



June 23, 2009

Giant Telecom Limited
7/F., Elite Industrial Building,
135-137 Hoi Bun Road, Kwun Tong,
Kowloon, Hong Kong.

Dear Mark Yuen:

Enclosed you will find your file copy of a Part 15 report (FCC ID: RAQIV730B).

For your reference, TCB will normally take another 15-20 days for reviewing the report. Approval will then be granted when no query is sorted.

Please contact me if you have any questions regarding the enclosed material.

Sincerely,

A handwritten signature in black ink, appearing to read "Shawn Xing", with a stylized flourish extending from the end.

Shawn Xing
Assistant Manager

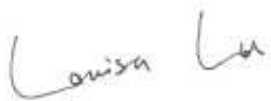
Enclosure

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch

6F, D Block, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China
Tel: (86 755) 8601 6288 Fax: (86 755) 8601 6751 Website: www.china.intertek-etlsemko.com

Giant Telecom Limited

Application
For
Certification
(FCC ID: RAQIV730B)
Computer Peripheral



SZ09020274-2

Louisa Lu

June 23, 2009

- The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
- This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.
- For Terms And Conditions of the services, it can be provided upon request.
- The evaluation data of the report will be kept for 3 years from the date of issuance.

TRF no.: FCC 15C_PC_a

Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch

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INTERTEK TESTING SERVICES

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INTERTEK TESTING SERVICES

MEASUREMENT / TECHNICAL REPORT

Giant Telecom Limited – MODEL: IT7350
ADDITIONAL MODEL: IT7340

FCC ID: RAQIV730B

June 23, 2009

This report concerns (check one:) Original Grant ☒ Class II Change ☐

Equipment Type: Class B Computing Device Peripheral (example: computer, printer, modem, etc.)

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes ☐ No ☒

If yes, defer until: _____
date

Company Name agrees to notify the Commission by: _____
date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes ☐ No ☒

If no, assumed Part 15, Subpart C for intentional radiator – the new 47 CFR [09-20-07 Edition] provision.

Report prepared by:



Shawn Xing
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Nanshan District, Shenzhen, P. R. China
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INTERTEK TESTING SERVICES

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INTERTEK TESTING SERVICES

List of attached file

Exhibit Type	File Description	Filename
Test Report	Test Report	report.pdf
Test Setup Photo	Radiated Emission	radiated photos.pdf
Test Setup Photo	Conducted Emission	conducted photos.pdf
External Photo	External Photo	external photos.pdf
Internal Photo	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
ID Label / Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Cover Letter	Letter of Agency	agency.pdf
Cover Letter	Confidentiality Request	request.pdf
Equipment List	Test Equipment List	equipment list.pdf

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EXHIBIT 1

GENERAL DESCRIPTION

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1.0 **General Description**

1.1 Product Description

The Equipment Under Test (EUT) is a Digital Photo Frame with WiFi operation at 2.412-2.462GHz, 11 channels selection. The EUT is powered by 3.7Vdc ($1 \times 3.7V$ "2100mAh 3.7V" Lithium-ion rechargeable battery) and/or AC/DC adaptor 100-240VAC 50/60Hz input, 5.0VDC 3A output, model: ZDA050300US. The EUT can support playback of digital multimedia contents, such as photo, MP3 and video and can download data from PC, it also has integrated WiFi function.

For more detailed features description, please refer to the user's manual.

The Model: IT7340 is the same as the tested Model: IT7350 in hardware and software aspect except that IT7350 has motion sensor but IT7340 doesn't has it which we have consider it during testing. The only differences are the packing accessories and model no. for trading purpose.

1.2 Related Submittal(s) Grants

This is an application for certification of a computer peripheral. The Wi-Fi function is subjected to certification and is in the process of being filed at the same time.

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1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2003). Radiated emission measurement was performed in semi-anechoic chamber and conducted emission measurement was performed in shield room. For radiated emission measurement, preliminary scans were performed in the semi-anechoic chamber only to determine the worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.

1.4 Test Facility

The Semi-Anechoic chamber and shield room used to collect the radiated data and conducted data is **Interterk Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, Block D, Huahan Building, Langshan Road, Nanshan District, Shenzhen, P. R. China. This test facility and site measurement data have been fully placed on file with the FCC.

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EXHIBIT 2

SYSTEM TEST CONFIGURATION

INTERTEK TESTING SERVICES

2.0 System Test Configuration

2.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.4 (2003).

The EUT was powered by 3.7Vdc ($1 \times 3.7V$ 2100mAh 3.7V Lithium-ion rechargeable battery) and/or AC/DC adaptor 100-240VAC 50/60Hz input, 5.0VDC 3A output, model: ZDA050300US during test. Only the worst case data were recorded in this test report.

For maximizing emissions, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. The step by step procedure for maximizing emissions led to the data reported in Exhibit 3.0.

