



EMC

TEST REPORT

REPORT NO. : CE89102704
MODEL NO. : PCM-3664
DATE OF TEST : Oct. 30 ~ Nov. 2, 2000
DATE OF RECEIPT : Oct. 27, 2000

PREPARED FOR : ADVANTECH CO., LTD.

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PREPARED BY: ADVANCE DATA TECHNOLOGY CORPORATION



Accredited Laboratory

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TABLE OF CONTENTS

1. CERTIFICATION	3
2. GENERAL INFORMATION.....	4
2.1 GENERAL DESCRIPTION OF EUT	4
2.2 GENERAL DESCRIPTION OF APPLIED STANDARD	4
2.3 DESCRIPTION OF SUPPORT UNITS	5
2.4 TEST SETUP	6
3. TEST INSTRUMENTS	7
3.1 TEST INSTRUMENTS (EMISSION)	7
3.2 TEST INSTRUMENTS (IMMUNITY).....	8
3.3 LIMITS OF CONDUCTED AND RADIATED EMISSION.....	9
4. TEST RESULTS (EMISSION).....	9
4.1 RADIO DISTURBANCE	9
4.2 EUT OPERATION CONDITION.....	10
4.3 TEST DATA OF CONDUCTED EMISSION	11
4.4 TEST DATA OF RADIATED EMISSION	13
5. TEST RESULTS (IMMUNITY)	15
5.1 GENERAL DESCRIPTION	15
5.2 PERFORMANCE CRITERIA DESCRIPTION.....	16
5.3 EUT OPERATION CONDITION.....	16
5.4 TEST RESULT OF ELECTROSTATIC DISCHARGE (ESD)	17
5.5 TEST RESULT OF RADIATED ELECTROMAGNETIC FIELDS (RS).....	18
5.6 TEST RESULT OF ELECTRICAL FAST TRANSIENT (EFT)	19
5.7 TEST RESULT OF CONDUCTED RADIO FREQUENCY DISTURBANCES (CS) 20	
5.8 TEST RESULT OF POWER FREQUENCY MAGNETIC FIELD.....	21
5.8.1 TEST RESULT OF RADIO-FREQUENCY ELECTROMAGNETIC FIELD, PULSE MODULATED.....	22
6. PHOTOGRAPHS OF THE TEST CONFIGURATION.....	23
7. APPENDIX - INFORMATION OF THE TESTING LABORATORY.....	30



1. CERTIFICATION

Issue date: Nov. 7, 2000

Product : PC/104 10 BaseT Ethernet Module
Trade Name : ADVANTECH
Model No. : PCM-3664
Applicant : ADVANTECH CO., LTD.
Standard : EN 55022: 1998, Class B

EN 50082-2: 1995

EN 61000-4-2: 1995

EN 61000-4-3: 1996

EN 61000-4-4: 1995

EN 61000-4-6: 1996

EN 61000-4-8: 1993

ENV 50204: 1995

We hereby certify that one sample of the designation has been tested in our facility Oct. 30 to Nov. 2, 2000. The test record, data evaluation and Equipment Under Test (EUT) configurations represent herein are true and accurate representation of the measurements of the sample's EMC characteristics under the conditions herein specified.

TESTED BY : _____ , DATE: _____
(Emission) (Arthur Lin)

TESTED BY : _____ , DATE: _____
(Immunity) (Joyce Chen)

CHECKED BY : _____ , DATE: _____
(Vickie Yu)

APPROVED BY : _____ , DATE: _____
(Mike Su)

ADVANCE DATA TECHNOLOGY CORPORATION



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2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product	:	PC/104 10 BaseT Ethernet Module
Model No.	:	PCM-3664
Power Supply Type	:	DC (from PC)
Power Cord	:	NA

Note: The EUT is a PC/104 10 BaseT Ethernet Module connector on CPU card. It offers two types of connectors, RJ45 & BNC.

Both the types of connector were pretest, and the highest emission was found with type of RJ45 connector, therefore this mode evaluated was in final test and recorded in this report.

For more detailed features description, please refer to manufacturer's specification and User's Manual.

