Nov 1, 2010

SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.
NO.1 Shuoying Rd., Hebei Industry Area,
Dalang, Longhua Town, Baoan, Shenzhen, China

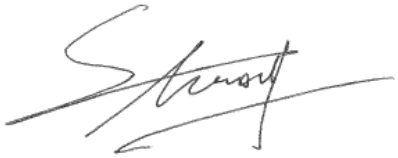
Dear Tony Pan,

Enclosed you will find your file copy of a Part 15 report (FCC ID: XJN-DV3100).

For your reference, TCB will normally take another one week 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,



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

SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.

Application
For
Certification
(FCC ID: XJN-DV3100)

Computer Peripheral

SZ10100013-1
Billy Li
Nov 1, 2010

TRF No.: FCC 15C_PC_a
FCC ID: XJN-DV3100

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LIST OF EXHIBITS

MEASUREMENT / TECHNICAL REPORT

SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD. – MODEL: DV3100

FCC ID: XJN-DV3100

Nov 1, 2010

This report concerns (check one:) Original Grant ___X___ Class II Change _____

Equipment Type: JBP-Class B Computing Device Peripheral

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes _____ No ___X

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 ___X

If no, assumed Part 15, Subpart C for intentional radiator – the new 47 CFR [10-1-09 Edition] provision.

Report prepared by:

Shawn Xing
Intertek Testing Services Shenzhen Ltd.
Kejiyuan Branch
6F, D Block, Huahan Building, Langshan Road
Nanshan District, Shenzhen, P. R. China
Phone: (86 755) 8601 6288
Fax: (86 755) 8601 6751

Table of Contents

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

EXHIBIT 1

GENERAL DESCRIPTION

1.0 General Description

1.1 Product Description

The Equipment Under Test (EUT) is a Digital Camera. The device can be used to transfer data connecting PC Directly or via USB extended cable by USB port (with SD Card & Internal flash). The EUT is powered by D.C. 3.7V rechargeable battery.

1.2 Related Submittal(s) Grants

This is an application for certification of a computer peripheral.

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 shielding room used to collect the radiated data and conducted data are **Interterk Testing Services Shenzhen Ltd. Kejiyuan Branch** and located at 6F, D Block, 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.

EXHIBIT 2

SYSTEM TEST CONFIGURATION

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 device is powered by a 3.7V fully charged battery during the test. The worst case data was reported in this 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 1GHz 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 is a software CD attached to exercise the device.

2.3 Special Accessories

There are one shielding USB cable, one HDMI cable with one ferrite core attached and one TV Out cable with one ferrite core attached.

2.4 Equipment Modification

Any modifications installed previous to testing by SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD. will be incorporated in each production model sold / leased in the United States.

No modifications were installed by Intertek Testing Services Shenzhen Ltd. Kejiyuan Branch.

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:

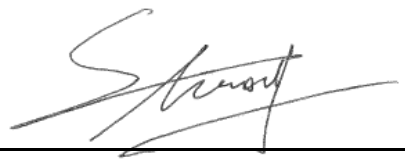
Refer List:

Description	Manufacturer	Model No.
Laptop	IBM	T61
Hard Disk	Smart.drive	HD-003
SD Card	Sandisk	1G/ BB0723011986D
USB Cable	Smart.drive	Unshielded, Length 155cm
1394 Cable	Smart.drive	Shielding, Length 180cm
USB Cable	ShuoYing	Shielding, Length 150cm
HDMI Cable	ShuoYing	Unshielded, Length 100cm
AV Cable	ShuoYing	Unshielded, Length 120cm
Load Terminal	MTC	TL-01
Test TV	Skyworth	LC1700T

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 SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.



Signature

Nov 1, 2010 *Date*

EXHIBIT 3

EMISSION RESULTS

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.

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 dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
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:

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

3.1 Field Strength Calculation (cont'd)

Example

Assume a receiver reading of 62.0dBμV 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 32dBμV/m. This value in dBμV/m was converted to its corresponding level in μV/m.