The rear of unit shall be flushed with the rear of the table.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was placed on turntable, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

The frequency range from 30MHz to 2GHz was searched for spurious emissions from the device. Only those emissions reported were detected. All other emissions were at least 20 dB below the applicable limits.

2.2 EUT Exercising Software

There was no special software to exercise the device.

2.3 Special Accessories

Adaptor DC cable with a ferrite ring.

2.4 Equipment Modification

Any modifications installed previous to testing by Giant Telecom Limited will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services.

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2.5 Measurement Uncertainty

When determining the test conclusion, the Measurement Uncertainty of test has been considered.

2.6 Support Equipment List and Description

This product was tested in the following configuration:

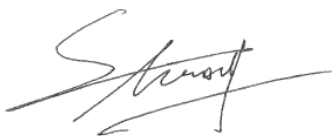
Refer List:

Description	Manufacturer	Model No.
Test PC	Lenovo	276811C
Adaptor	Shenzhen Ya Da	92P1103
Hard Disk	Smart.drive	HD3-SU2FW
USB Cable 1	Smart.drive	Length 155cm
1394 Cable	Smart.drive	Length 180cm
SD Card	Sandisk	1G (BB0723011986D)
CF Card	Kingston	CF/2GB
Flash Disk	Sony Eriession	1G (SA-U007)
Earphone	---	Length 150cm
USB Cable 2	---	Length 85cm

All the items listed under section 2.0 of this report are

Confirmed by:

Shawn Xing
Assistant Manager
Intertek Testing Services Shenzhen Ltd.
Kejiyuan Branch
Agent for Giant Telecom Limited



Signature

June 23, 2009

Date

INTERTEK TESTING SERVICES

EXHIBIT 3

EMISSION RESULTS

INTERTEK TESTING SERVICES

3.0 **Emission Results**

Data is included worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

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3.1 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

$$FS = RA + AF + CF - AG + PD + AV$$

where FS = Field Strength in dB μ V/m

RA = Receiver Amplitude (including preamplifier) in dB μ V

CF = Cable Attenuation Factor in dB

AF = Antenna Factor in dB

AG = Amplifier Gain in dB

PD = Pulse Desensitization in dB

AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

$$FS = RA + AF + CF - AG + PD + AV$$

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3.1 Field Strength Calculation (cont'd)

Example

Assume a receiver reading of 62.0dB μ V is obtained. The antenna factor of 7.4dB and cable factor of 1.6dB is added. The amplifier gain of 29dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0dB, and the resultant average factor was -10dB. The net field strength for comparison to the appropriate emission limit is 32dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$RA = 62.0\text{dB}\mu\text{V}$$

$$AF = 7.4\text{dB}$$

$$CF = 1.6\text{dB}$$

$$AG = 29.0\text{dB}$$

$$PD = 0\text{dB}$$

$$AV = -10\text{dB}$$

$$FS = 62 + 7.4 + 1.6 - 29 + 0 + (-10) = 32\text{dB}\mu\text{V/m}$$

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(32\text{dB}\mu\text{V/m})/20] = 39.8\mu\text{V/m}$$

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3.2 Radiated Emission Configuration Photograph

Worst Case Radiated Emission
At
215.925MHz

For electronic filing, the worst case radiated emission configuration photograph is saved with filename: radiated photos.pdf.

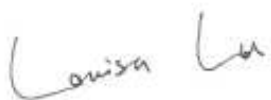
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3.3 Radiated Emission Data

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgement: Passed by 3.2dB margin

TEST PERSONNEL:



Signature

Louisa Lu, Engineer

Typed / Printed Name

June 23, 2009

Date

INTERTEK TESTING SERVICES

Company: Giant Telecom Limited

Date of Test: May 18, 2009

Model: IT7350

Worst Case Operating Mode: Download (Powered by Adaptor)

Table 1

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
Vertical	32.720	37.6	20.0	17.3	34.9	40.0	-5.1
Horizontal	203.934	49.4	20.0	10.2	39.6	43.5	-3.9
Horizontal	215.925	49.3	20.0	11.0	40.3	43.5	-3.2
Horizontal	227.915	44.9	20.0	11.8	36.7	46.0	-9.3
Horizontal	239.997	47.1	20.0	12.2	39.3	46.0	-6.7
Horizontal	252.010	43.1	20.0	12.4	35.5	46.0	-10.5
Horizontal	1209.314	51.5	36.9	24.7	39.3	54.0	-14.7

- NOTES:
1. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
 2. Negative value in the margin column shows emission below limit.
 3. Horn antenna used for the emission over 1000MHz.
 4. All emissions below 1000MHz are below the QP limit and all emissions above 1000MHz are below the AV limit.
 5. QP detector for frequency from 30MHz to 1GHz and PK detector for frequency above 1GHz.

