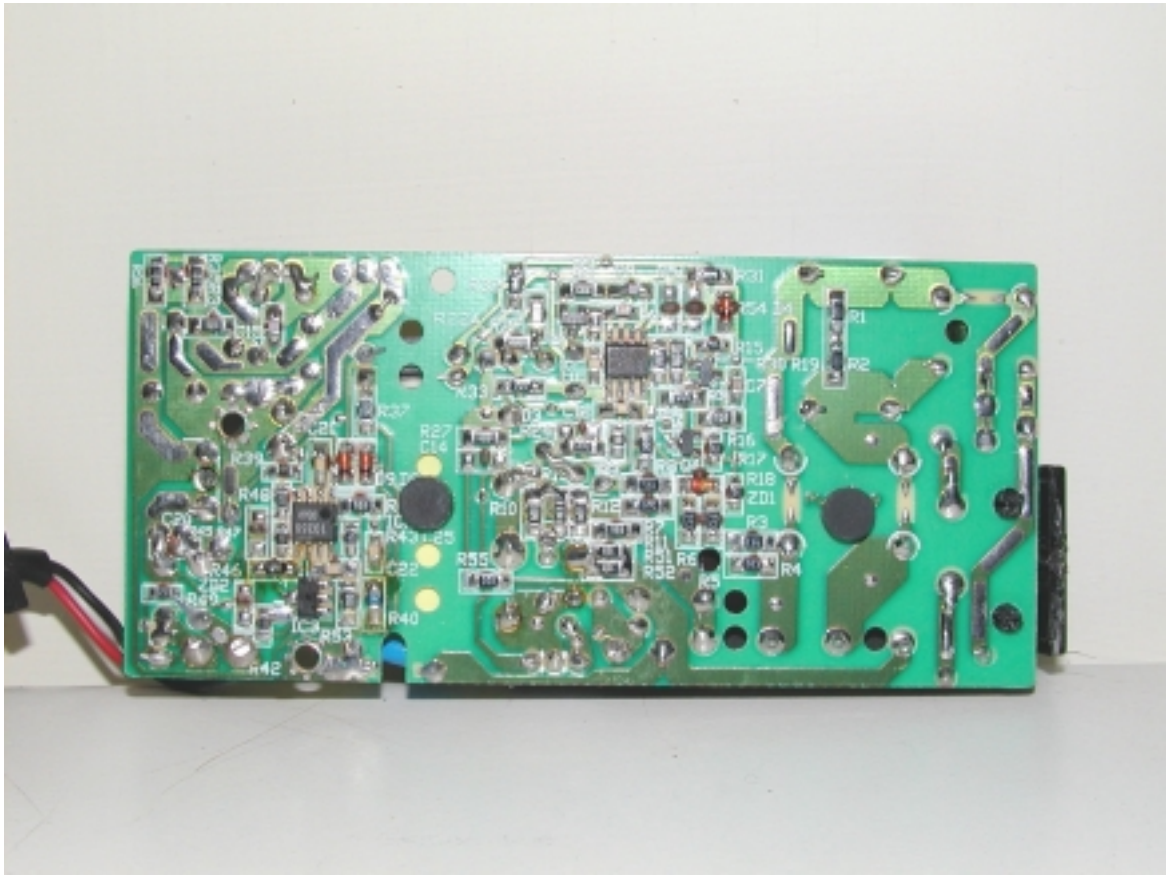
31. Inner View Of Adapter
32. Inner View Of Adapter





33. Component Side Of Adapter
34. Solder Side Of Adapter





7. EMI REDUCTION METHOD DURING COMPLIANCE TESTING

A. LAN Port:
   1. FB18 change to BLM31B601S
   2. CN12 pin #1, 2, 3, 6 connect to BLM21B221S
B. PLL
   1. R219 // 22p cap.
   2. R238 // 22p cap.
   3. R242 // 22p cap.
   4. R244 // 22p cap.
C. Audio
   1. FB59 change to BLM21B601S
   2. FB57, 65 change to BLM21B601S
D. Serial port
   1. FB64 change to BLM31B601S
E. USB Port
   1. L1, L2, L3, L4 change to BLM21B221SB
   2. FB12 change to BLM31B601S
F. CPU clk gen
   1. U35 pin #23, 24 added BLM11B220SB
   2. R229, C178 grounding point change to GND_CLK
   3. FB42 change to BLM31B601S
G. CRT Port
   1. FB 1, 2, 3, 8, 9 change to BLM21B221S
   2. FB66 change to BLM31B601S

Appendix A

Circuit (Block) Diagram

(Shall be added by Applicant)

Appendix B

User Manual

(Shall be added by Applicant)