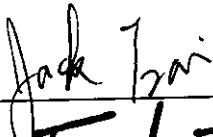
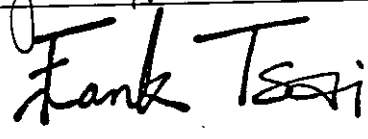


***EXHIBIT B***

***Test Report***

Report No.	P1115813	
Specifications	FCC Part 15.109 (g), CISPR 22	
Test Method	ANSI C63.4 1992	
Applicant address	10F-1, NO. 92, PAO-CHUNG RD., HSIN TIEN, TAIPEI HSIEN, TAIWAN, R.O.C.	
Applicant Items tested	PRO-NETS TECHNOLOGY CORPORATION	
Model No.	56K Fax/Data/Voice Modem Card	
Results	HPI56M (Sample # P11813)	
Sample received data	<b>Compliance</b> (As detailed within this report)	
Prepared by		project engineer
Authorized by		General Manager (Frank Tsai)
Issue date	FEB. 5, 1999	(month / day / year)
<b>Modifications</b>	<b>None</b>	
Tested by	Training Research Co., Ltd.	
Office at	2, Lane 194, Huan-Ho Street, Hsichih, Taipei Hsien 221, Taiwan	
Open site at	No. 5-3, Lane 21, Yen Chiu Yuan Rd., Sec. 4, Taipei, Taiwan	

**Conditions of issue:**

- (1) **This test report shall not be reproduced except in full, without written approval of TRC. And the test result contained within this report only relate to the sample submitted for testing.**
- (2) **This report must not be used by the client to claim product endorsement by NVLAP or any agency of U.S. Government.**

★ FCC ID : MTR – PNT088021

# Contents

## Chapter 1 Introduction

Description of EUT .....	3
Configuration of Test Setup .....	4
List of Support Equipment .....	6

## Chapter 2 Conducted Emission Test

Test Condition and Setup .....	8
Conducted Test Placement .....	9

## Chapter 3 Radiated Emission Test

Test Condition and Setup .....	10
Radiated Test Placement .....	11

## Appendix A :

Conducted test result .....	12
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## Appendix B :

Radiated test result .....	13
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## ***Chapter 1 Introduction***

### ***Description of EUT:***

This Fax/Data/Voice modem card is a data communication device. It is designed to install in the personal computer and makes your data equipment available to transmit and receive data via the public telephone network.

### ***Connections of EUT:***

- (1) Put the EUT into a personal computer's bus and screw it.
- (2) Line jack of EUT connects with a line cable to the PABX located remotely.
- (3) Phone jack of EUT connects with a telephone set.
- (4) SPK. jack of EUT connects a pair of speakers.
- (5) MIC. jack of EUT connects a microphone.

### ***Test method:***

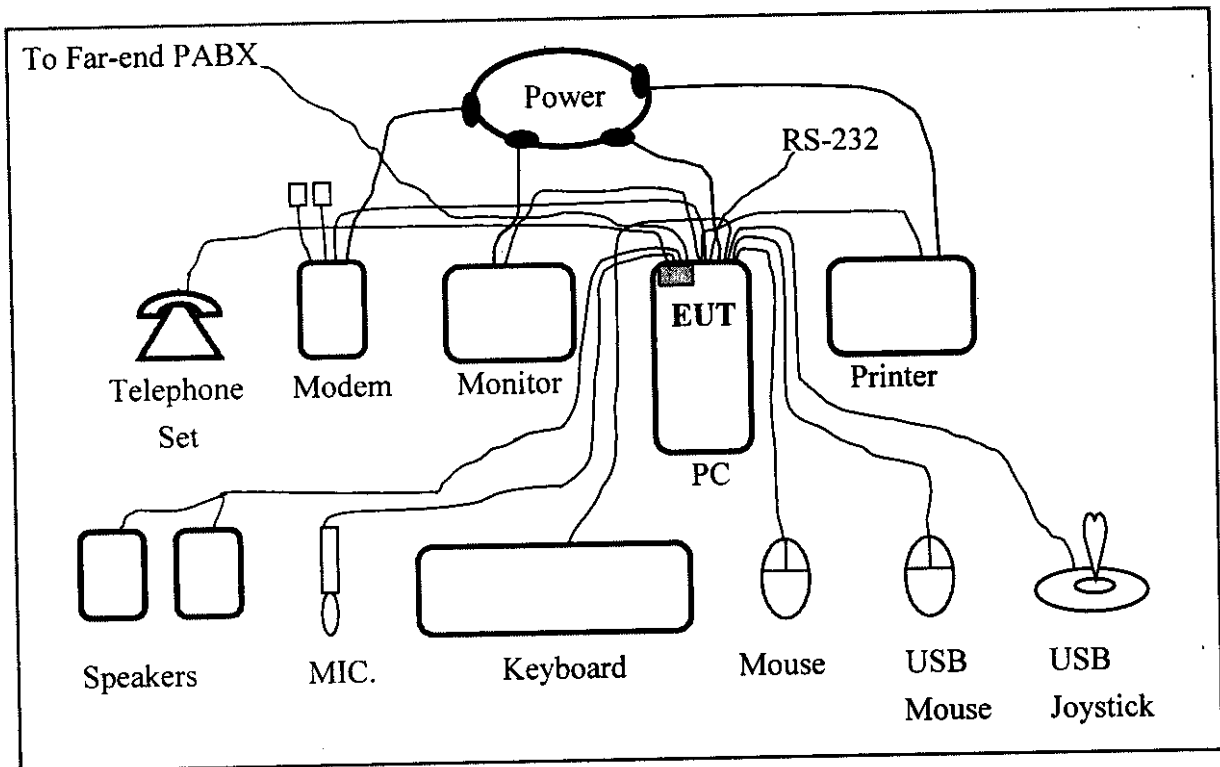
Pretest was found that the emission of operating mode is worse than standby mode. So, The final test is made at the operating mode.

