

TEST REPORT

REPORT NUMBER: 108GE6398-FCC-PART15B

ON

Type of Equipment:

GSM/GPRS Mobile Phone (TRI Band GSM850/1800)

/1900 handheld Cellular phone)

Type of Designation:

MASS1

Manufacturer:

Ezze Mobile Tech., Inc.

ACCORDING TO

Part 15B: Radio Frequency Devices, Sep 20, 2007

China Telecommunication Technology Labs.

Month date, year Oct, 16, 2008

Signature

Ma Xin

Deputy Director



REPORT NO.: 108GE6398-FCC-PART15B

FCC ID: RV2MASS1
Report Date: 2008-9-27

Test Firm Name: China Telecommunication Technology Labs

Registration Number: 840587

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 15B. The sample tested was found to comply with the requirements defined in the applied rules.



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1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Parts 15B.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

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REPORT NO.: 108GE6398-FCC-PART158

1.2 Testers

Name:

Li Dongjin

Position:

Engineer

Department:

Department of EMC test

Signature:

田

Editor of this test report:

Name:

Li Guoqing

Position:

Engineer

Department:

Department of EMC test

Date:

2008-10-16

Signature:

国庆

Technical responsibility for area of testing:

Name:

Zou Dongyi

Position:

Manager

Department:

Department of EMC test

Date:

2008-10-16

Signature:

都长收



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1.3 Testing Laboratory information

| 1 | . 3 | . 1 | Lo | C | a | ti | io | n |
|---|-----|-----|------|---|---|----|----|---|
| • | | | | _ | _ | • | _ | |

Name: China Telecommunication Technology Labs.

Address: No. 11, Yue Tan Nan Jie, Xi Cheng District

BEIJING

P. R. CHINA, 100083

Tel: +86 10 68094053

Fax: +86 10 68011404

Email: emc@chinattl.com

1.3.2 Details of accreditation status

Accredited by: China National Accreditation Service for Conformity

Assessment (CNAS)

Registration number: CNAS Registration No. CNAS L0570

Standard: ISO/IEC 17025: 2005

1.3.3 Test location, where different from section 1.3.1

Name: -----

Street:

City: -----

Country: -----

Telephone: -----

Fax: -----

Postcode: -----



FCC Parts 15B
Equipment: MASS1 REPORT NO.: I08GE6398-FCC-PART15B

1.4 Details of applicant or manufacturer

| Namo: | Ezzo Mobilo Toch | Inc |
|-------|------------------|-----|

Name: Ezze Mobile Tech.,Inc

Address: 1F,Bubmusa Bldg., 151-31.

Nonhyun-Dong, Kangnam-Ku, Seoul, Korea

Country: KOREA

1.4.1 Applicant

Telephone: +82-2-519-7802

Fax: +82-2-519-7800

Contact: KIM, KEUK-RAE

Telephone: +82-2-519-7802

Email: <u>keukrae@ezzemobile.com</u>

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: -----

Address: -----

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: ----

Address: -----



FCC Parts 15B
Equipment: MASS1
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2 Test Item

2.1 General Information

Manufacturer: Ezze Mobile Tech., Inc

Name: GSM/GPRS Mobile Phone (TRI Band GSM850/1800

/1900 handheld Cellular phone)

Model Number: MASS1

Serial Number: --

Production Status: Production Receipt date of test item: 2008-9-8

2.2 Outline of EUT

E.U.T. is a GSM/GPRS Mobile phone.

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

| Item | Generic Description | Manufacturer | Туре | Serial No. | Remarks |
|------|---------------------|------------------------|--------------|------------|---------|
| Α | handset | Ezze Mobile Tech., Inc | MASS1 | | None |
| В | | DE MING ELECTRONIC | USB type | | |
| | adapter | CO.,LTD | charger | | None |
| | | CO.,LID | (JYCC-228D) | | |
| C | · A A | Shenzhen ZhiYin | Lithium Ion | | |
| | battery | ELECTRONIC CO.,LTD. | Rechargeable | | None |
| | | ELECTRONIC CO.,LID. | Battery | | |
| D | Earphone | Rich star | Wire type | | None |

Cables:

| Cable Type | Manufacturer | Length | Shield | Quantity | Remarks |
|------------|-----------------------------------------------|--------------------|--------------------------|-----------------------------|-------------------------------|
| C cable on | Unknown | 1.0 m | No | 1 | None |
| (| <u>, , , , , , , , , , , , , , , , , , , </u> | C cable on Unknown | C cable on Unknown 1.0 m | C cable on Unknown 1.0 m No | C cable on Unknown 1.0 m No 1 |

2.5 Other Information

Hardware version: 1.0 Software version: 1.0



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3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

| Specification Clause | Name of Test | Result |
|----------------------|--------------------------------------------------|-------------|
| 15.109 | Radiated Emission | Pass |
| 15.107 | Pass | |
| Note: The EUT comp | lies with the requirements of the Class B digita | al devices. |





