EMC

TEST REPORT

REPORT NO. : CE86121201
MODEL NO. : IPC-6606-200, IPC-6606P-200
DATE OF TEST : Dec. 15 ~ 26, 1997

PREPARED FOR : ADVANTECH CO., LTD.

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PREPARED BY: ADVANCE DATA TECHNOLOGY CORPORATION

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Accredited Laboratory

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1. CERTIFICATION

Issue date: Jan. 6, 1998

Product	:	INDUSTRIAL COMPUTER	
Trade Name	:	ADVANTECH	
Model No.	:	IPC-6606-200, IPC-6606P-200	
Applicant	:	ADVANTECH CO., LTD.	
Standard	:	EN 55022:1994, Class A	**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 from Dec. 15 ~ 26, 1997. 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.

PREPARED BY: Sharon Hsiung , DATE: 1/6/98
(Sharon Hsiung)

CHECKED BY: Paul Yang DATE: 1/6/98
(Paul Yang)

APPROVED BY: , DATE: 1/6/98
(Harris W. Lai)

ADVANCE DATA TECHNOLOGY CORPORATION

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2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product	:	INDUSTRIAL COMPUTER
Model No.	:	IPC-6606-200, IPC-6606P-200
Power Supply Type	:	Switching
Power Cord	:	Nonshielded (1.8m)

Note: The EUT has two model names which are identical to each other in all aspects except for the following:

Model: IPC-6606-200 (use ISA back plane, model: PCA-6106)
Model: IPC-6606P-200 (use PCI+ISA back plane, model: PCA-6106P3)

Both models were selected as representative models for the test and their data are recorded in this report.

The EUT was tested under the following configurations:

- CPU BOARD, ADVANTECH, model: PCA-6159
- CPU: Intel Pentium 200MHz
- HDD: SEAGATE, model: ST31720A
- FDD: TEAC, model: FD-235HF
- POWER SUPPLY: SEASONIC, model: SSG-200G
- VGA CARD: SIGMA, model: SGX-PC-12801

The EUT was tested with the following kind of processing speed of CPU:

Intel Pentium 200MHz	Speed: 200 MHz (the clock frequency of generator is 66.6MHz)

The video resolution of 640x480 was used during the test.

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

2.2 GENERAL DESCRIPTION OF APPLIED STANDARD

The EUT is an office equipment and is classified as a light industry equipment. According to the manufacturer's request, the EUT was tested with the requirements of the following standards:

EN 55022:1994, Class A	**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.

FOR EMISSION TEST

No	Product	Brand	Model No.	Serial No.	I/O Cable
1	COLOR MONITOR	ACER	7134T	M500233452	Shielded Signal (1.9m) Nonshielded Power (2.1m)
2	KEYBOARD	ACER	6311 EXT: K9C/CH	K6353249710	Shielded Signal (1.3m)
3	PRINTER	HP	2225C+	2949S63865	Shielded Signal (1.4m) Nonshielded Power (2.4m)
4	MODEM	DATATRONICS	1200CK	02-542193	Shielded Signal (1.2m) Nonshielded Power (2.4m)

FOR IMMUNITY TEST

No	Product	Brand	Model No.	Serial No.	I/O Cable
1	COLOR MONITOR	ACER	7156I	N/A	Shielded Signal (1.5m) Nonshielded Power (1.8m)
2	KEYBOARD	HP	C3758A	C3758-60223	Shielded Signal (1.8m)
3	PRINTER	HP	C2145A	SG5BN160GY	Shielded Signal (2m) Nonshielded Power (1.8m)
4	MODEM	GVC	F-1128V1R6	50601531	Shielded Signal (1.5m) Nonshielded Power (2.0m)

2.4 TEST SETUP

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

3. TEST INSTRUMENTS

3.1 TEST INSTRUMENTS (EMISSION)

RADIATED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
HP Spectrum Analyzer	8594E	3520A01861	Feb. 18, 1998
HP Preamplifier	8447D	2944A08118	June 29, 1998
ROHDE & SCHWARZ TEST RECEIVER	ESVS 10	840241/010	Sept. 9, 1998
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 28, 1998
CHASE BiLOG Antenna	CBL6111A	1079	July 19, 1998
ADT Turn Table	U200	9701	N/A
EMCO Tower	1051	1825	N/A
Open Field Test Site	Site 3	ADT-R03	July 18, 1998

Note: 1. The measurement uncertainty is less than +/- 4dB, which is calculated as per NAMA's 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.

CONDUCTED EMISSION MEASUREMENT

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
ROHDE & SCHWARZ Test Receiver	ESHS30	828109/007	Aug. 4, 1998
ROHDE & SCHWARZ Artificial Mains Network	ESH2-Z5	892107/003	July 22, 1998
EMCO L.I.S.N.	3825/2	9504-2359	Aug. 1, 1998
Shielded Room	Site 3	ADT-C03	N/A

Note: 1. The measurement uncertainty is less than +/- 3dB, which is calculated as per NAMA's 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, 1998
KeyTek, ESD Simulator	MZ-15/EC	92022232	June 11, 1998
KeyTek, EFT Generator	CE-40	9508257	Sept. 9, 1998
KeyTek, Capacitive Clamp	CE-40-CCL	9508259	Sept. 9, 1998
ROHDE & SCHWARZ Signal Generator	SMY01	840490/009	Sept. 29, 1998
KALMUS Power Amplifier	LA1000V	091995-1	N/A
KALMUS Power Amplifier	757LC	091995-2	N/A
HOLADAY Field Probe	HI-4422	89915	Oct. 12, 1998
EMCO BiconiLog Antenna	3141	1001	N/A
FCC Coupling Decoupling Network	FCC-801-M3-25	48	N/A
FCC Coupling Decoupling Network	FCC-801-M2-25	20	N/A
FCC Coupling Decoupling Network	FCC-801-M1-25	17	N/A
BOONTON RF Voltage Meter	9200B	331801AE	Sept. 29, 1998
COMTEST Compact Full Anechoic Chamber (7x3x3 m)	CFAC	ADT-S01	Aug. 4, 1998
HAEFELY Magnetic Field Tester	MAG 100.1	083794-06	N/A
COMBINOVA Magnetic Field Meter	MFM10	224	June 5, 1998

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

4. TEST RESULTS (EMISSION)

4.1 RADIO DISTURBANCE

Product Family Standard	:	EN 55 022, Class A
Frequency Range	:	0.15 - 30 MHz (Conducted Emission)
		30 - 1000 MHz (Radiated Emission)
Input Voltage	:	230 Vac, 50 Hz
Temperature	:	22 ℃
Humidity	:	59 %
Atmospheric Pressure	:	1060 mbar

TEST RESULT	Remarks
PASS	Minimum passing margin of conducted emission: -16.1 dB at 0.185 MHz Minimum passing margin of radiated emission: -3.7 dB at 334.19 MHz

4.1.1 EUT OPERATION CONDITION

1. Turn on the power of all equipments.
2. EUT runs a test program to enable all functions.
3. EUT sends "H" messages to monitor and monitor displays "H" patterns on screen.
4. EUT sends "H" messages to printer, then printer prints them on paper.
5. EUT sends "H" messages to modem.
6. Repeat steps 3-6.

4.2 TEST DATA OF CONDUCTED EMISSION (A)

EUT: **INDUSTRIAL COMPUTER** MODEL: **IPC-6606-200**

6 dB Band Width: 10 kHz

TEST PERSONNEL: Brian Hsu

Freq.	L Level		N Level		Limit		Margin [dB (μV)]			
[MHz]	[dB (μV)]		[dB (μV)]		[dB (μV)]		L		N	
	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
0.168	47.80	-	47.90	-	65.05	52.05	-17.3	-	-17.1	-
0.188	45.20	-	44.50	-	64.12	51.12	-18.9	-	-19.6	-
0.525	28.20	-	32.00	-	56.00	43.00	-27.8	-	-24.0	-
6.290	34.90	-	35.10	-	60.00	47.00	-25.1	-	-24.9	-
14.910	27.20	-	27.10	-	60.00	47.00	-32.8	-	-32.9	-
24.010	30.20	-	30.30	-	60.00	47.00	-29.8	-	-29.7	-