2.2 GENERAL DESCRIPTION OF APPLIED STANDARD

According to the manufacturer's request, the EUT was tested with the requirements of the following standards:

EN 55022: 1998, Class B

EN 50082-2: 1995

EN 61000-4-2: 1995

EN 61000-4-3: 1996

EN 61000-4-4: 1995

EN 61000-4-6: 1996

EN 61000-4-8: 1993

ENV 50204: 1995

All tests are performed and recorded as per above standards.



2.3 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 are used to form representative test configuration during the tests.

EMISSION TEST

No.	Product	Brand	Model No.	Serial No.	FCC ID
1.	PERSONAL COMPUTER	NTI	PI I-233	P201094	FCC DoC
2.	21" COLOR MONITOR	HP	D2846A	JP90512129	DOC
3.	PRINTER	HP	2225C+	3123S97230	DSI6XU2225
4.	MODEM	ACEEX	1414	980020528	IFAXDM1414
5.	PS/2 KEYBOARD	FORWARD	FDA-104GA	FDKB8110111	F4ZDA-104G
6.	MOUSE	LOGITECH	M-S43	LZE00703197	DZL211106
7.	PERSONAL COMPUTER	IBM	2156-D1N	BNA349G	FCC DoC APPROVED
8.	MONITOR	ACER	7134T	M500233564	JVP7134T
9.	PS/2 KEYBOARD	FORWARD	FDA-104GA	FDKB8110116	F4ZDA-104G
10.	MOUSE	LOGITECH	M-S43	LZE00702998	DZL211106
11.	Network adapter	INTEL	GD82559	009027A598FB	EJMNPDALB ANY

No.	Signal cable description
1.	NA
2.	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core.
3.	1.2m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core.
4.	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
5.	1.5 m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
6.	1.5 m foil shielded wire, terminated with PS2 connector via drain wire, w/o core.
7.	NA
8.	1.5 m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
9.	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core.
10.	1.5 m foil shielded wire, terminated with PS2 connector via drain wire, w/o core.
11.	NA

Note: 1.The EUT was installed in support unit 1.

2.All power cords of the above support units are non shielded (1.8m).

3. The EUT acted as SERVER PC and communicated with support units 7-11 which acted as WORKSTATION and partners of communication system via a STP cable (10m).



IMMUNITY TEST

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	Personal Computer	NTI	PI I-233	P201094	FCC DoC
2	COLOR MONITOR	ACER	7254e	9171602008	JVP7254E
3	PRINTER	HP	C2145A	SG5N1601K	B94C2145X
4	MODEM	GVC	F-1128V1R6	96-191-113003	DK4F1128VR6
5	PS/2 KEYBOARD	HP	C3758A	C3758-60223	CIGE03633
6	MOUSE	LOGITECH	M-S43	LZE00703276	DZL211106
7	Personal Computer	NTI	PI I-233	P201096	FCC DoC
8	MONITOR	ADI	937G	649015T00102 093A	BR8937G
9	PS/2 KEYBOARD	HP	C3758A	C3758-60223	CIGE03633
10	MOUSE	LOGITECH	M-S43	LZE00703276	DZL211106
11	Network adapter	INTEL	GD82559	009027A59648	EJMNPDALBA NY

No.	Signal cable description
1	NA
2	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core.
3	1.2m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core.
4	1.2 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core.
5	1.5 m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
6	1.8 m foil shielded wire, terminated with PS2 connector via drain wire, w/o core.
7	NA
8	1.8 m braid shielded wire, terminated with VGA connector via metallic frame, w/o core.
9	1.5 m foil shielded wire, terminated with PS/2 connector via metallic frame, w/o core.
10	1.8 m foil shielded wire, terminated with PS2 connector via drain wire, w/o core.
11	NA

Note: 1.The EUT was installed in support unit 1.

2.All power cords of the above support units are non shielded (1.8m).

3. The EUT acted as SERVER PC and communicated with support units 7-11 which acted as WORKSTATION and partners of communication system via a STP cable (10m).

2.4 TEST SETUP

Please refer to the photos of test configuration in Item 6.



