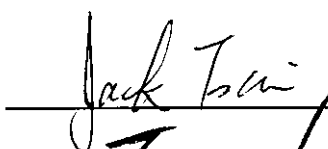
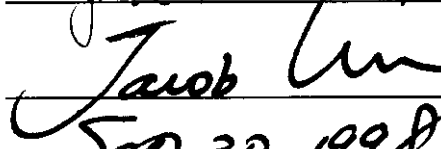
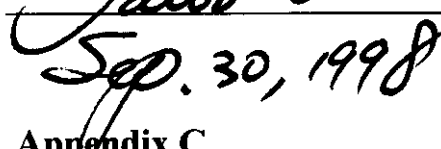


EXHIBIT B

Test Report

Report No.	S4515813
Specifications Test Method	FCC Part 15.109(g), CISPR 22 Class B, Certification. ANSI C63.4 1992
Applicant Address	18F-6, NO.1, Bao Sheng Rd., Yung Ho City, Taipei Hsien, Taiwan, R.O.C.
Applicant Items tested Model No.	Super Gate Technology Co., Ltd. Keyboard SG-3000 (Sample # S45813)
Results Sample received date	As detailed within this report 09/14/98 (month / day / year)
Prepared by	 project engineer
Authorized by	 Vice General Manager (Jacob Lin)
Issue date	 (month / day / year)
Modifications	Appendix C
Tested by	Training Research Co., Ltd.
Office at	2F, No. 571, Chung Hsiao E. Road, Sec.7, Taipei, 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: KU6SG-3000

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Chapter 1 Introduction

Description of EUT:

The keyboard set are fully compatible with IBM PC or equally PC.

Connections of EUT:

Connect to the keyboard Port of PC.

Test method:

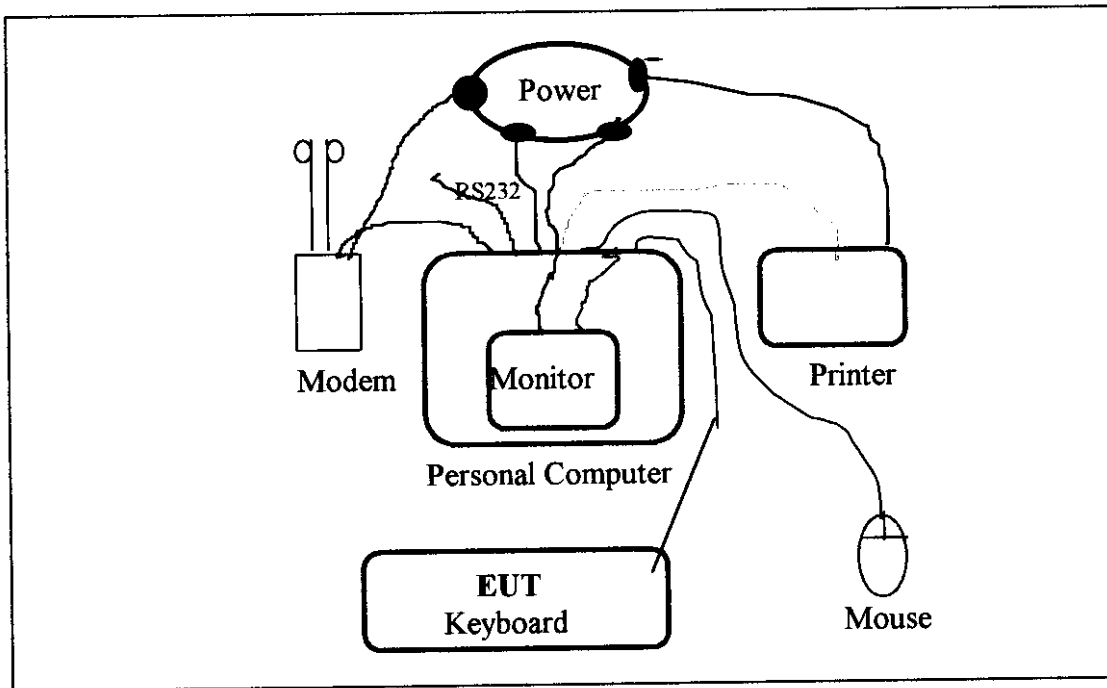
All measurements contained in this report were performed according to the techniques described in Measurement procedure ANSI C63.4 – 1992.

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 depressed one key continuously. This was done in order to ensure that maximum emission levels were attained. 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 --- a modem
 - *Serial B port --- a 76 cm shielded RS232 cable
 - *Printer port --- a printer
 - *Keyboard port --- EUT
 - *Mouse port --- a mouse
 - *Monitor port --- a monitor
- (Each port on PC is connected with suitable device)

EUT:

- *Cable --- Shielded, 175 cm long, metal hood, ferrite core.