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

ADT CO.SITE-3

EN55022 CLASS A

15. Dec 97 21:07

File No. CE861201

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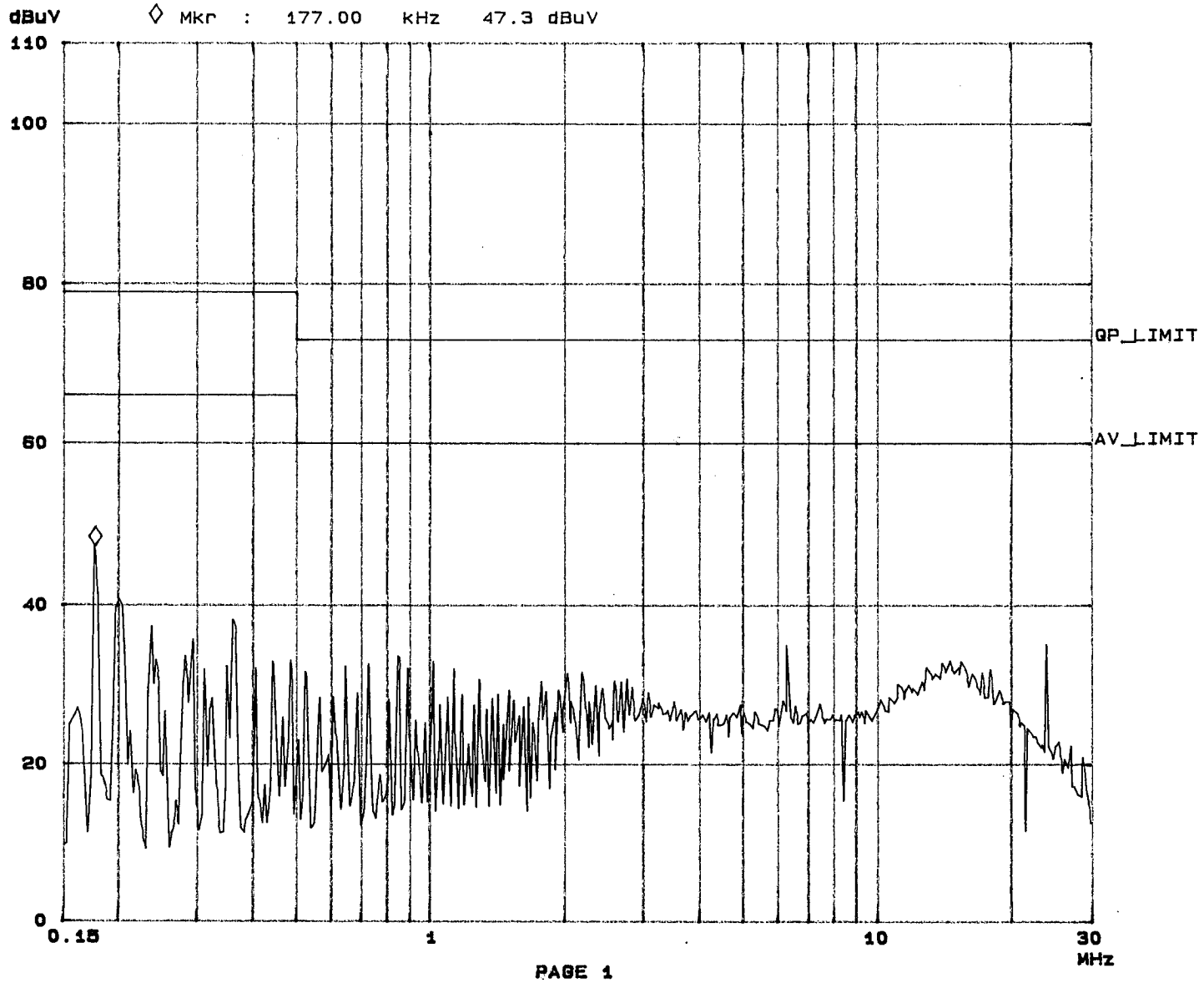
Tested by Brian Hou

EUT: IPC-6606-200
Test Spec: LISN : L
Comment: 110V AC/60Hz

Fast Scan Settings (3 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpAge
150k	450k	3k	10k	PK	0.05ms	10dBLN	OFF	60dB
450k	5M	3k	10k	PK	0.05ms	10dBLN	OFF	60dB
5M	30M	3k	10k	PK	0.05ms	10dBLN	OFF	60dB



ADT CO.SITE-3

EN55022 CLASS A

15. Dec 97 20: 40

File No. CE8612121-01

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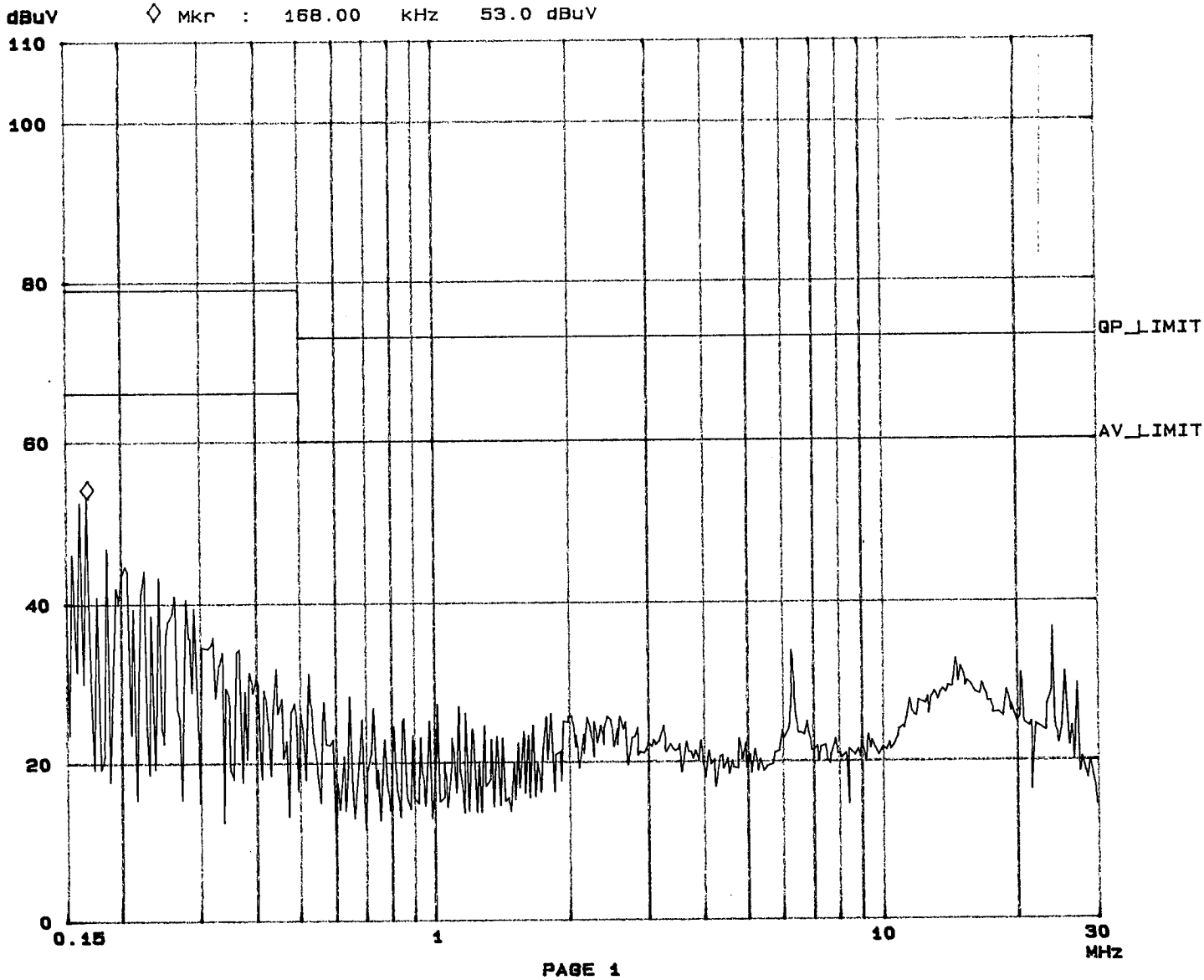
Tested by Brian Hsu

EUT: IPC-6606-200
Test Spec: LISN : N
Comment: 110V AC/60Hz

Fast Scan Settings (3 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150k	450k	3k	10k	PK	0.05ms	10dBLN	OFF	60dB
450k	5M	3k	10k	PK	0.05ms	10dBLN	OFF	60dB
5M	30M	3k	10k	PK	0.05ms	10dBLN	OFF	60dB



4.3 TEST DATA OF CONDUCTED EMISSION (B)

EUT: **INDUSTRIAL COMPUTER** MODEL: **IPC-6606P-200**

6 dB Band Width: 10 kHz

TEST PERSONNEL: Brian Hom

Freq.	L Level		N Level		Limit		Margin [dB (μV)]			
[MHz]	[dB (μV)]		[dB (μV)]		[dB (μV)]		L		N	
	QP	AV	QP	AV	QP	AV	QP	AV	QP	AV
0.185	48.00	-	48.20	-	64.26	51.26	-16.3	-	-16.1	-
0.609	30.30	-	19.10	-	56.00	43.00	-25.7	-	-36.9	-
0.887	21.90	-	30.50	-	56.00	43.00	-34.1	-	-25.5	-
6.290	35.30	-	34.60	-	60.00	47.00	-24.7	-	-25.4	-
14.910	23.90	-	27.30	-	60.00	47.00	-36.1	-	-32.7	-
24.010	34.60	-	37.40	-	60.00	47.00	-25.4	-	-22.6	-