3. TEST INSTRUMENTS

3.1 TEST INSTRUMENTS (EMISSION)

CONDUCTED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ Test Receiver	ESHS30	828109/007	July 6, 2001
ROHDE & SCHWARZ Artificial Mains Network	ESH3-Z5	839135/006	July 9, 2001
ROHDE & SCHWARZ 4-wire ISN	ENY41	835154/007	Apr. 26, 2001
EMCO-L.I.S.N.	3825/2	9204-1964	July 9, 2001
Shielded Room	Site 2	ADT-C02	NA

Note: 1. The measurement uncertainty is less than +/- 2.6dB, which is calculated as per NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months.
And the calibrations are traceable to NML/ROC and NIST/USA.

RADIATED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
HP Spectrum Analyzer	8590L	3544A01042	April 6, 2001
HP Preamplifier	8447D	2944A08313	Mar. 20, 2001
HP Preamplifier	8449B	3008A01201	Dec. 14, 2000
ROHDE & SCHWARZ TEST RECEIVER	ESVS 30	841977/008	Oct. 11, 2001
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 23, 2000
ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Aug. 3, 2001
EMCO Double Ridged Guide Antenna	3115	9312-4192	March 29, 2001
CHASE BILOG Antenna	CBL6111A	1647	July 3, 2001
EMCO Turn Table	1016	1722	NA
EMCO Tower	1051	1825	NA
Open Field Test Site	Site 4	ADT-R04	June 9, 2001

Note: 1. The measurement uncertainty is less than +/- 3.0dB, which is calculated as per NAMAS document NIS81.

2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to NML/ROC and NIST/USA.



3.2 TEST INSTRUMENTS (IMMUNITY)

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
KeyTek, ESD Test System	2000	9105240/41	Aug. 10, 2001
KeyTek, ESD Simulator	MZ-15/EC	9902287	Feb. 28, 2001
KeyTek, EFT Generator	CE-40	9508257	Sept. 4, 2001
KeyTek, Capacitive Clamp	CE-40-CCL	9508259	Sept. 4, 2001
KeyTek, Control Center	E103	9508347	NA
KeyTek, Surge Combination Wave	E501A	9508349	Aug. 29, 2001
KeyTek, Surge Coupler/Decoupler	E551	9508350	Aug. 29, 2001
External Coupler /Decoupler	CM-TELCD	9926194	NA
I/O Signal Line Coupler/Decoupler	CM-110CD	9907177	NA
ROHDE & SCHWARZ Signal Generator	SMY01	840490/009	Aug. 13, 2001
KALMUS Power Amplifier	LA1000V	091995-1	NA
KALMUS Power Amplifier	757LC	091995-2	NA
HOLADAY Field Probe	HI-4422	89915	Aug. 14, 2001
EMCO BiconiLog Antenna	3141	1001	NA
FCC Coupling Decoupling Network	FCC-801-M3-25	48	NA
FCC Coupling Decoupling Network	FCC-801-M2-25	20	NA
FISCHER CUSTOM COMMUNICATIONS EM Injection Clamp	FCC-203I	50	NA
FCC Coupling Decoupling Network	FCC-801-M1-25	17	NA
BOONTON RF Voltage Meter	9200B	331801AE	Aug. 13, 2001
COMTEST Compact Full Anechoic Chamber (7x3x3 m)	CFAC	ADT-S01	Aug. 26, 2001
HAEFELY Magnetic Field Tester	MAG 100.1	083794-06	NA
COMBINOVA Magnetic Field Meter	MFM10	224	Oct. 30, 2001
KEYTEK Mains Interference Simulator	EMC Pro	9902207	Feb. 16, 2001
HAEFELY Mains Interference Simulator	PLINE 1610	083690-17	March 01, 2001

Note: The calibration interval of the above test instruments is 12 months.
And the calibrations are traceable to NML/ROC and NIST/USA.

3.3 LIMITS OF CONDUCTED AND RADIATED EMISSION

LIMIT OF CONDUCTED EMISSION OF EN 55022

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

Note: (1) The lower limit shall apply at the transition frequencies.

(2) The limit decreases linearly with the logarithm of the frequency in the range 0.15 to 0.50 MHz

(3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

LIMIT OF RADIATED EMISSION OF EN 55022

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

Note: (1) The lower limit shall apply at the transition frequencies.