During testing, the EUT was operated at "transmitting" and "receiving" mode simultaneously.

While testing, the transmitting rate was set to "AUTO" which means it transmitted the test file depending on the telephone line condition, normally the operating rate is the highest speed. The test placement as the photographs showed is the worst case emission placed. (If the emission is close to the ambient, the resolution BW and view resolution will be reduced and the data will be recorded by detection of maximum hold peak mode.)

***The testing configuration of test setup is showing in the next page.***

### Configuration of test setup



### Connections:

#### ***PC:***

- \*Serial A port --- 76 cm shielded cable connected to a external modem
  - \*Serial B port --- 76 cm shielded cable left unterminal
  - \*Printer port --- a printer with 1.2m length data cable
  - \*Keyboard port --- a keyboard with 1m length
  - \*Mouse port --- a mouse with 1m length
  - \*Monitor port --- a monitor with 0.7m long of data cable
  - \*USB ports --- a joystick with 1.5m long, shielded and no ferrite bead data cable
  - \*USB ports --- a mouse with 1.5m long, shielded and no ferrite bead data cable
- (Each port on PC is connected with suitable device)

#### ***EUT:***

- \*Line jack --- via 15 m RJ11C cable to PABX located remotely
- \*Phone jack --- via a 7 feet RJ11C cable to telephone set
- \*SPK. jack --- a pairs of speakers with 1.2 m long wire
- \*MIC. Jack --- a dynamic microphone with 3 m long wire

**List of support equipment****Conducted (Radiated) test:**

**PC** : **ACER Power 8000**  
Model No. : M11E/H71-X30-P4X  
Serial No. : TM02607  
FCC ID : N/A (Doc Approved)  
檢磁 : 3872A827  
Power type : 100 ~ 120VAC / 50 ~ 60Hz, 5A, Switching  
Power cord : Shielded, 1.8m long, Plastic, No ferrite core

**Monitor** : **ACER**  
Model No. : 1555  
Serial No. : 91716023058320117495C431  
FCC ID : JVP7254E  
檢磁 : 4872A030  
Power type : 110 ~ 240 VAC / 50 ~ 60 Hz, Switching  
Power cord : Shielded, 1.8m long, No ferrite core  
Data cable : Shielded, 1.34m long, with ferrite core

**Keyboard** : **ACER**  
Model No. : 6311-C4C  
Serial No. : 9132C0704C87L04379S00000  
FCC ID : N/A (Doc Approved)  
檢磁 : 4862A064  
Power type : By PC  
Data cable : Shielded, 1.8m long, with ferrite core

**Printer** : **EPSON**  
Model No. : P78PA (P70RA)  
Serial No. : 0EE0014030 (10010386)  
FCC ID : BKM9A8P70RA  
Power type : Linear  
Power cord : Non-shielded, 2m long, No ferrite core  
Data cable : Shielded, 1.84m long, No ferrite core (1.7m)