RA = 62.0dBμV
AF = 7.4dB
CF = 1.6dB
AG = 29.0dB
PD = 0dB

AV = −10dB

FS = $62 + 7.4 + 1.6 - 29 + 0 + (-10)$ = 32dBμV/m

Level in μV/m = Common Antilogarithm [(32dBμV/m)/20] = 39.8μV/m

3.2 Radiated Emission Configuration Photograph

Worst Case Radiated Emission
At
663.831MHz (Download Mode)

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

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 5.7dB margin (Download Mode)

TEST PERSONNEL:

Signature

Billy Li Compliance Engineer
Typed / Printed Name

Nov 1, 2010
Date

Company: SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.
Date of Test: Nov 1, 2010
Model: DV3100
Worst Case Operating Mode: Download(with SD card & Internal flash)

Table 1

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	312.015	43.0	20.0	14.8	37.8	46.0	-8.2
Horizontal	456.007	40.7	20.0	17.2	37.9	46.0	-8.1
Horizontal	864.200	30.8	20.0	24.3	35.1	46.0	-10.9
Vertical	65.890	39.7	20.0	7.4	27.1	40.0	-12.9
Vertical	663.831	40.7	20.0	19.6	40.3	46.0	-5.7
Vertical	864.038	35.1	20.0	24.3	39.4	46.0	-6.6

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. All emissions are below the QP limit.

Test Engineer: Billy Li

Company: SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.
Date of Test: Nov 1, 2010
Model: DV3100
Worst Case Operating Mode: Video Record

Table 2

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	312.056	41.0	20.0	14.8	35.8	46.0	-10.2
Horizontal	457.253	39.7	20.0	17.2	36.9	46.0	-9.1
Horizontal	864.007	30.0	20.0	24.3	34.3	46.0	-11.7
Vertical	256.271	42.6	20.0	12.1	34.7	46.0	-11.3
Vertical	674.329	38.0	20.0	19.6	37.6	46.0	-8.4
Vertical	864.094	34.1	20.0	24.3	38.4	46.0	-7.6

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. All emissions are below the QP limit.

Test Engineer: Billy Li

Company: SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.
Date of Test: Nov 1, 2010
Model: DV3100
Worst Case Operating Mode: Playback Videos (with HDMI output)

Table 3

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	457.249	36.4	20.0	17.3	33.7	46.0	-12.3
Horizontal	563.756	37.9	20.0	17.8	35.7	46.0	-10.3
Horizontal	633.890	37.2	20.0	20.3	37.5	46.0	-8.5
Vertical	612.572	32.6	20.0	20.6	33.2	46.0	-12.8
Vertical	843.517	31.4	20.0	24.0	35.4	46.0	-10.6
Vertical	869.742	32.9	20.0	24.0	36.9	46.0	-9.1

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. All emissions are below the QP limit.

Test Engineer: Billy Li

3.4 Conducted Emission Configuration Photograph

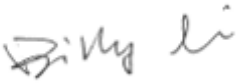
Worst Case Neutral-Conducted Configuration
at
0.150 MHz

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

3.5 Conducted Emission Data

Judgement: Passed by 11.3 dB margin

TEST PERSONNEL:



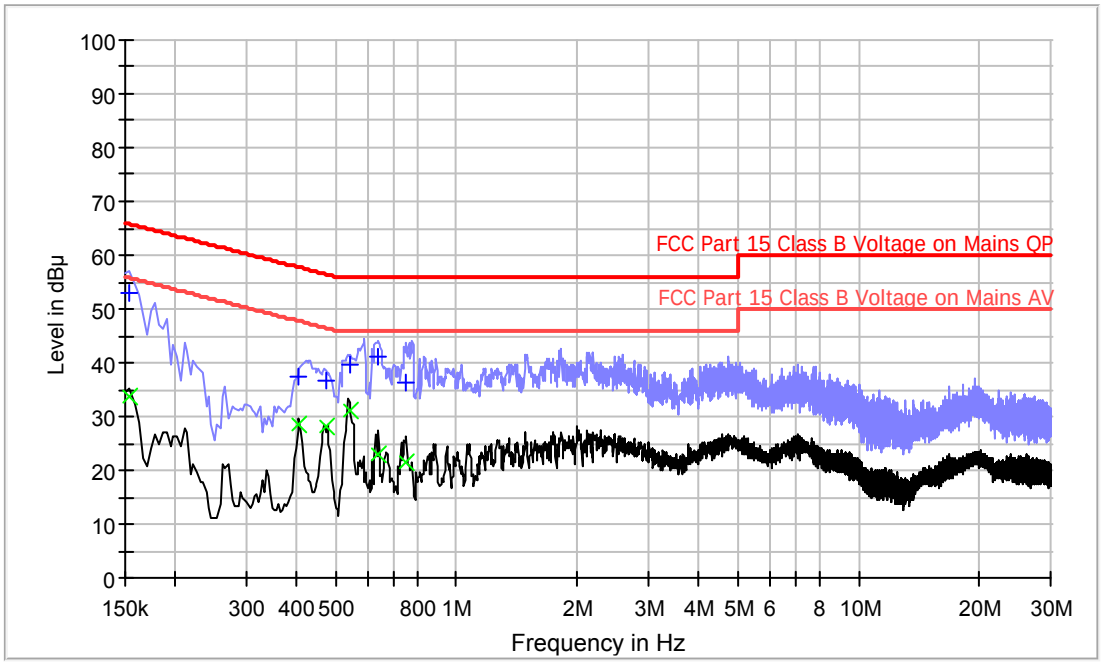
Signature

Billy Li, Compliance Engineer
Typed/Printed Name

Nov 1, 2010
Date

Company: SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.
Date of Test: Nov 1, 2010
Model: DV3100
Worst Case Operating Mode: Download (with SD card & Internal flash)

Conducted Emission Test - FCC



Result Table-QP

Frequency (MHz)	QuasiPeak (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.154000	52.8	L1	9.7	13.0	65.8
0.406000	37.4	L1	9.7	20.3	57.7
0.474000	36.5	L1	9.7	19.9	56.4
0.542000	39.8	L1	9.7	16.2	56.0
0.638000	41.3	L1	9.7	14.7	56.0
0.750000	36.2	L1	9.7	19.8	56.0

