



## MPE REPORT

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Report No.: SRMC2009-H024-E0030

Product Name: CDMA 1X Digital Fixed Wireless Phone

Product Model: ZTE WP832

Applicant: ZTE Corporation

Manufacture: ZTE Corporation

Specification: FCC Part2.1093

OET Bulletin 65 Supplement C[June 2001]

FCC ID: Q78-ZTEWP832

The State Radio Monitoring Center

State Radio Spectrum Monitoring and Testing Center

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## 1. General information

### 1.1 Notes of the test report

The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written permission of The State Radio Monitoring Center.

The test results relate only to individual items of the samples which have been tested.

### 1.2 Information about the testing laboratory

Company: The State Radio Monitoring Center  
State Radio Spectrum Monitoring and Testing Center  
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### 1.3 Applicant's details

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### 1.4 Manufacturer's details

Company: ZTE Corporation  
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Grantee Code: Q78  
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Email: li.dezi@zte.com.cn

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## 1.5 Application details

Date of reception of test sample: 26<sup>th</sup> Oct 2009

Date of test: 26<sup>th</sup> Oct 2009 to 4<sup>th</sup> Nov 2009

## 1.6 Reference specification

FCC Part2.1093, OET Bulletin 65 Supplement C [June 2001]

## 1.7 Information of EUT

### 1.7.1 General information

Name of EUT	CDMA 1X Digital Fixed Wireless Phone
FCC ID	Q78-ZTEWP832
Frequency range	Tx:824~849MHz Rx:869~894MHz
Rated output power	24.0dBm
E.R.P.	21.5dBm
Modulation type	OQPSK
Emission Designator	1M25F9W
Duplex mode	FDD
Duplex spacing	45MHz
Antenna type	External
Power Supply	Battery or charger
Rated Power Supply Voltage	5V
Extreme Temperature	Lowest: -30°C Highest: +50°C
Extreme Voltage	Minimum: 4.9V Maximum: 5.2V
HW Version	F53b
SW Version	EPS3P_WP832NV1.0.0B03

### 1.7.2 EUT details

Name	Model	IMEI
CDMA 1X Digital Fixed Wireless Phone	ZTE WP832	321481865215

### 1.7.3 Auxiliary equipment details

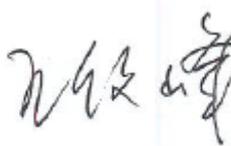
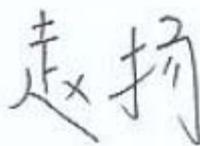
Equipment	Charger
Manufacturer	Shenzhen DeZe Electronic industrial Co., Ltd.
Model Number	STC-A22O50C35-A

Equipment	Battery
Manufacturer	BYD Co., Ltd
Model Number	Ni3612T30P3S534416
Capacity	1200mAh
Rated Voltage	3.6V

## 2. Test information

### 2.1 Summary of the calculation results

No.	Test case	FCC reference	Verdict
1	MPE Calculation	FCC Part2.1093, OET Bulletin 65 Supplement [June 2001]	Pass

This Test Report Is Issued by: Mr. Song Qizhu, Director of the test lab 	Checked By: 
Tested By: 	Issued date: <b>2009.11.09</b>

## 2.2 Calculation result

### 2.2.1 Maximum Permissible Exposure (MPE)

Limit:

#### FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

(A) Limits for Occupational/Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	100*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> ) *	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	100*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz \*Plane-wave equivalent power density

Calculation procedure:

In accordance with 47CFR FCC Part 2.1091, the product has been defined as a mobile device where a distance of 0.2m normally can be maintained between the user and product.

Calculation formula:

$$\text{Power Density: } P_d (\text{W/m}^2) = E^2/377$$

$$E (\text{V/m}) = (30 \cdot P \cdot G)^{0.5} / d$$

E: Electric Field Strength (V/m)

P: Peak RF Output Power (W)

G: Antenna Numeric Gain (Numeric)

d: Separation Distance Between the Radiator and Human Body (m)

So the calculation formula can be changed as:

$$P_d = (30 * P * G) / (377 * d^2)$$

Calculation result:

Channel No.	Effective Radiated Power (E.R.P.) (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Verdict
1013	131.8	0.0262	0.550	Pass
384	141.2	0.0281	0.558	Pass
777	138.0	0.0274	0.566	Pass