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

ADT CO.SITE-3

EN55022 CLASS A

15. Dec 97 21:30

File No. CE861201

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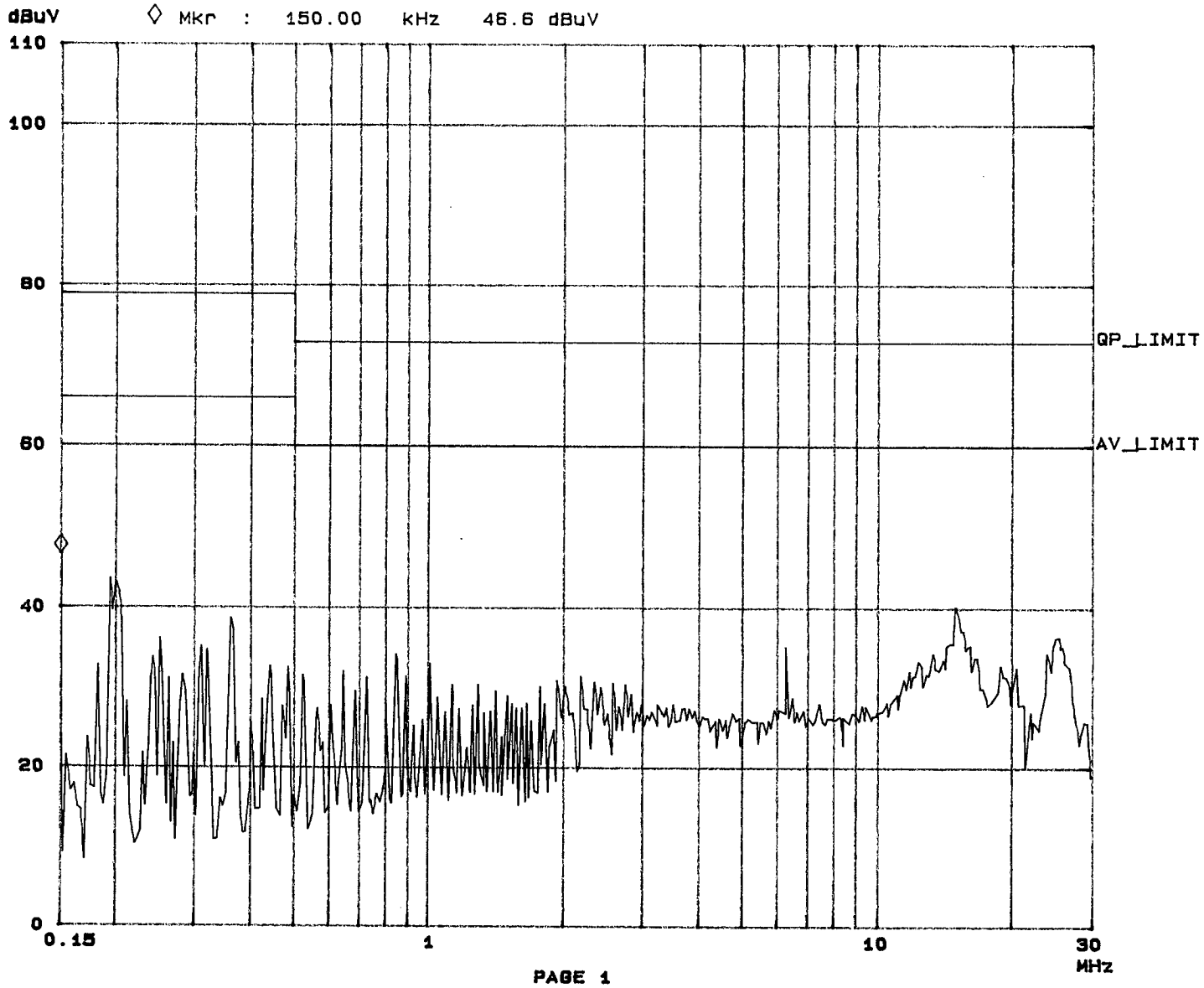
Tested by Brian Hou

EUT: IPC-6606P-200
Test Spec: LISN : L
Comment: 110V AC/60Hz

Fast Scan Settings (3 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150k	450k	3k	10k	PK	0.05ms	10dBLN	OFF	60dB
450k	5M	3k	10k	PK	0.05ms	10dBLN	OFF	60dB
5M	30M	3k	10k	PK	0.05ms	10dBLN	OFF	60dB



ADT CO.SITE-3

15. Dec 97 21:37

EN55022 CLASS A

EUT: IPC-6606P-200
Test Spec: LISN : N
Comment: 110V AC/60Hz

File No. CE861210-01
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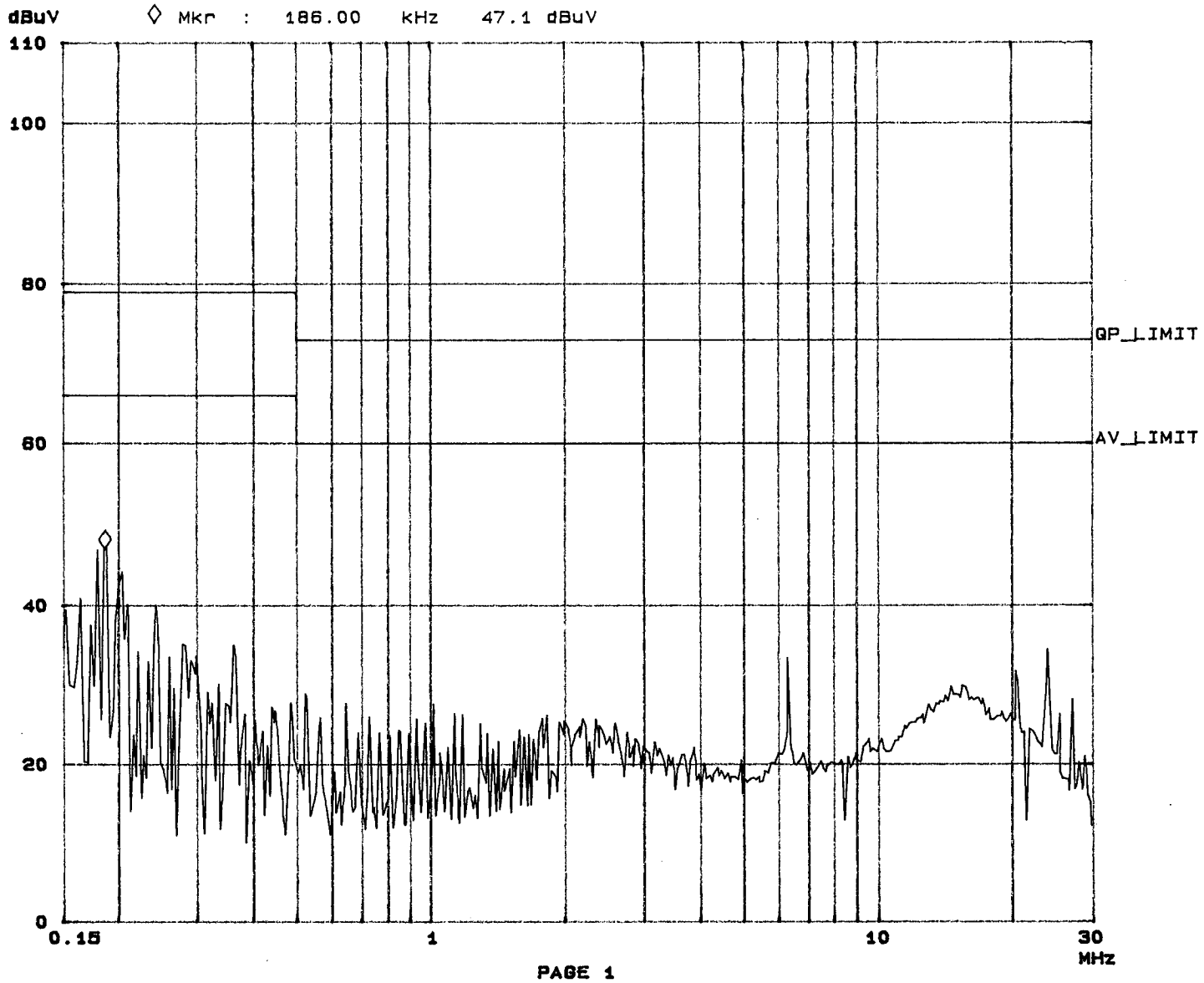
Tested by Brian Hsu

Fast Scan Settings (3 Ranges)

Frequencies			Receiver Settings					
Start	Stop	Step	IF BW	Detector	M-Time	Atten	Preamp	OpRge
150K	450K	3K	10K	PK	0.05ms	10dBLN	OFF	60dB
450K	5M	3K	10K	PK	0.05ms	10dBLN	OFF	60dB
5M	30M	3K	10K	PK	0.05ms	10dBLN	OFF	60dB



4.4 TEST DATA OF RADIATED EMISSION (A)

EUT: **INDUSTRIAL COMPUTER** MODEL: **IPC-6606-200**

ANTENNA: CHASE BILOG CBL6111A POLARITY: Horizontal

DETECTOR FUNCTION: Quasi-peak 6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz MEASURED DISTANCE: 10 M

TEST PERSONNEL: Brian Hsu

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
44.18	14.7	8.5	23.2	40.0	-16.8
112.48	13.0	14.2	27.2	40.0	-12.8
160.03	12.8	6.2	19.0	40.0	-21.0
165.23	12.5	11.7	24.2	40.0	-15.8
203.73	13.4	13.4	26.8	40.0	-13.2
243.50	15.0	13.3	28.3	47.0	-18.7

REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) +Meter Reading (dBuV).
2. Correction Factor(dB/m) = Ant. Factor(dB/m)+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 (A)

EUT: **INDUSTRIAL COMPUTER** MODEL: **IPC-6606-200**

ANTENNA: CHASE BILOG CBL6111A POLARITY: Vertical

DETECTOR FUNCTION: Quasi-peak 6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz MEASURED DISTANCE: 10 M

TEST PERSONNEL: Brian Hou

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
31.09	16.7	19.5	36.2	40.0	-3.8
45.96	12.2	22.2	34.4	40.0	-5.6
120.04	15.8	11.3	27.1	40.0	-12.9
203.69	13.3	11.6	24.9	40.0	-15.1
285.13	15.5	21.4	36.9	47.0	-10.1
334.19	16.8	26.5	43.3	47.0	-3.7
434.35	19.9	15.3	35.2	47.0	-11.8

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

4.5 TEST DATA OF RADIATED EMISSION (B)

EUT: **INDUSTRIAL COMPUTER** MODEL: **IPC-6606P-200**

ANTENNA: CHASE BILOG CBL6111A POLARITY: Horizontal

DETECTOR FUNCTION: Quasi-peak 6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz MEASURED DISTANCE: 10 M

TEST PERSONNEL: Brian Han

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
32.03	19.3	12.6	31.9	40.0	-8.1
44.13	14.7	15.4	30.1	40.0	-9.9
234.55	14.6	25.8	40.4	47.0	-6.6
244.55	15.0	24.2	39.2	47.0	-7.8
254.55	15.4	22.9	38.3	47.0	-8.7
264.55	15.5	22.9	38.4	47.0	-8.6

REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) +Meter Reading (dBuV).
2. Correction Factor(dB/m) = Ant. Factor(dB/m)+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 (B)

EUT: **INDUSTRIAL COMPUTER** MODEL: **IPC-6606P-200**

ANTENNA: CHASE BILOG CBL6111A POLARITY: Vertical

DETECTOR FUNCTION: Quasi-peak 6 dB BANDWIDTH: 120 kHz

FREQUENCY RANGE: 30-1000 MHz MEASURED DISTANCE: 10 M

TEST PERSONNEL: Brian Hou

Frequency (MHz)	Correction Factor (dB/m)	Reading Data (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
32.03	16.9	14.8	31.7	40.0	-8.3
44.28	13.0	20.1	33.1	40.0	-6.9
81.08	8.8	25.0	33.8	40.0	-6.2
234.76	13.6	28.9	42.5	47.0	-4.5
244.06	13.7	29.1	42.8	47.0	-4.2
254.71	14.3	24.9	39.2	47.0	-7.8
264.11	15.0	24.7	39.7	47.0	-7.3

REMARKS :
1. Emission level (dBuV/m) = Correction Factor(dB/m) +Meter Reading (dBuV).
2. Correction Factor(dB/m) = Ant. Factor(dB/m)+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

Basic Standard	:	EN 61000-4-2	(Electrostatic Discharge Test, ESD)
		EN 61000-4-3	(Radiated Radio-Frequency Disturbance Test, RS)
		EN 61000-4-4	(Electrical Fast Transient/Burst Test, EFT)
		EN 61000-4-6	(Conducted Radio Frequency Disturbances Test, CS)
		EN 61000-4-8	(Power Frequency Magnetic Field Test)
		ENV 50204	(Radio-Frequency Electromagnetic Field, Pulse modulated)
Generic Standard	:	EN 50 082-2	
Input Voltage	:	230 Vac, 50 Hz	
Temperature	:	20 ℃	
Humidity	:	56 %	
Atmospheric Pressure	:	1060 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 **4.1.1**.

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(Direct/Indirect)
Polarity	:	Positive/Negative
Number of Discharge	:	Minimum 10 times at each test point
Discharge Mode	:	Single Discharge
Discharge Period	:	1 second minimum
Test Personnel	:	Dennis Chuang

Test Result		Remarks
Criterion A	**PASS**	Model: IPC-6606-200
Criterion A	**PASS**	Model: IPC-6606P-200

OBSERVATION DESCRIPTION

Direct Application			Test Result	
Discharge Level (kV)	Polarity (+/-)	Test Point	Contact Discharge	Air Discharge
8	+/-	1 ~ 8	N/A	Note 1
4	+/-	1, 4, 5	Note 1	N/A

Description of test point:

1. All I/O ports
2. FDD
3. All openings
4. All screws
5. Case
6. All LEDs
7. Power switch
8. Power input connector

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

Description of test point:

1. Front side
2. Left side
3. Right side
4. Rear 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
Test Personnel	:	Dennis Chuang

Test Result		Remarks
Criterion A	**PASS**	Model: IPC-6606-200
Criterion A	**PASS**	Model: IPC-6606P-200

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 - N/A
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 Personnel	:	Dennis Chuang

Test Result		Remarks
Criterion A	**PASS**	Model: IPC-6606-200
Criterion A	**PASS**	Model: IPC-6606P-200

OBSERVATION DESCRIPTION

Test Point	Polarity	Test Level (kV)	Result
L1	+/−	2	Note 1
L2	+/−	2	Note 1
GND	+/−	2	Note 1

Description of test result:

Note 1: There was no change compared with initial operation during the 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/m
Modulation	:	1kHz Sine Wave, 80%, AM Modulation
Frequency step	:	1 % of fundamental
Coupled cable	:	Power Mains, Unshielded
Coupling device	:	CDN-M3 (3 wires)
Test Personnel	:	Dennis Cheung

Test Result		Remarks
Criterion A	**PASS**	Model: IPC-6606-200
Criterion A	**PASS**	Model: IPC-6606P-200

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 Personnel	:	Dennis Chuang

Test Result		Remarks
Criterion A	**PASS**	Model: IPC-6606-200
Criterion A	**PASS**	Model: IPC-6606P-200

OBSERVATION DESCRIPTION

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

5.9 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
Dewell Time	:	30 second
Polarity of Antenna	:	Horizontal and Vertical
Test distance	:	3 m
Test Personnel	:	Dennis Chuong

Test Result		Remarks
Criterion A	**PASS**	Model: IPC-6606-200
Criterion A	**PASS**	Model: IPC-6606P-200

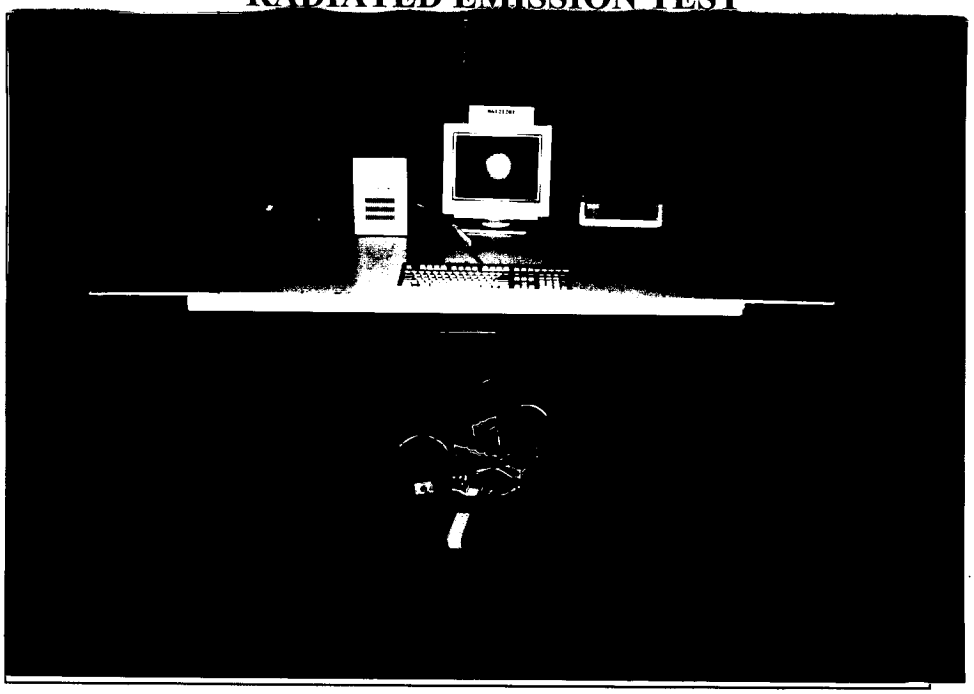
Note: Four sides of EUT are verified separately.