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4 Test Results

4.1 Radiated Emission

| Specifi | cations: | 15.109, AN | 15.109, ANSI C63.4-2003 | | | | |
|-----------------|-------------------------------|--------------------------------|-------------------------|---------------|------------|--------|--|
| Date o | f Tests | 2008-9-12 | | | | | |
| Test co | onditions: | Ambient Temperature: 15°C-35°C | | | | | |
| | | Relative Hu | umidity: 30%-6 | 50% | | | |
| | | Air pressur | e: 86-106kPa | | | | |
| Operat | ion Mode | TX on | | | | | |
| Test R | esults: | Pass | | | | | |
| Test ed | quipment Use | ent Used: | | | |) | |
| Asset Number | Description | Manufacturer | Model Number | Serial Number | Cal Due | State | |
| 7805 | EMI Test Receiver | R/S | ESI26 | 100211 | 2009-01-03 | Normal | |
| 7330 | Ultra Broadband Antenna | SCHWARZBE CK | VULB 9160 | > | 2010-10-26 | Normal | |
| 7330 | Double-Ridged Horn Antenna | R/S | HF906 | 100037 | 2009-01-14 | Normal | |
| 713 | Fully-Anechoic Chamber | ETS | 11.8m×6.5m×6 .3m | | 2010-11-17 | Normal | |
| 023 | Wireless Communications | Agilent | 8960(E5515C) | GB41450323 | 2009-06-13 | Normal | |

Limit Level Construction:

According to Part 15.109(a).

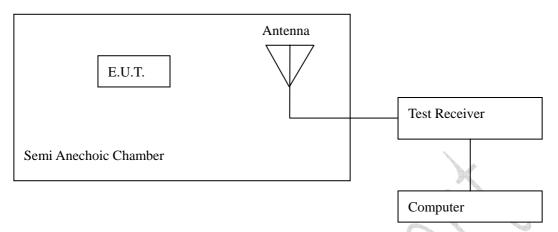
Limits

| | All I | | | | |
|----------------------------------------------------|----------------|----------------|--------------|--|--|
| Frequency | Field Strength | Field Strength | Measurement | | |
| [MHz] | [μ V/m] | [dB | distance [m] | | |
| 30 -88 | 100 | 40.0 | 3 | | |
| 88-216 | 150 | 43.5 | 3 | | |
| 216 – 960 | 200 | 46.0 | 3 | | |
| Above 960 | 500 | 54.0 | 3 | | |
| Note: The tighter limit applies at the band edges. | | | | | |



FCC Parts 15B
Equipment: MASS1
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Test Configuration



The measuring distance between E.U.T and antenna is 3m.

Test Setup:

The EUT was placed in an anechoic chamber, see figure RE. The EUT is tested as tabletop EUT. The EUT is positioned on an 80cm height wood table.

The EUT is used as the peripheral equipment of the PC.

The setup is according to Figure 11a of ANSI C63.4-2003.

The Wireless Communications Test Set (Test Simulator) was used to set the TX channel and power level and modulate the TX signal with different bit patterns. The test was done using an automated test system, where all test equipments were controlled by a computer.



Figure RE



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Test Method

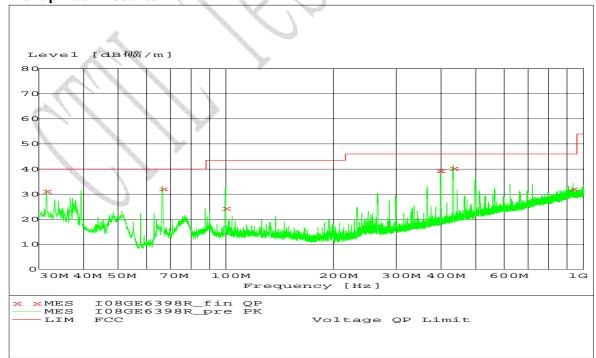
During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. The measurement was done by the automated test system.

Note: --

Test Data:

| Frequency [MHz] | Level [dBµV/m] | Limit [dBµV/m] | Antenna Height [cm] | Turntable Azimuth [degree] | Antenna Polarisation (V/H) |
|--------------------|-------------------|-------------------|---------------------------|----------------------------|----------------------------------|
| 31.500000 | 31.2 | 40 | 100 | 75 | VERTICAL |
| 66.600000 | 32.1 | 40 | 100 | 69 | VERTICAL |
| 99.900000 | 24.5 | 43 | 138 | 265 | VERTICAL |
| 397.740000 | 39.3 | 46 | 100 | 21 | HORIZONTAL |
| 433.020000 | 40.4 | 46 | 100 | 283 | HORIZONTAL |
| 936.000000 | 32.2 | 46 | 100 | 45 | HORIZONTAL |
| Remarks: | | × | 7 | | _ |