**Modem** : **ACEEX**  
Model No. : XDM-9624  
FCC ID : IFAXDM-9624  
Power type : Linear  
Power cord : Non-shielded, 1.9m long, No ferrite cord  
Data cable : RS232, Shielded, 1.2m long, No ferrite core  
RJ11C x 2, 7' long non-shielded, No ferrite core

**PABX** : **King Design**  
Model No. : KD8705-A  
Serial No. : GV101101186  
Power type : 110 VAC 50/60Hz  
Power cord : Non-shielded

**Mouse** : **ACER**  
Model No. : M-S42  
Serial No. : LZA83604858  
FCC ID : DZL211106  
檢磁 : 4862A094  
Power type : Powered by PC  
Power cord : Non-shielded, 1.85m long, No ferrite core

**USB Joystick** : **Padix**  
Model No. : QF-305U, QF-307U, QF-606U, QF-707U (Doc Approval)  
Power type : Powered by PC  
Power Cable : Shielded, 1.5M long, No ferrite bead data cable

**USB Mouse** : **Chic Technology Corporation**  
Model No. : CM-USB  
Serial No. : N/A  
FCC ID : IOWCM-USB  
Power type : Powered by PC  
Power Cable : Shielded, 1.5M long, Plastic hoods, No ferrite bead

**Microphone** : **KOKA**  
Model : DM-515  
Power type : Dynamic  
Data cable : Non-shielded, 3m

**Speaker** : **OZAKI (J-S)**  
Model : EM22MPC (J-153)  
Data cable : Non-shielded, 1.2 m  
Power type : Powered by PC  
Power Cable : Non-shielded, 1.5M long, No ferrite bead data cable

**Telephone** : **HUSTON**  
Model No. : 4782  
Serial No. : N/A  
Power type : Powered by PSTN  
Data Cable : Non-shielded, 7 feet long



## **Chapter 2 Conducted emission test**

### **Test condition and setup:**

All the equipment is placed and setup according to the ANSI C63.4 - 1992. The EUT is assembled on a wooden table which is 80 cm high, is placed 40 cm from the back-wall which is a vertical conducting plane. One LISN is for EUT, the other LISN is for support equipment. They are all placed on the conductive ground. The EUT's LISN connect a line switch box for selecting L1 or L2, then connect to a preamplifier and spectrum.

The spectrum scans from 150KHz to 30MHz. Conducted emission levels are detected at max. peak mode. But if the max. peak mode failed or over average limit, it will be measured by average detection mode.

While testing, there is the worst-emission plot printed at peak detection mode, and there are more than 6 highest emissions relative to limit recorded. The plot is kept as the original data, not included in test report.

### **List of test Instrument:**

Instrument Name	Model No.	Brand	Serial No.	Calibration Date	
				Last time	Next time
Spectrum analyzer	8591EM	H P	3619A00821	10/29/98	10/29/99
LISN (EUT)	3825/2	EMCO	9411-2284	05/15/98	05/15/99
LISN (Support E.)	3825/2	EMCO	9210-2007	05/15/98	05/15/99
Preamplifier	8447F	H P	2944A03706	05/13/98	05/15/99
Line switch box	AC1-003	TRC	-----	05/15/98	05/15/99
Line selector	AC1-002	TRC	-----	05/15/98	05/15/99

The level of confidence of 95% , the uncertainty of measurement of conducted emission is  $\pm 2.4$  dB.

**Test Result: Pass (Appendix A)**

### **Chapter 3 Radiated emission test**

**Test condition and setup:**

**Pretest :** Prior to the final test (OATS test), the EUT is placed in a shielded enclosure, and scan from 30MHz to 1GHz. This is done to ensure the radiation exactly emits from the EUT.

**Final test:** Final radiation measurements is made on a **10 - meter**, open-field test site. The EUT is placed on a nonconductive table which is 0.8 m height, the top surface is 1.0 x 1.5 meter. All the placement is according to ANSI C63.4 - 1992.

The spectrum is examined from 30 MHz to 1000 MHz measured by HP spectrum.

The EMCO whole range Antenna is used to measure frequency from 30 MHz to 1GHz. The final test is used the spectrum analyzer.

Measure more than six top marked frequencies generated from pretest by computer step by step at each frequency. The EUT is rotated 360 degrees, and antenna is raised and lowered from 1 to 4 meters to find the maximum emission levels. The antenna is used with both horizontal and vertical polarization.

Appropriated preamplifier which is made by TRC is used for improving sensitivity and precautions is taken to avoid overloading. The spectrum analyzer's 6dB bandwidth is set to 120 KHz, and the EUT is measured at quasi-peak mode.