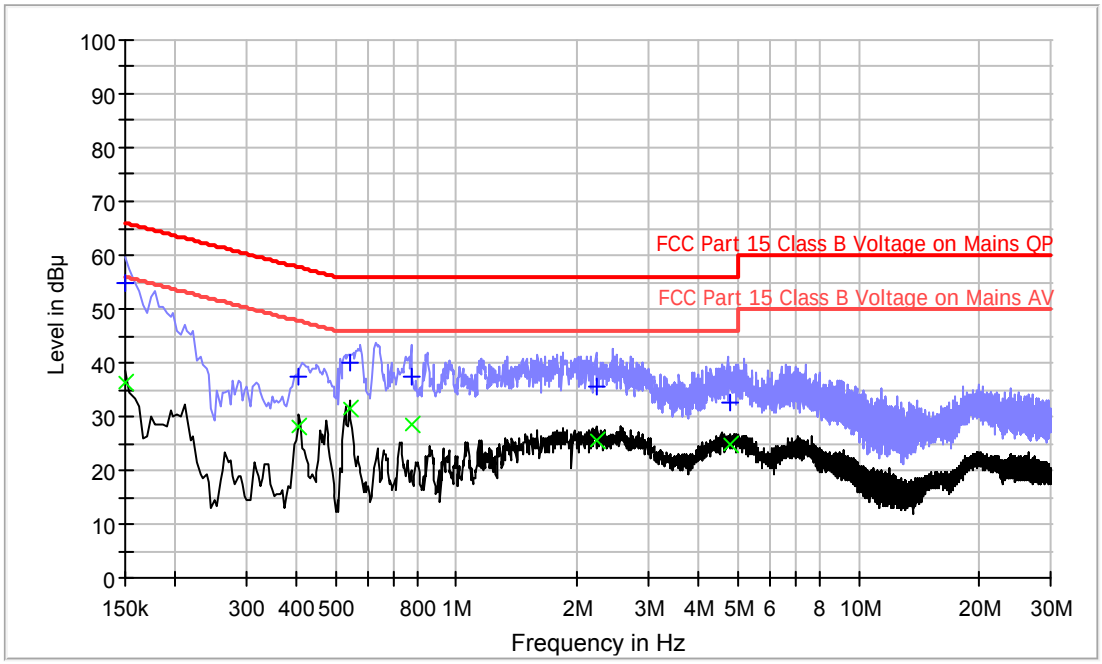
Result Table-AV

Frequency (MHz)	Average (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.154000	33.6	L1	9.7	22.2	55.8
0.406000	28.4	L1	9.7	19.3	47.7
0.474000	28.1	L1	9.7	18.3	46.4
0.542000	31.3	L1	9.7	14.7	46.0
0.638000	23.0	L1	9.7	23.0	46.0
0.750000	21.6	L1	9.7	24.4	46.0

Test Engineer: Billy Li

Company: SHUOYING INDUSTRIAL (SHENZHEN) CO., LTD.
Date of Test: Nov 1, 2010
Model: DV3100
Worst Case Operating Mode: Download(with SD card & Internal flash)

Conducted Emission Test - FCC



Result Table-QP

Frequency (MHz)	QuasiPeak (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.150000	54.7	N	9.6	11.3	66.0
0.406000	37.4	N	9.6	20.3	57.7
0.542000	39.8	N	9.6	16.2	56.0
0.774000	37.4	N	9.7	18.6	56.0
2.222000	35.5	N	9.8	20.5	56.0
4.770000	32.6	N	9.9	23.4	56.0

Result Table-AV

Frequency (MHz)	Average (dB µ V)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)
0.150000	36.3	N	9.6	19.7	56.0
0.406000	28.2	N	9.6	19.5	47.7
0.542000	31.5	N	9.6	14.5	46.0
0.774000	28.4	N	9.7	17.6	46.0
2.222000	25.5	N	9.8	20.5	46.0
4.770000	24.7	N	9.9	21.3	46.0

Test Engineer: Billy Li

EXHIBIT 4

EQUIPMENT PHOTOGRAPHS

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

5.0 **Product Labelling**

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

EXHIBIT 6

TECHNICAL SPECIFICATIONS

6.0 Technical Specifications

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

EXHIBIT 7

INSTRUCTION MANUAL

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.

EXHIBIT 8

MISCELLANEOUS INFORMATION

8.0 Miscellaneous Information

This miscellaneous information includes emission measuring procedure.

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 is in QP mode from the frequency band 30MHz to 1GHz and RBW setting is 120kHz. 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 1GHz. For line-conducted emissions, the range scanned is 150kHz to 30MHz.

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.

EXHIBIT 9

TEST EQUIPMENT LIST

9.0 Test Equipment List

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Due Date
SZ061-03	BiConiLog Antenna	ETS	3142C	00066460	25-Nov-09	25-May-11
SZ185-01	EMI Receiver	R&S	ESCI	100547	08-Mar-10	08-Mar-11
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	4102	09-Jan-10	09-Jan-11
SZ062-02	RF Cable	RADIALL	RG 213U	--	30-Sep-10	30-Mar-11
SZ062-06	RF Cable	RADIALL	0.04-26.5GHz	--	11-Sep-10	11-Mar-11
SZ185-02	EMI Test Receiver	R&S	ESCI	100692	23-Nov-09	23-Nov-10
SZ187-01	Two-Line V-Network	R&S	ENV216	100072	23-Nov-09	23-Nov-10
SZ188-03	Shielding Room	ETS	RFD-100	4100	16-Sep-10	16-Sep-13