List of support equipment

Conducted (Radiated) test:

PC : HP
Model : Vectra VE2
Serial No. : SG61803151 (SG61802786)
FCC ID : HCJVECTRAVL5
Power type : AC 230 VAC, switching
Power cord : non-Shielded, 1.7m long, Plastic, no ferrite core
Monitor : HP
Model No. : D2084 (D2813)
Serial No. : KR4397004 (TW63803597)
FCC ID : CSYSC-428VSP (A3KM043)
Power type : 230VAC, Switching
Power cord : Non-Shielded, 3m long, no ferrite core
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 9624 External Fax / Modem
Model No. : XDM=9624
Serial No. : N / A
FCC ID : IFAXDM-9624
Power Type : Linear
Power Cord : Non-shielded, 5.5' long, Plastic hoods, and No ferrite bead
Data Cable : RS-232 → Shielded, 3' long, Metal hoods , No bead
RJ-11C → Non-shielded, 7' long, Plastic hoods, No bead
Mouse : Hewlett Packard Mouse
Model No. : C3751B
Serial No. : LCA52707170
FCC ID : DZL210582
Power type : Powered by PC
Power cable : Non – Shielded. 5.5' long, Plastic hoods, No ferrite bead

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.	<u>Calibration Date</u>	
				Last time	Next time
Spectrum analyzer	8591EM	H P	3619A00821	10/06/97	10/06/98
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 ± 2.4 dB.

Test Result: N/A

Appendix A

Conducted Emission Test Result:

Testing room: Temperature : 24 ° C

Humidity : 58 % RH

Line 1

Frequency (KHz)	Amplitude (dBuV)	Limit (dBuV/m)	Margin (dB)
222.00	44.04	53.94	-9.90
335.00	41.95	50.71	-8.76
444.00	40.34	47.60	-7.26
671.00	39.12	46.00	-6.88
891.00	36.41	46.00	-9.59
1003.00	35.55	46.00	-10.45
1120.00	34.82	46.00	-11.18
1224.00	33.83	46.00	-12.17
1564.00	33.58	46.00	-12.42
16480.00	37.51	50.00	-12.49

Line 2

Frequency (KHz)	Amplitude (dBuV)	Limit (dBuV)	Margin (dB)
446.00	38.03	47.54	-9.51
1021.00	41.06	46.00	-4.94
1099.00	42.90	46.00	-3.10
1224.00	33.67	46.00	-12.33
1340.00	35.65	46.00	-10.35
1780.00	33.93	46.00	-12.07
2000.00	33.39	46.00	-12.61
2560.00	33.46	46.00	-12.54
2890.00	33.76	46.00	-12.24
4580.00	34.63	46.00	-11.37

* The reading amplitudes are all under average limit.

Appendix B

Radiated Emission Test Result: (Horizontal)

Test Conditions:

Testing room : Temperature : 28 ° C

Humidity : 70 % RH

Testing site : Temperature : 34 ° C

Humidity : 85 % 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

54.493	40.78	3.02	61	-23.33	17.45	30.00	-12.55
58.703	44.39	3.02	103	-24.34	20.05	30.00	-9.95
62.818	39.49	3.02	73	-24.82	14.67	30.00	-15.33
66.970	34.94	3.02	260	-25.07	9.87	30.00	-20.13
71.278	48.67	3.02	60	-25.04	23.63	30.00	-6.37
75.625	48.34	3.02	257	-25.09	23.25	30.00	-6.75

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

54.493	42.14	1.00	93	-23.33	18.81	30.00	-11.19
58.703	43.77	3.02	178	-24.34	19.43	30.00	-10.57
62.818	39.31	3.02	34	-24.82	14.49	30.00	-15.51
66.970	37.41	1.00	106	-25.07	12.34	30.00	-17.66
71.278	45.47	3.02	21	-25.04	20.43	30.00	-9.57
75.625	50.89	3.02	315	-25.09	25.80	30.00	-4.20

Test Report

Appendix C

1. The cable of EUT connected through ferrite core (MFG.: Crown Ferrite Enterprise Co., Type No.: L52RH 12x5.5x20mm). The ferrite core nearly connector of PCB.

Statement of Applicant:

I acknowledge that the modifications made to the EUT for compliance during testing will be incorporated into mass production units.

Applicant: Super Gate Technology Co., Ltd.

By: Tony Huang

Signature

Mr. Tony Huang

Printed

Date: 29/9/1998

Title: R & D Manager