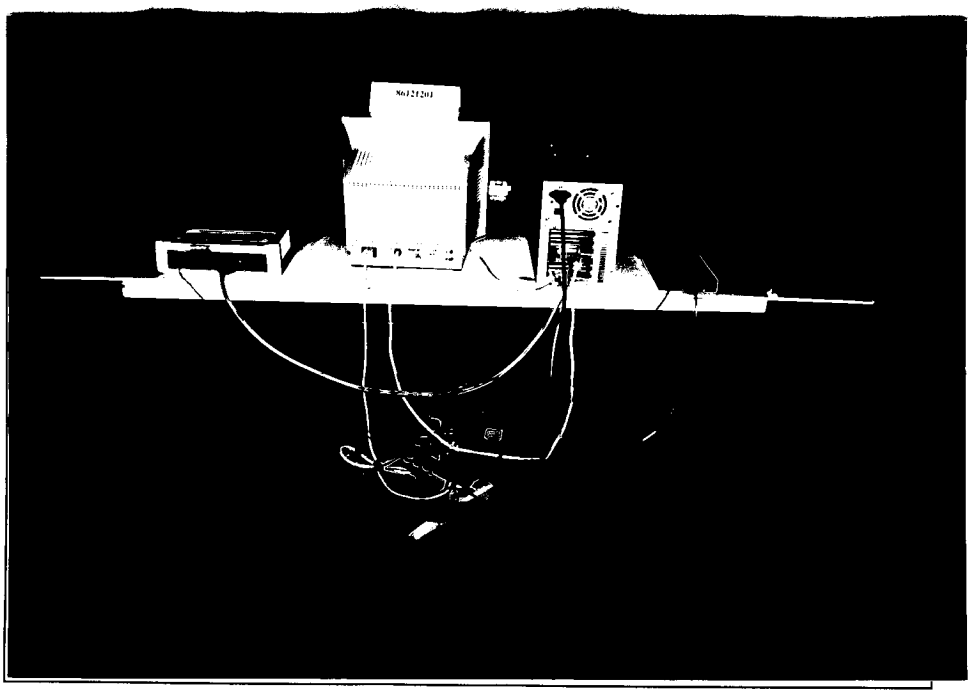
OBSERVATION DESCRIPTION

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

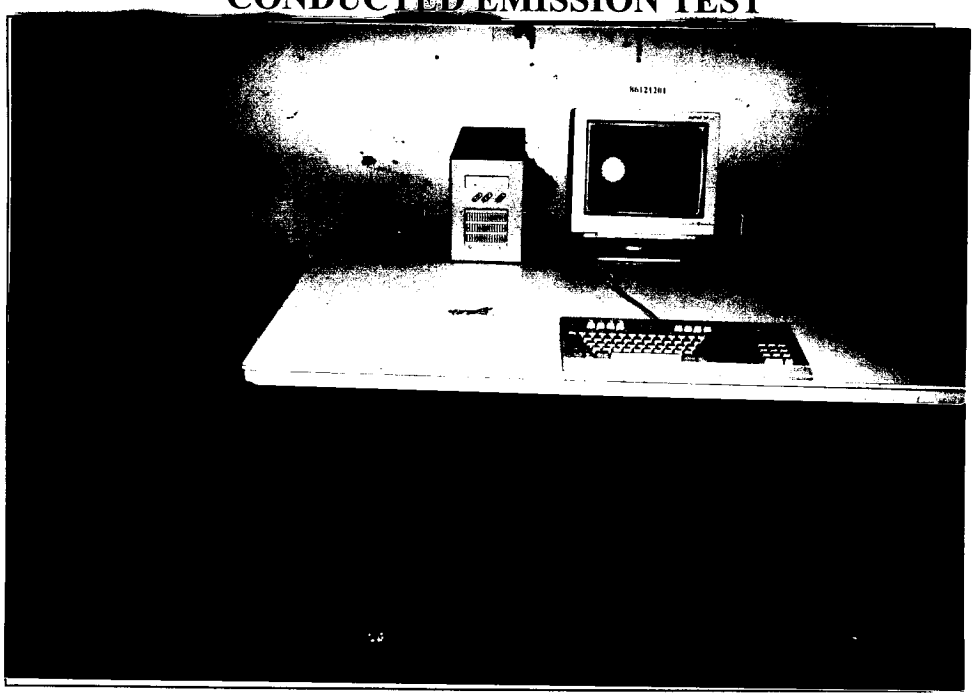
6. PHOTOGRAPHS OF THE TEST CONFIGURATION