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

(3) All emanation from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4. TEST RESULTS (EMISSION)

4.1 RADIO DISTURBANCE



Product Family Standard : EN 55022: 1998, Class B
Frequency Range : 0.15 - 30 MHz (Conducted Emission)
30 - 1000 MHz (Radiated Emission)
Input Voltage : 230 Vac, 50 Hz
Temperature : 25 Degree C
Humidity : 80 %
Atmospheric Pressure : 998 mbar

TEST RESULT	Remarks
PASS	Minimum passing margin of conducted emission: -21.46 dB at 7.619 MHz Minimum passing margin of radiated emission: -2.7 dB at 160.03 MHz

4.2 EUT OPERATION CONDITION

1. Turn on the power of all equipment.
2. PC runs a test program to enable all functions.
3. PC sends and receives messages to and from WORKSTATION PC via EUT and a STP cable.
4. PC sends "H" messages to monitor and monitor displays "H" patterns on screen.
5. PC sends "H" messages to modem.
6. PC sends "H" messages to printer.
7. Repeat steps 3-7.

4.3 TEST DATA OF CONDUCTED EMISSION

EUT: **PC/104 10 BaseT Ethernet Module**

MODEL: **PCM-3664**

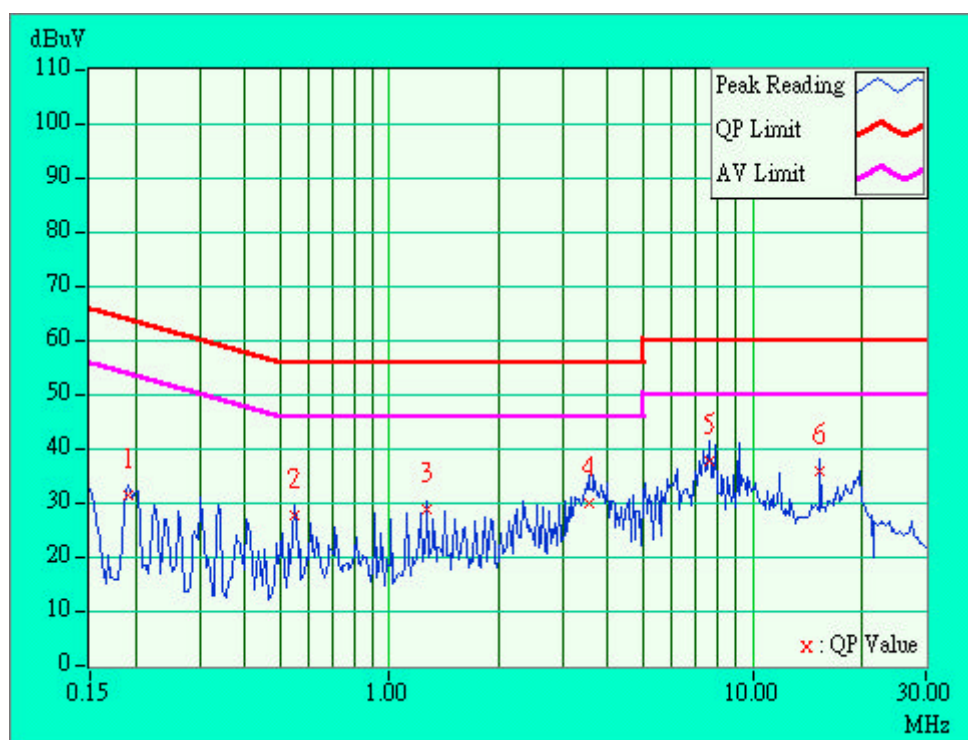
PHASE: LINE (L)

Bandwidth: 10 kHz

Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.191	0.19	31.44	-	31.63	-	64.01	54.01	-32.38	-
0.549	0.20	27.74	-	27.94	-	56.00	46.00	-28.06	-
1.269	0.20	28.90	-	29.10	-	56.00	46.00	-26.90	-
3.552	0.36	29.88	-	30.24	-	56.00	46.00	-25.76	-
7.619	0.58	37.96	-	38.54	-	60.00	50.00	-21.46	-
15.347	1.01	36.06	-	37.07	-	60.00	50.00	-22.93	-

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Correction Factor + Reading Value.