Test Engineer: Louisa Lu

INTERTEK TESTING SERVICES

3.4 Conducted Emission Configuration Photograph

Worst Case Line-Conducted Configuration
at
0.206 MHz

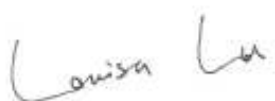
For electronic filing, the worst case conducted emission configuration photograph is saved with filename: conducted photos.pdf.

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3.5 Conducted Emission Data

Judgement: Passed by 13.3 dB margin

TEST PERSONNEL:



Signature

Louisa Lu, Engineer
Typed/Printed Name

June 23, 2009
Date

INTERTEK TESTING SERVICES

Company: Giant Telecom Limited

Date of Test: May 18, 2009

Model: IT7350

Worst Case Operating Mode: Download (Powered by Adaptor)

Table 2

Conducted Emissions

Live Line Data

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(μ V)	Permitted limit dB(μ V)	Disturbance level dB(μ V)	Permitted limit dB(μ V)
0.206	50.1	63.4	39.3	53.4
0.274	37.9	61.0	28.1	51.0
0.410	35.7	57.6	28.7	47.6

Neutral Line Data

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(μ V)	Permitted limit dB(μ V)	Disturbance level dB(μ V)	Permitted limit dB(μ V)
0.204	45.5	63.4	36.3	53.4
0.334	35.8	59.4	29.7	49.4
1.050	35.8	56.0	25.5	46.0

Test Engineer: Louisa Lu

INTERTEK TESTING SERVICES

Company: Giant Telecom Limited

Date of Test: June 23, 2009

Model: IT7350

Worst Case Operating Mode: Download (Powered by PC power cord)

Table 3

Conducted Emissions

Live Line Data

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(μ V)	Permitted limit dB(μ V)	Disturbance level dB(μ V)	Permitted limit dB(μ V)
0.150	50.9	66.0	29.9	56.0
0.298	40.9	60.3	33.3	50.3
0.397	44.5	57.9	33.7	47.9

Neutral Line Data

Frequency (MHz)	Quasi-Peak		Average	
	Disturbance level dB(μ V)	Permitted limit dB(μ V)	Disturbance level dB(μ V)	Permitted limit dB(μ V)
0.150	52.0	66.0	30.8	56.0
0.198	47.1	63.7	39.9	53.7
0.290	41.0	60.5	31.6	50.5

Test Engineer: Louisa Lu

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EXHIBIT 4

EQUIPMENT PHOTOGRAPHS

INTERTEK TESTING SERVICES

4.0 **Equipment Photographs**

For electronic filing, photographs of the tested EUT are saved with filename: external photos.pdf and internal photos.pdf.

EXHIBIT 5
PRODUCT LABELLING

INTERTEK TESTING SERVICES

5.0 **Product Labelling**

For electronics filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

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EXHIBIT 6

TECHNICAL SPECIFICATIONS

INTERTEK TESTING SERVICES

6.0 **Technical Specifications**

For electronic filing, the block diagram of the tested EUT is saved with filename: block.pdf.

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EXHIBIT 7

INSTRUCTION MANUAL

INTERTEK TESTING SERVICES

7.0 **Instruction Manual**

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold / leased in the United States.

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EXHIBIT 8

MISCELLANEOUS INFORMATION

INTERTEK TESTING SERVICES

8.0 **Miscellaneous Information**

This miscellaneous information includes emission measuring procedure.

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8.1 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services in the measurements of computer peripheral operating under Part 15, Subpart B rules.

The test set-up and procedures described below are designed to meet the requirements of ANSI C63.4 – 2003.

The computer peripheral equipment under test (EUT) is placed on a wooden turntable which is four feet in diameter and approximately one meter in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The antenna height and polarization are varied during the testing to search for maximum signal levels. The height of the antenna is varied from one to four meters.

Detector function for radiated emissions from the frequency band 30MHz to 1GHz is in QP mode and RBW setting is 120kHz. Detector function for radiated emissions for frequency band above 1GHz, both peak and AV detectors shall be used to measure the emissions and the peak limit is 20dB above the maximum permitted average emission limit and RBW setting is 1MHz. Detector function for conducted emissions are in QP & AV mode and IFBW setting is 9kHz from the frequency band 150kHz to 30MHz.

For radiated emission, the frequency range scanned is 30MHz to 2GHz. For line-conducted emissions, the range scanned is 150kHz to 30MHz.

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8.1 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

Conducted measurements are made as described in ANSI C63.4 – 2003.

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EXHIBIT 9

CONFIDENTIALITY REQUEST

INTERTEK TESTING SERVICES

9.0 **Confidentiality Request**

The applicant would like to have confidential protection of the following documents:

- Block Diagram
- Circuit Diagram
- Operational Description

For electronic filing, the request letter is saved with filename: request.pdf.

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EXHIBIT 10

TEST EQUIPMENT LIST

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10.0 **Test Equipment List**

For electronic filing, the test equipment list of the tested EUT is saved with filename: equipment list.pdf.