RADIATED EMISSION TEST

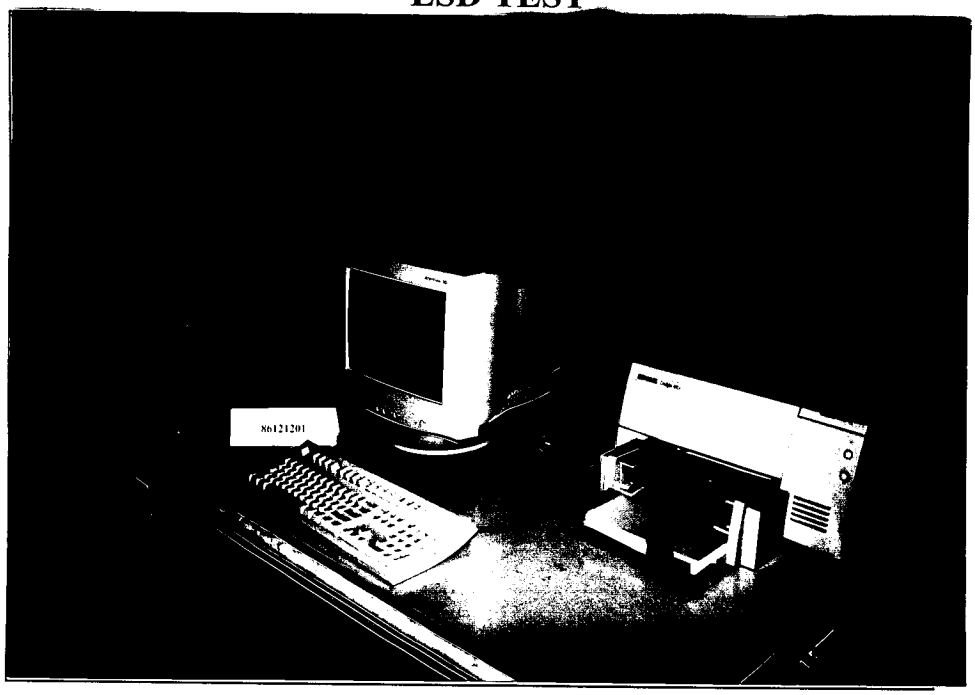




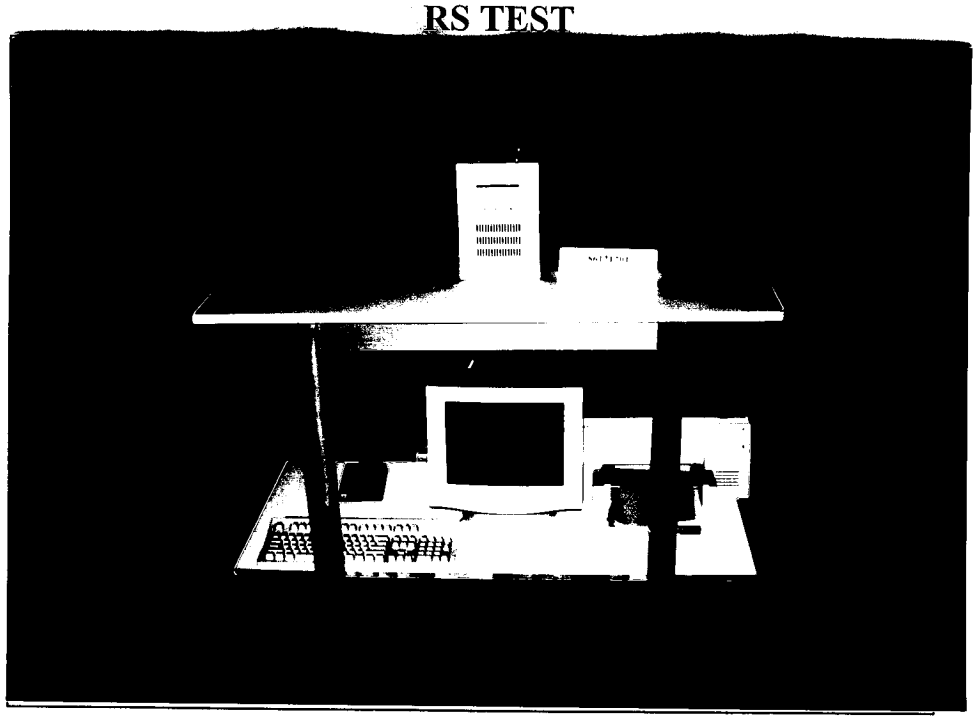
CONDUCTED EMISSION TEST

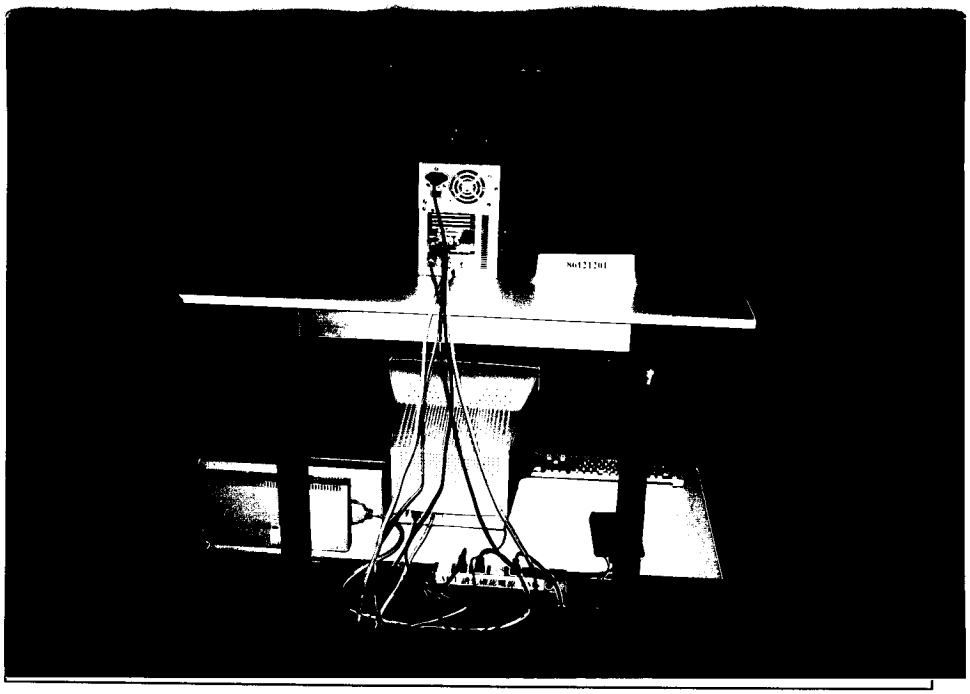


ESD TEST



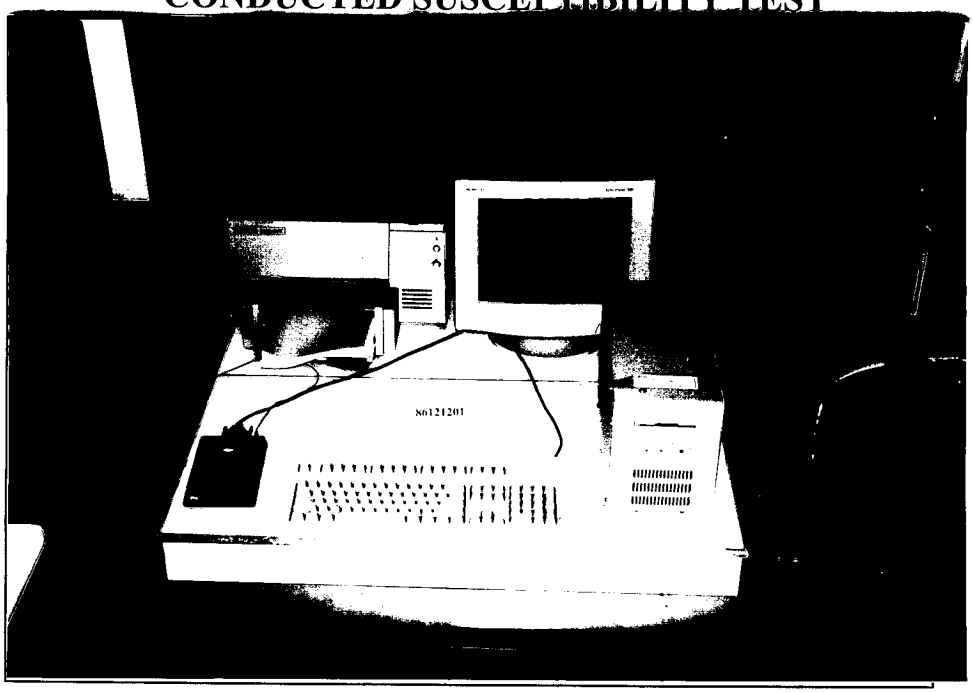
RS TEST



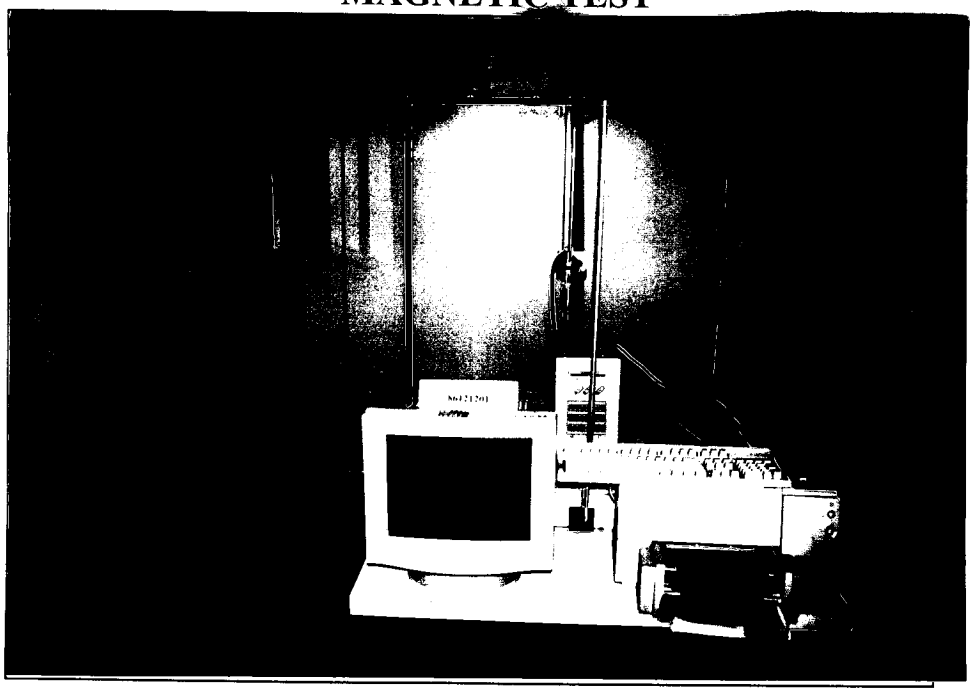


EFT TEST

CONDUCTED SUSCEPTIBILITY TEST

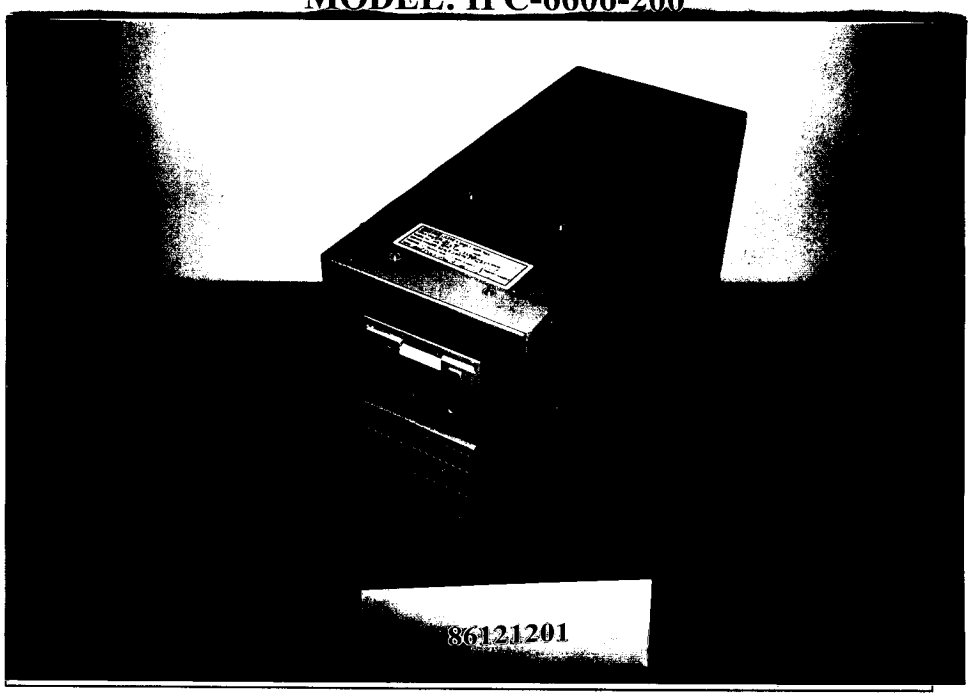


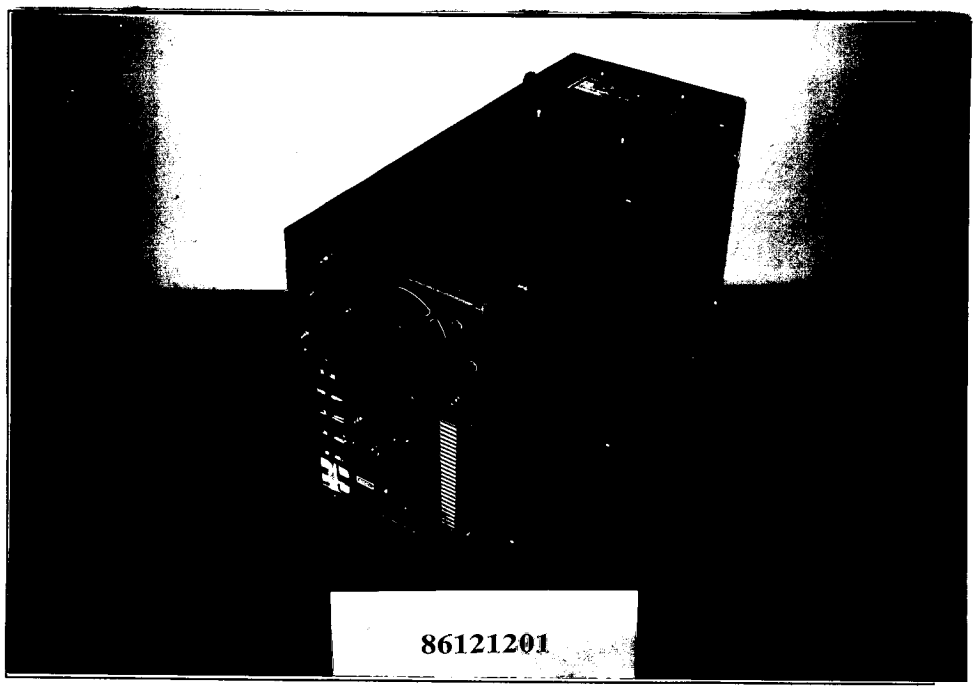
MAGNETIC TEST

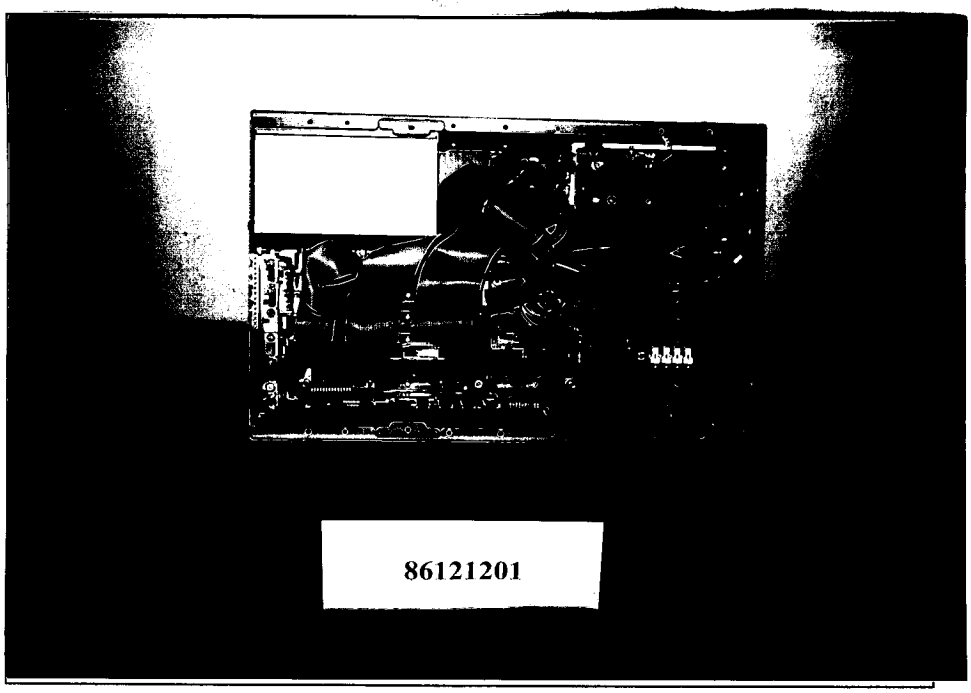