TEST DATA OF CONDUCTED EMISSION

EUT: PC/104 10 BaseT Ethernet Module

MODEL: PCM-3664

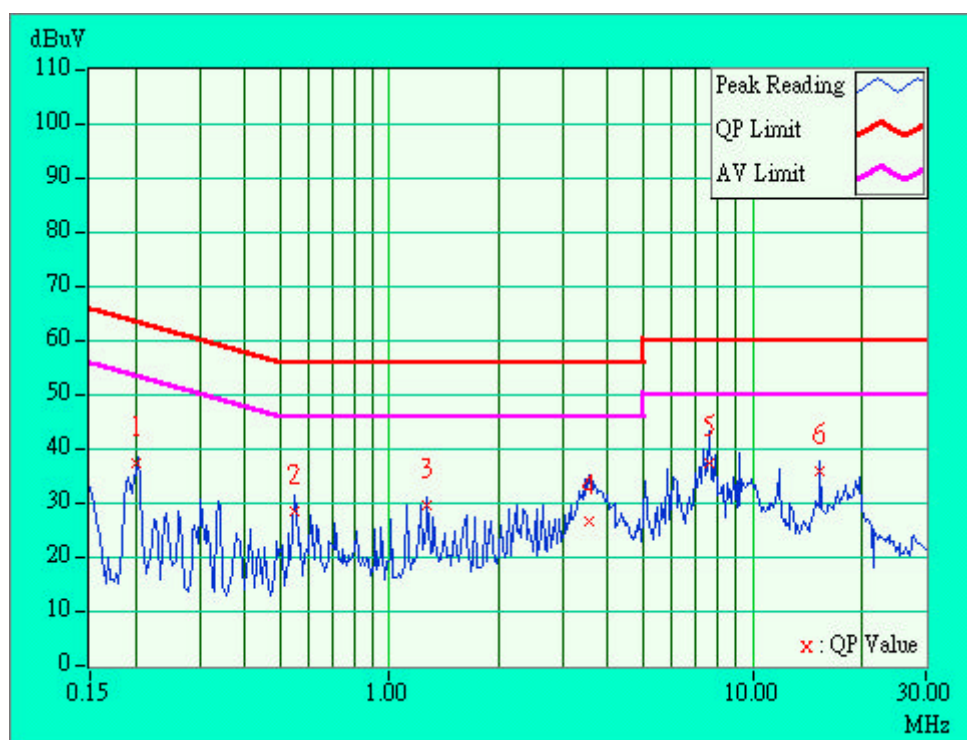
PHASE: LINE (N)

Bandwidth: 10 kHz

Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
		[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
0.202	0.20	37.54	-	37.74	-	63.52	53.52	-25.78	-
0.549	0.20	28.70	-	28.90	-	56.00	46.00	-27.10	-
1.269	0.20	29.66	-	29.86	-	56.00	46.00	-26.14	-
3.554	0.36	26.54	-	26.90	-	56.00	46.00	-29.10	-
7.617	0.52	37.42	-	37.94	-	60.00	50.00	-22.06	-
15.348	0.91	35.80	-	36.71	-	60.00	50.00	-23.29	-

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Emission Level = Correction Factor + Reading Value.





4.4 TEST DATA OF RADIATED EMISSION

EUT: **PC/104 10 BaseT Ethernet Module**

MODEL: **PCM-3664**

POLARITY: Horizontal

DETECTOR FUNCTION: Quasi-peak

6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz

MEASURED DISTANCE: 10 M

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
78.88	9.1	17.5	26.6	30.0	-3.4	400	94
112.50	12.6	9.8	22.4	30.0	-7.6	400	138
120.00	13.1	8.7	21.8	30.0	-8.2	400	343
139.65	13.7	10.5	24.2	30.0	-5.8	400	78
160.02	11.5	8.0	19.5	30.0	-10.5	400	352
186.19	10.6	8.6	19.2	30.0	-10.8	400	275
200.47	10.5	15.5	26.0	30.0	-4.0	400	151
209.54	11.2	12.4	23.6	30.0	-6.4	400	101
367.56	17.5	15.7	33.2	37.0	-3.8	337	46
632.00	22.8	7.0	29.8	37.0	-7.2	258	210
701.71	23.9	8.6	32.5	37.0	-4.5	119	139