Graphical Results:



Graphical results



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4.2 Conducted Emission

| Specifi | cations: | 15 107 AN | 15.107, ANSI C63.4-2003 | | | | |
|----------------------|-------------|--------------------------------|-------------------------|-----------------------------|--|--|--|
| Specifi | cations. | 13.107, AN | 13.107, ANSI C03.4-2003 | | | | |
| Date of | f Tests | 2008-9-22 | 2008-9-22 | | | | |
| Test co | onditions: | Ambient Temperature: 15°C-35°C | | | | | |
| | | Relative Humidity: 30%-60% | | | | | |
| | | Air pressure: 86-106kPa | | | | | |
| Operat | ion Mode | TX on | | | | | |
| Test Re | esults: | Pass | | | | | |
| Test equipment Used: | | | | | | | |
| Asset | Description | Manufacturer | Model Number | Serial Number Cal Due State | | | |

| Asset Number | Description | Manufacturer | Model Number | Serial Number | Cal Due | State |
|-----------------|----------------------------------------|--------------|--------------|---------------|------------|--------|
| 7330 | EMI Test Receiver | R/S | ESI40 | 839283/007 | 2009-02-03 | Normal |
| 7330 | Artificial Mains Network | R/S | ESH2-Z5 | 837480/002 | 2009-01-09 | Normal |
| 714 | Shielding Room | ETS | | 19003 | 2010-11-17 | Normal |
| 023 | Wireless Communications Test Set | Agilent | 8960(E5515C) | GB41450323 | 2009-06-13 | Normal |

Limit Level Construction:

According to Part 15.107 (a)

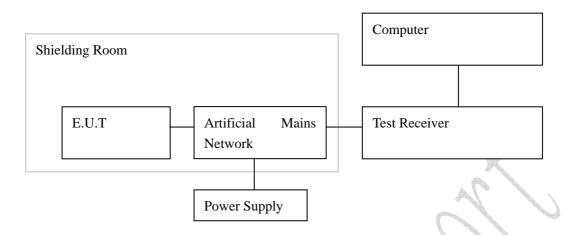
| Limits for Conducted Emission | | | | |
|-------------------------------|------------------------|-----------|--|--|
| Frequency of Emission | Conducted limit [dBµV] | | | |
| [MHz] | Quasi-peak | Average | | |
| 0.15 - 0.5 | 66 to 56* | 56 to 46* | | |
| 0.5 - 5 | 56 | 46 | | |
| 5 - 30 | 60 | 50 | | |

^{*} Decreases with the logarithm of the frequency.



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Test Configuration



Test Setup:

The EUT was placed in a shielding room, see figure CE. The EUT is positioned on an 80cm height wood table. The EUT is used as the peripheral equipment of the PC.

The setup is according to Figure 10a of ANSI C63.4-2003.

The Wireless Communications Test Set (Test Simulator) was used to set the TX channel and power level and modulate the TX signal with different bit patterns. The test was done using an automated test system, where all test equipments were controlled by a computer.



Figure CE



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Test Method:

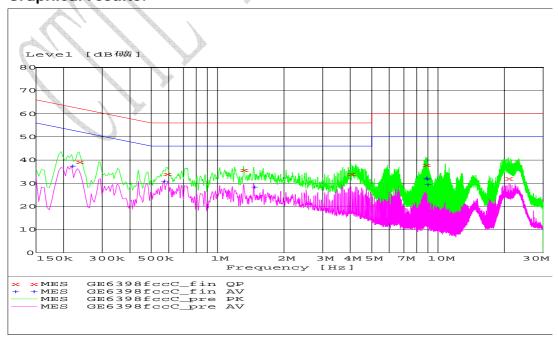
During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.4-2003. The AC power line of the Notebook was connected to the artificial mains network then to EMI receiver. The measurement was done by the automated test system.

Note: --

Test Data:

| Test Data. | | | | | | |
|------------|-----------|--------|--------|-------------|------|-----|
| Detector | Frequency | Level | Limit | Margin | Line | PE |
| (QP/AV) | (MHz) | (dBµV) | (dBµV) | (dB) | | |
| QP | 0.235500 | 39.2 | 62 | 23.1 | L1 | GND |
| QP | 0.586500 | 33.9 | 56 | 22.1 | L1 | GND |
| QP | 1.311000 | 35.8 | 56 | 20.2 | 1.1 | GND |
| QP | 4.024500 | 34.0 | 56 | 22.0 | N | GND |
| QP | 8.803500 | 38.0 | 60 | 22.0 | N | GND |
| QP | 20.818500 | 32.2 | 60 | 27.8 | N | GND |
| AV | 0.217500 | 37.5 | 53 | 15.4 | ▶ L1 | GND |
| AV | 0.568500 | 31.1 | 46 | 14.9 | L1 | GND |
| AV | 1.459500 | 28.4 | 46 | 17.6 | L1 | GND |
| AV | 8.803500 | 32.4 | 50 | 17.6 | N | GND |
| AV | 8.857500 | 31.9 | 50 | 18.1 | N | GND |
| AV | 8.911500 | 29.50 | 20 | 20.5 | N | GND |
| Remarks: | | 1 1 | | | | |