If the emission is close to the frequency band of ambient, the data will be rechecked by the tester and the corrected data will be written in the test data sheet. If the emission is just within the ambient, the data from shield room will be taken as the final data.

**List of test Instrument:**

Instrument Name	Model No.	Brand	Serial No.	Calibration Date	
				Last	Next
Spectrum analyzer	8568B	H P	3004A18617	05/15/98	05/15/99
Quasi-peak Adapter	85650A	H P	2521A00984	05/15/98	05/15/99
RF Pre-selector	85685A	H P	2947A01011	05/15/98	05/15/99
Antenna (30M-2G Hz)	3142	EMCO	1296	06/10/98	06/10/99
Open test side (Antenna, Amplify, cable calibrated together)				05/15/98	05/15/99

The level of confidence of 95%, the uncertainty of measurement of radiated emission is  $\pm 4.96$  dB.

**Test Result: Pass (Appendix B)**

## Appendix A

### Conducted Emission Test Result:

Testing room : Temperature : 21 ° C

Humidity : 65 % RH

#### Line 1

Frequency (KHz)	Amplitude (dBuV)	Limit (dBuV/m)	Margin (dB)
167.00	49.56	55.51	-5.95
197.00	46.18	54.66	-8.48
297.00	46.89	51.80	-4.91
427.00	39.11	48.09	-8.98
496.00	37.89	46.11	-8.22
560.00	36.69	46.00	-9.31
692.00	35.34	46.00	-10.66
1084.00	37.01	46.00	-8.99
1156.00	38.06	46.00	-7.94
1291.00	36.07	46.00	-9.93

#### Line 2

Frequency (KHz)	Amplitude (dBuV)	Limit (dBuV/m)	Margin (dB)
158.00	47.98	55.77	-7.79
165.00	49.35	55.57	-6.22
196.00	46.72	54.69	-7.97
297.00	46.03	51.80	-5.77
430.00	37.93	48.00	-10.07
496.00	38.24	46.11	-7.87
560.00	35.05	46.00	-10.95
1084.00	36.89	46.00	-9.11
1120.00	37.55	46.00	-8.45
1184.00	38.62	46.00	-7.38

\* The reading amplitudes are all under average limit.

## Appendix B

### Radiated Emission Test Result :(Horizontal)

Test Conditions:

Testing room : Temperature : 24 ° C

Humidity : 67 % RH

Testing site : Temperature : 22 ° C

Humidity : 82 % RH

Frequency	Reading Amplitude	Ant. Height	Table	Correction Factors	Corrected Amplitude	Class B Limit	Margin
MHz	dBuV	m	degree	dB/m	dBuV/m	dBuV/m	dB

135.480	42.10	4.00	220	-15.75	26.35	30.00	-3.65
165.400	39.80	1.00	23	-13.83	25.97	30.00	-4.03
216.070	34.20	4.00	113	-11.59	22.61	30.00	-7.39
220.150	36.90	4.00	320	-11.41	25.49	30.00	-4.51
304.830	32.40	4.00	199	-7.81	24.59	37.00	-12.41
***							

Note:

1. Margin = Amplitude - limit, *if margin is minus means under limit.*
  2. Corrected Amplitude = Reading Amplitude + Correction Factors
  3. Correction factor = Antenna factor + ( Cable Loss - Amplitude gain)
- (For example : 30MHz correction factor = 15.5 + (-15.26) = 0.24 dB/m)

***Radiated Emission Test Result: (Vertical)***

Frequency	Reading Amplitude	Ant. Height	Table	Correction Factors	Corrected Amplitude	Class B Limit	Margin
MHz	dBuV	m	degree	dB/m	dBuV/m	dBuV/m	dB

67.740	39.00	1.00	210	-17.10	21.90	30.00	-8.10
83.250	41.80	4.00	162	-16.67	25.13	30.00	-4.87
85.870	40.00	1.00	57	-16.49	23.51	30.00	-6.49
89.490	43.40	4.00	346	-16.24	27.16	30.00	-2.84
135.480	44.70	4.00	223	-15.75	28.95	30.00	-1.05
180.600	38.50	1.00	192	-13.06	25.44	30.00	-4.56
200.910	35.50	1.00	29	-12.26	23.24	30.00	-6.76
204.600	33.90	1.00	342	-12.10	21.80	30.00	-8.20
208.460	37.70	1.00	343	-11.93	25.77	30.00	-4.23
***							