- REMARKS:
1. Emission level (dBuV/m) = Correction Factor (dB)
+ Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value



TEST DATA OF RADIATED EMISSION

EUT: **PC/104 10 BaseT Ethernet Module**

MODEL: **PCM-3664**

POLARITY: Vertical

DETECTOR FUNCTION: Quasi-peak

6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz

MEASURED DISTANCE: 10 M

Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
60.69	6.8	20.1	26.9	30.0	-3.1	212	311
80.79	9.4	13.9	23.3	30.0	-6.7	141	220
85.93	10.0	16.4	26.4	30.0	-3.6	189	43
114.62	12.8	11.8	24.6	30.0	-5.4	100	280
120.03	13.1	14.1	27.2	30.0	-2.8	100	110
160.03	11.5	15.8	27.3	30.0	-2.7	100	6
171.97	11.0	11.0	22.0	30.0	-8.0	100	136
200.03	10.5	13.9	24.4	30.0	-5.6	100	256
209.46	11.2	15.0	26.2	30.0	-3.8	100	311
367.56	17.5	15.8	33.3	37.0	-3.7	100	19
621.10	22.7	8.4	31.1	37.0	-5.9	260	28
701.70	23.9	6.8	30.7	37.0	-6.3	204	207

- REMARKS:
1. Emission level (dBuV/m) = Correction Factor (dB)
+ Reading value (dBuV).
 2. Correction Factor (dB) = Ant. Factor (dB)+Cable loss (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level - Limit value



5. TEST RESULTS (IMMUNITY)

5.1 GENERAL DESCRIPTION

Generic Standard	:	EN 50082-2: 1995
Basic Standard	:	EN 61000-4-2 (Electrostatic Discharge, ESD, 8kV air discharge, 4kV Contact discharge, Performance Criterion B)
Specification and Performance Criteria	:	EN 61000-4-3 (Radio-Frequency Electromagnetic Field Susceptibility Test, RS, 80-1000 MHz, 10V/m, 80% AM (1kHz), Performance Criterion A)
	:	EN 61000-4-4 (Electrical Fast Transient/Burst, EFT, Power line: 2kV, Signal line: 1kV, Performance Criterion B)
	:	EN 61000-4-6 (Conducted Radio Frequency Disturbances Test, CS, 0.15-80 MHz, 10V, 80% AM, 1kHz, Performance Criterion A)
	:	EN 61000-4-8 (Power Frequency Magnetic Field Test, 50 Hz, 30A/m, Performance Criterion A)
	:	ENV 50204 (Radio-Frequency Electromagnetic Field, Pulse modulated, 900+/-5 MHz, 10V/m, 50 % duty cycle, Rep. Frequency 200 Hz, Performance Criterion A)
Input Voltage	:	230 Vac, 50 Hz
Temperature	:	23 Degree C
Humidity	:	47 %
Atmospheric Pressure	:	1002 mbar



5.2 PERFORMANCE CRITERIA DESCRIPTION

- Criterion A - The apparatus shall continue to operate as intended. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.
- Criterion B - The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended.
- Criterion C - Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

5.3 EUT OPERATION CONDITION

Same as item **4.2**

5.4 TEST RESULT OF ELECTROSTATIC DISCHARGE (ESD)

Basic Standard	:	EN 61000-4-2
Discharge Impedance	:	330 ohm / 150 pF
Discharge Voltage	:	Air Discharge - 8 kV (Direct) Contact Discharge - 4 kV (Indirect)
Polarity	:	Positive/Negative
Number of Discharge	:	Minimum 20 times at each test point
Discharge Mode	:	Single Discharge
Discharge Period	:	1-second minimum

Test Result		Remarks
Criterion A	PASS	MODEL: PCM-3664

OBSERVATION DESCRIPTION

Direct Application			Test Result	
Discharge Level (kV)	Polarity (+/-)	Test Point	Contact Discharge	Air Discharge
8	+/-	1~2	NA	Note 1
4	+/-	1~2	Note 1	NA

Description of test point: (Please refer to ESD test photos)

1. BNC port
2. Metal case

Indirect Application			Test Result	
Discharge Level (kV)	Polarity (+/-)	Test Point	Horizontal Coupling Plane	Vertical Coupling Plane
4	+/-	1 ~ 4	Note 1	Note 1

Description of test point:

1. Front side
2. Rear side
3. Right side
4. Left side

Description of test result:

Note 1: There was no change compared with initial operation during the test.