7. CONSTRUCTION PHOTOS OF EUT

MODEL: IPC-6606-200



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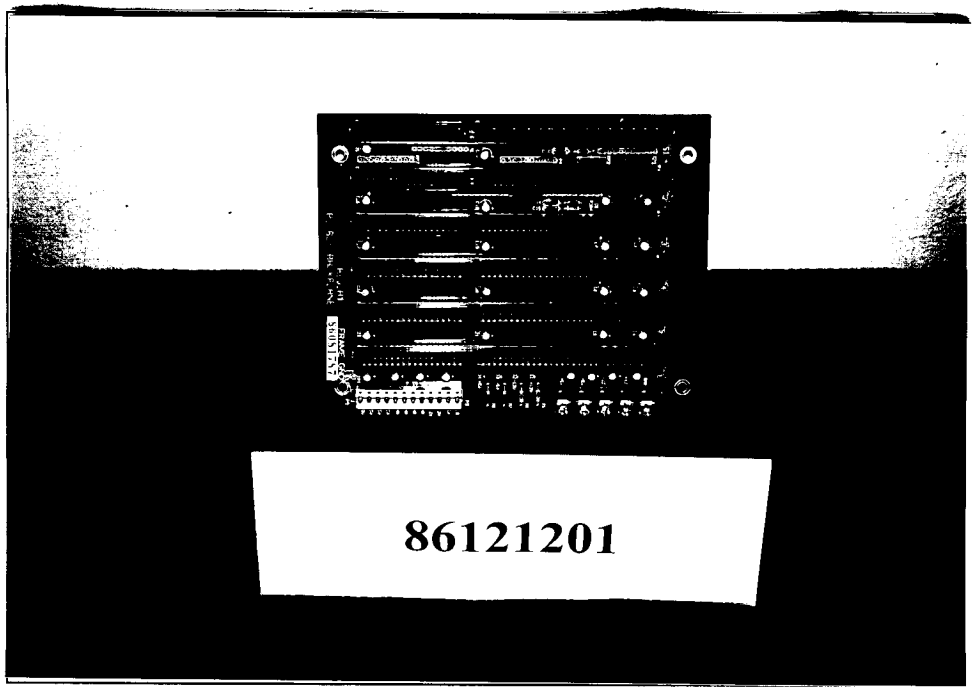
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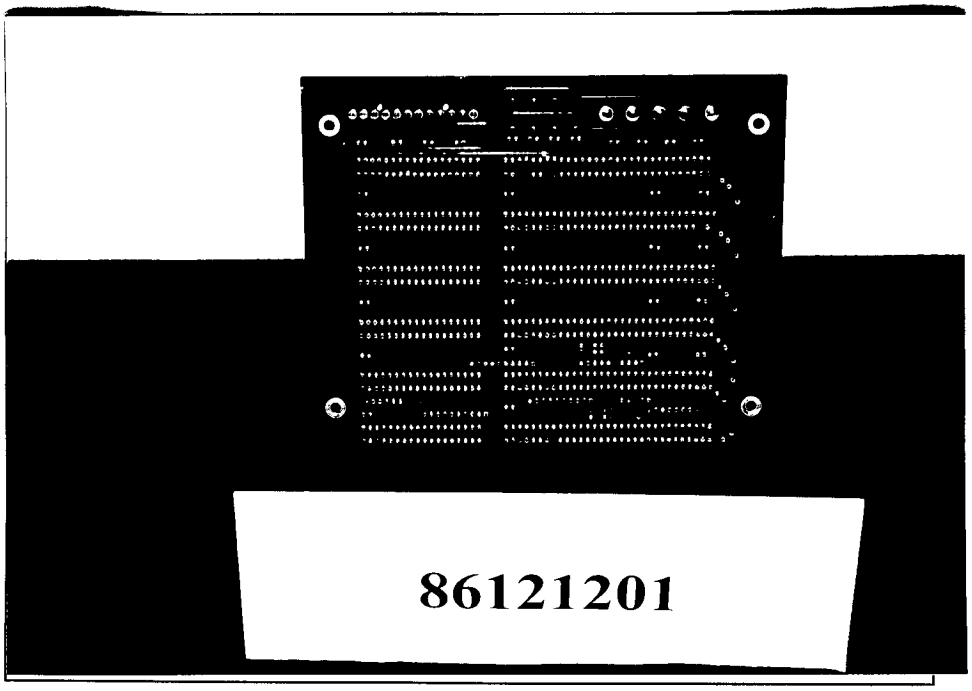
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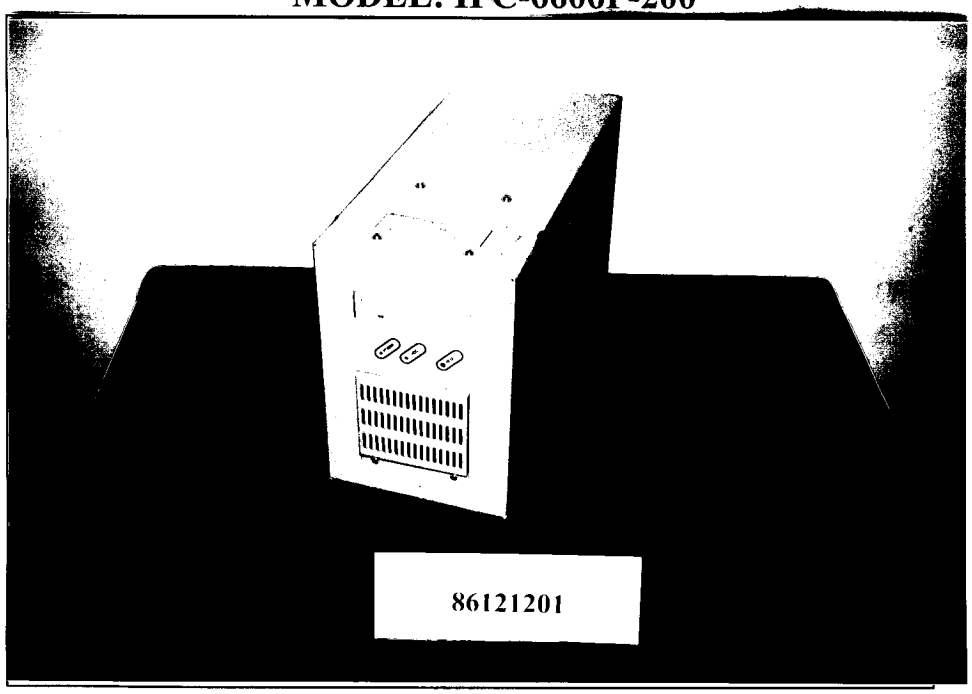
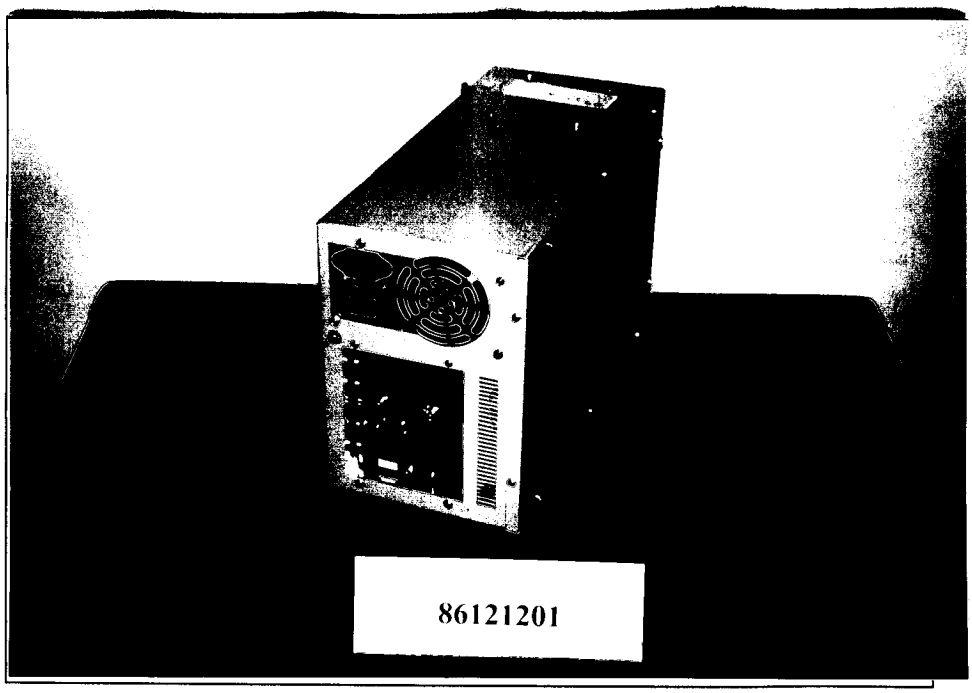
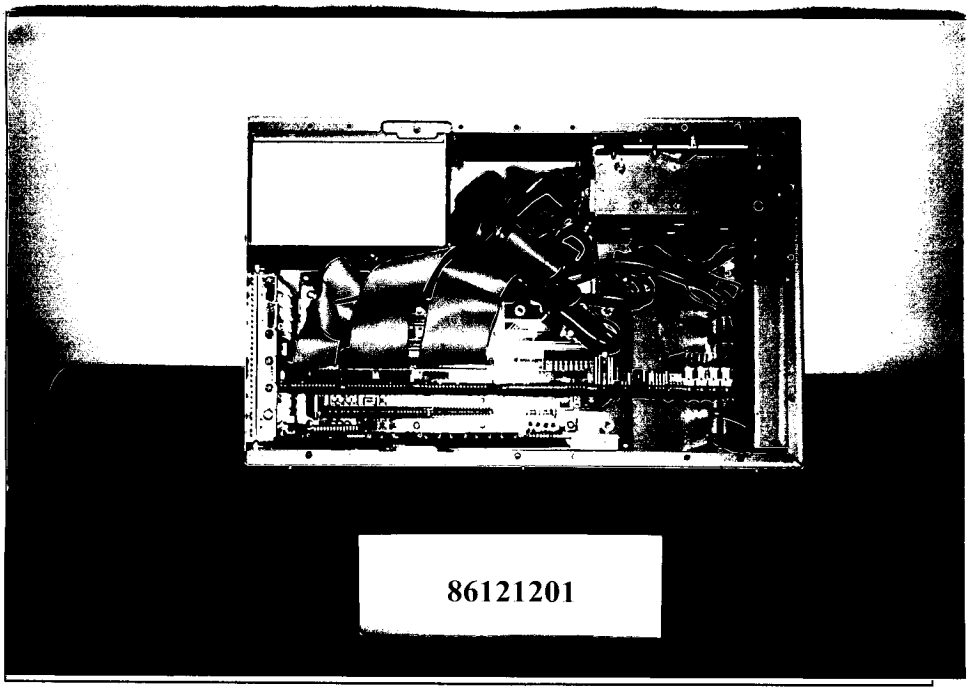
MODEL: IPC-6606P-200