Graphical results:



CE graphical result

TTL

FCC Parts 15B Equipment: MASS1

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Annex A External Photos



Face view with clip close



Face view with clip open



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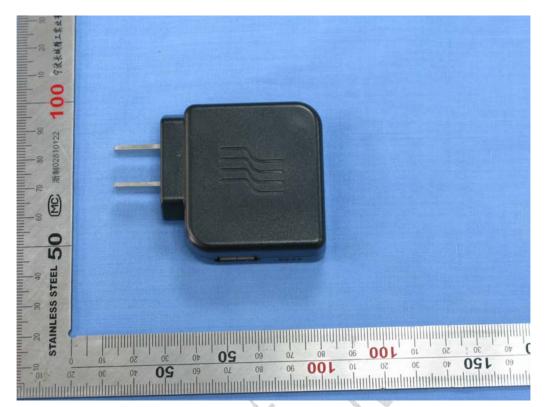
Back view with clip close



Back view with clip open



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Adaptor



Cable



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Battery



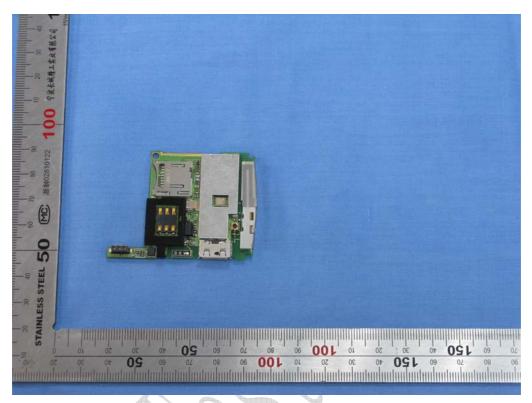
Earphone

TTL

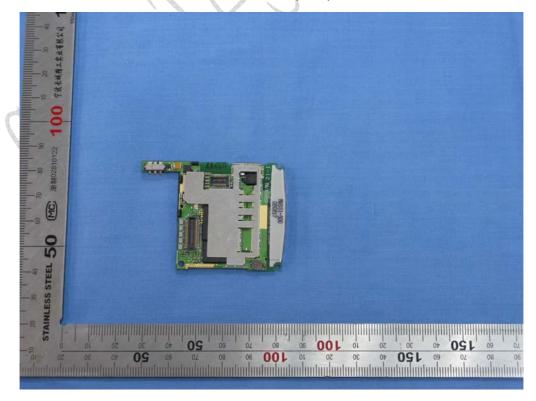
FCC Parts 15B Equipment: MASS1

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Annex B Internal Photos



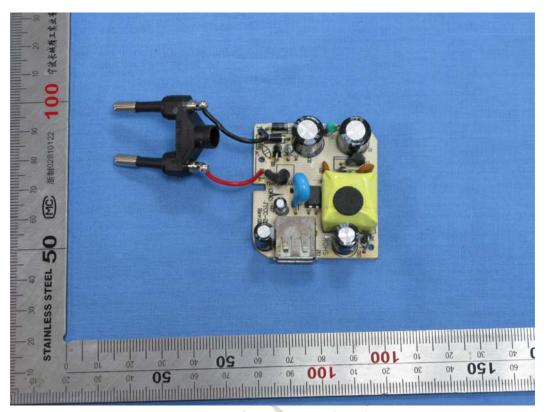
Main board (face)



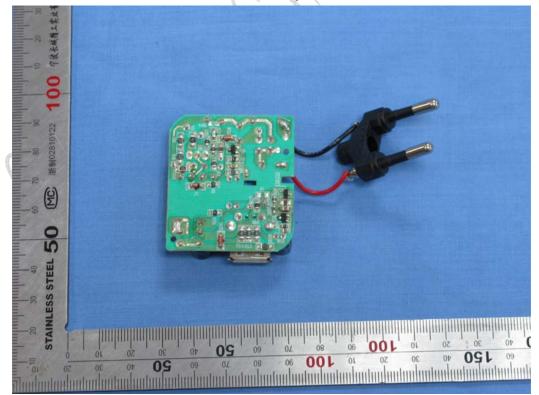
Main board (back)



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Mainboard of Adapter (face)



Mainboard of Adapter (inverse)



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ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