5.5 TEST RESULT OF RADIATED ELECTROMAGNETIC FIELDS (RS)

Basic Standard : EN 61000-4-3
Frequency range : 80 MHz - 1000 MHz
Field strength : 10 V/m
Modulation : 1kHz Sine Wave, 80%, AM Modulation
Frequency step : 1 % of fundamental
Polarity of Antenna : Horizontal and Vertical
Test distance : 3 m
Antenna height : 1.5m
Dwell Time : at least 3 seconds

Test Result		Remarks
Criterion A	PASS	MODEL: PCM-3664

Note: Four sides of EUT are verified separately.

Description of test result:

There was no change compared with initial operation during the test.



5.6 TEST RESULT OF ELECTRICAL FAST TRANSIENT (EFT)

Basic Standard : EN 61000-4-4
Test Voltage : Power Line - 2 kV
Signal/ Control Line - NA
Polarity : Positive/ Negative
Impulse Frequency : 5 kHz
Tr / Tn : 5/50 ns
Burst Duration : 15 ms
Burst Period : 300 ms
Test Duration : Not less than 1 min.

Test Result		Remarks
Criterion B	PASS	MODEL: PCM-3664

OBSERVATION DESCRIPTION

Test Point	Polarity	Test Level (kV)	Result
Signal/ Control Line	+	1	Note 1
Signal/ Control Line	-	1	Note 2

Description of test result:

Note 1: There was no change compared with initial operation during the test.

2: The transmission of message stopped during the test, but self-recoverable after test.



5.7 TEST RESULT OF CONDUCTED RADIO FREQUENCY DISTURBANCES (CS)

Basic Standard : EN 61000-4-6
Frequency range : 0.15 MHz - 80 MHz
Field strength : 10 V
Modulation : 1kHz Sine Wave, 80%, AM Modulation
Frequency step : 1 % of fundamental
Coupled cable : Power Mains, Unshielded
Coupling device : CDN-M3
Dwell Time : at least 3 seconds

Test Result		Remarks
Criterion A	PASS	MODEL: PCM-3664

OBSERVATION DESCRIPTION

There was no change compared with initial operation during the test.



5.8 TEST RESULT OF POWER FREQUENCY MAGNETIC FIELD

Basic Standard : EN 61000-4-8
Frequency range : 50Hz
Field strength : 30 A/m
Observation Time : 1 minute
Inductance coil : Rectangular type, 1mx1m

Test Result		Remarks
Criterion A	PASS	MODEL: PCM-3664

OBSERVATION DESCRIPTION

There was no change compared with initial operation during the test.



5.8.1 TEST RESULT OF RADIO-FREQUENCY ELECTROMAGNETIC FIELD, PULSE MODULATED

Basic Standard : ENV 50204
Frequency range : 900 +/- 5 MHz
Field strength : 10 V/m
Modulation : 200Hz, Square Wave, 50% Duty Cycle
Dwell Time : 30 second
Polarity of Antenna : Horizontal and Vertical
Test distance : 3 m

Test Result		Remarks
Criterion A	PASS	MODEL: PCM-3664

Note: Four sides of EUT are verified separately.