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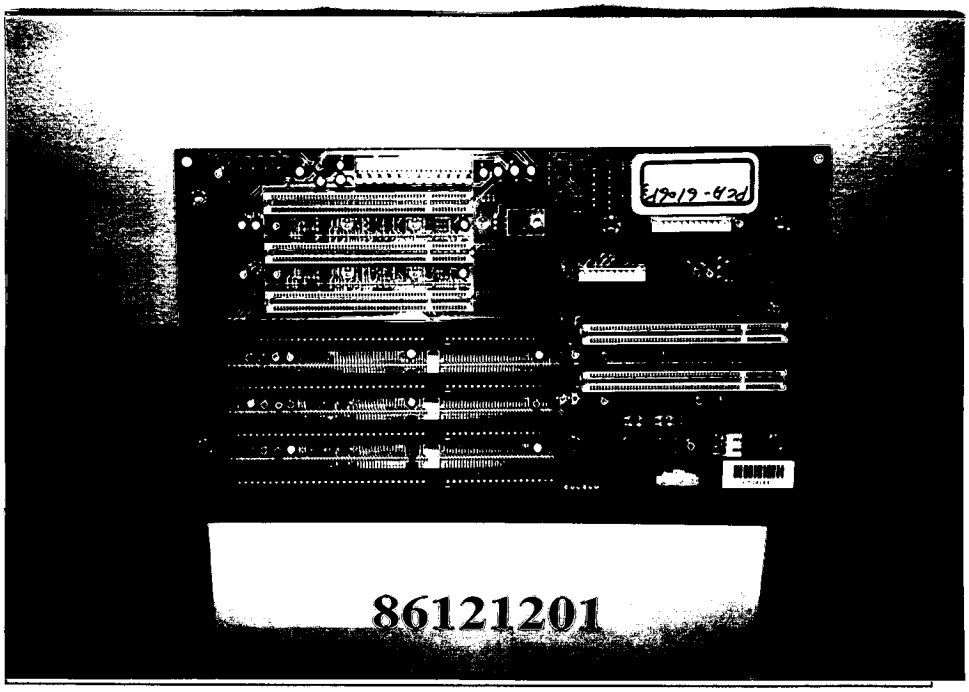
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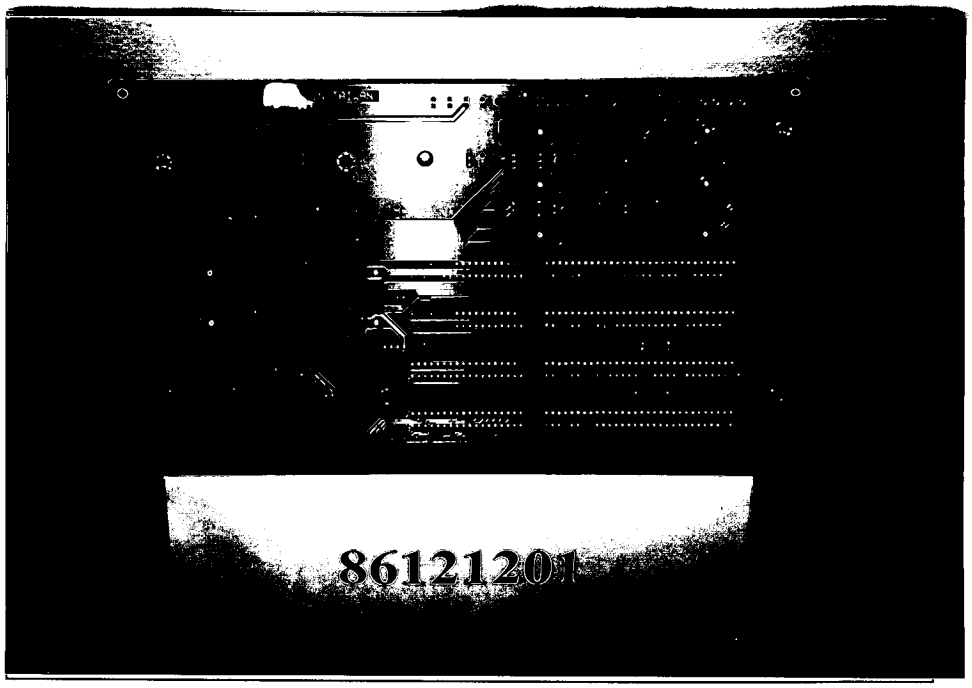
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