OBSERVATION DESCRIPTION

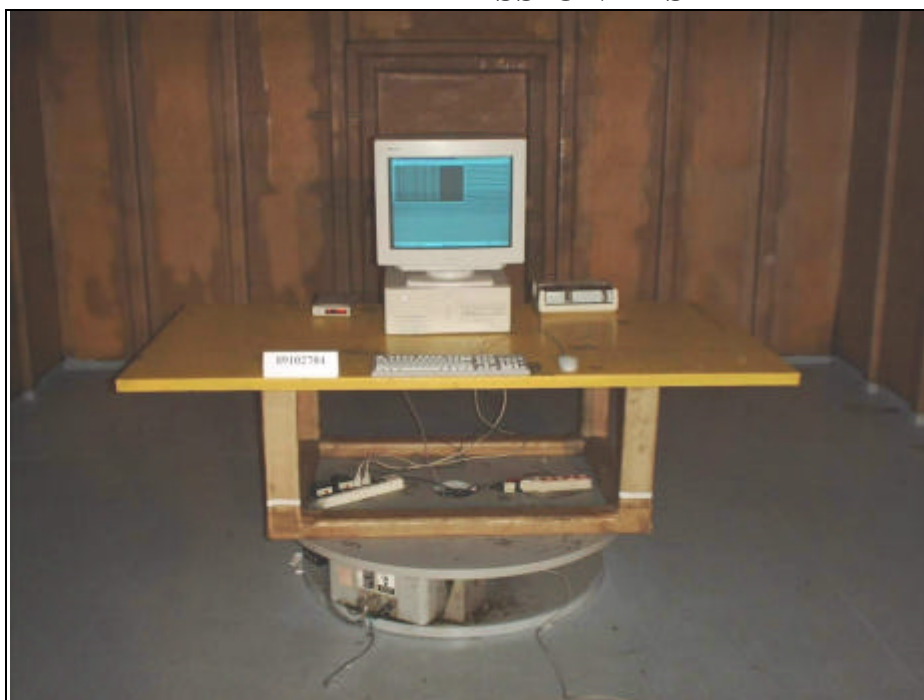
There was no change compared with initial operation during the test.

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST



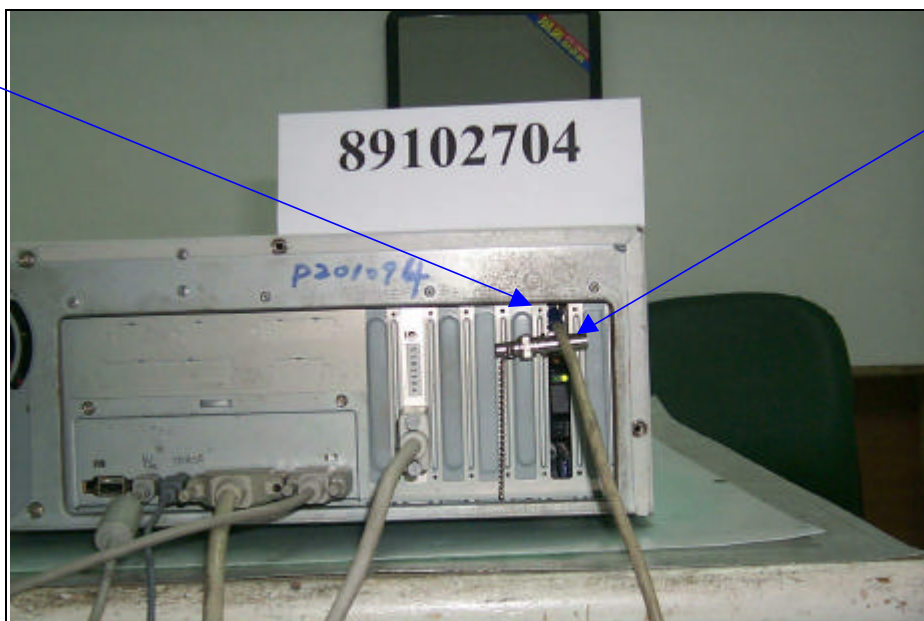
RADIATED EMISSION TEST



ESD TEST



2



1

RS TEST & PULSE MODULATION TEST



EFT TEST



CONDUCTED SUSCEPTIBILITY TEST



MAGNETIC TEST





7. APPENDIX - INFORMATION OF THE TESTING LABORATORY

Information of the testing laboratory

We, ADT Corp., are founded in 1988, to provide our best service in EMC and Safety consultation. Our laboratory is accredited by the following approval agencies according to ISO/IEC Guide 25 or EN 45001:

● USA	FCC, NVLAP
● Germany	TUV Rheinland
● Japan	VCCI
● New Zealand	RFS
● Norway	NEMKO, DNV
● U.K.	INCHCAPE
● R.O.C.	BSMI

Copies of accreditation certificates of our laboratory obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.
If you have any comments, please feel free to contact us at the following:

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