FCC Test Report

APPLICANT	**:**	**ZTE CORPORATION**
EQUIPMENT	**:**	**CDMA2000 Single band (850M)**
BRAND NAME	**:**	**ZTE**
MODEL NAME	**:**	**AC2787_V3**
FCC ID	**:**	**Q78-AC2787V3**
STANDARD	**:**	**FCC 47 CFR FCC Part 15 Subpart B**
CLASSIFICATION	**:**	**Certification**

The product was received on Jun. 14, 2012 and completely tested on Jul. 04, 2012. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai

Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC252204-01	Rev. 01	This is a variant report for ZTE AC2787_V3. The product equality declaration can be referred to Appendix C. All the test cases were performed in original report which can be referred to Sporton Report Number FC252204 for FCC ID: Q78-AC2787V2 as Appendix D. Based on original report, only the worst cases of Radiated Spurious Emission was verified.	Jul. 16, 2012

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.109	7.2.3.2	Radiated Emission	< 15.109 limits	PASS	Under limit 4.74 dB at 64.920 MHz

1. General Description

1.1. Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

1.2. Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, P.R.China

1.3. Feature of Equipment Under Test

Product Feature	
Equipment	CDMA2000 Single band (850M)
Brand Name	ZTE
Model Name	AC2787_V3
FCC ID	Q78-AC2787V3
EUT supports Radios application	CDMA / EV-DO
HW Version	AC2787MB_B
SW Version	AC2787_MDM6085-1_LU8ADA24
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard	
Tx Frequency	824.70 MHz ~ 848.31 MHz
Rx Frequency Range	869.70 MHz ~ 893.31 MHz
Antenna Type	PCB Antenna
Type of Modulation	CDMA2000 : QPSK CDMA2000 1xEV-DO : 8PSK

1.4. Test Site

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.	
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958	
Test Site No.	**Sporton Site No.**	**FCC/IC Registration No.**
	03CH01-KS	149928/4086E-1

1.5. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2003
- IC RSS-Gen Issue 3

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

1.6. Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	Monitor	DELL	E1910Hc	FCC DoC	Shielded, 1.2 m	Unshielded, 1.8 m
3.	Notebook	DELL	PP42L	N/A	N/A	AC I/P: Unshielded, 0.8 m DC O/P: Shielded, 1.8 m
4.	iPod	Apple	A1199	FCC DoC	Shielded, 1.2 m	N/A

2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following tables are showing the test modes as the worst cases and recorded in this report.

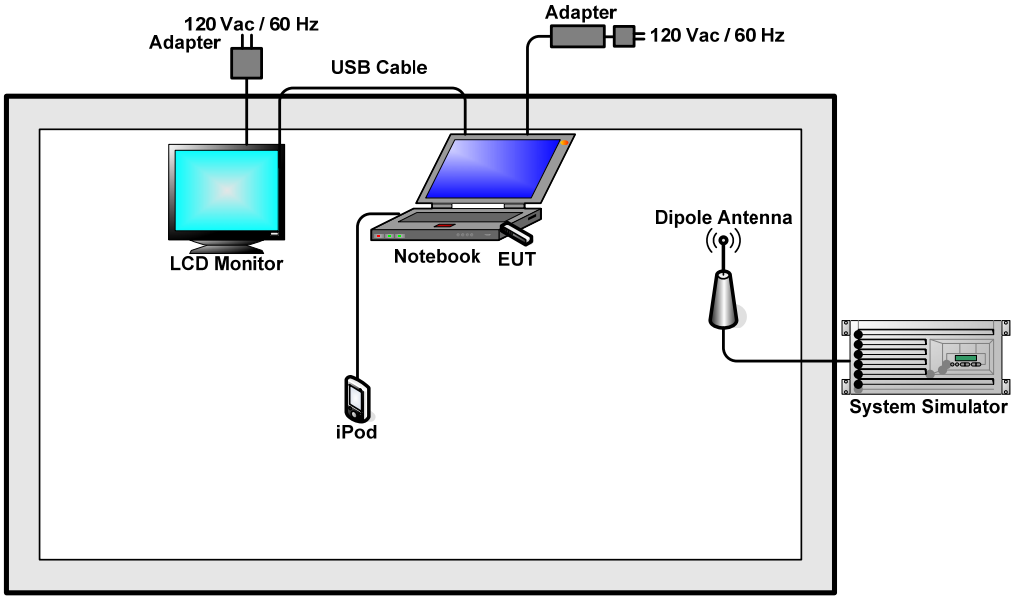
Item	EUT Configuration	Test Condition
		EMI RE
1.	Data application transferred mode (EUT with Notebook)	☒

Abbreviations:

- EMI RE: EUT radiated emissions

Test Items	EUT Configure Mode	Function Type
Radiated Emissions	1	Mode 1: CDMA2000 BC0 Idle + USB Data Link with Notebook

2.2. Connection Diagram of Test System



2.3. Test Software

The EUT was in CDMA2000 idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization, and execute the program, "Winthrax", installed in notebook for files transfer with EUT via USB cable.

3. Test Result

3.1. Test of Radiated Emission Measurement

3.1.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.1.2. Measuring Instruments

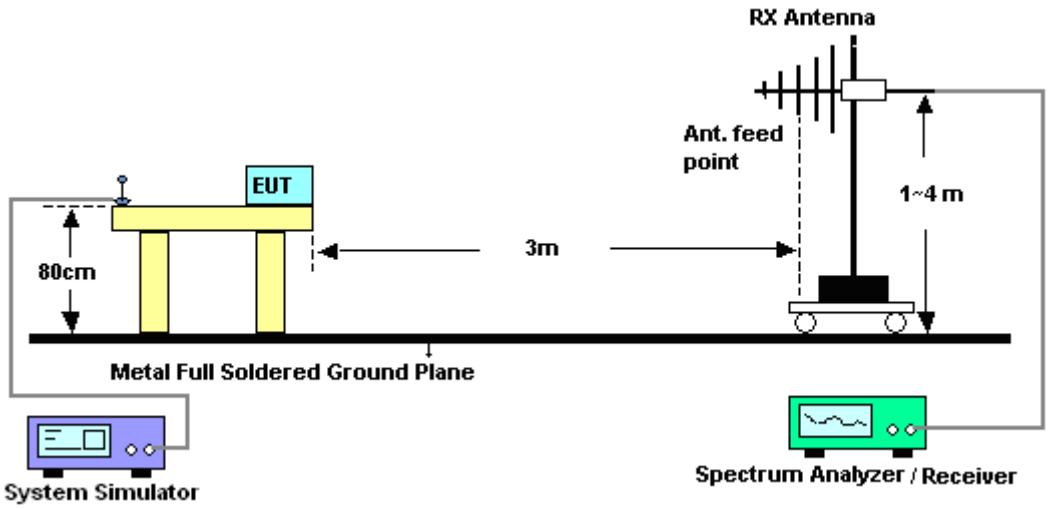
See list of measuring instruments of this test report.

3.1.3. Test Procedures

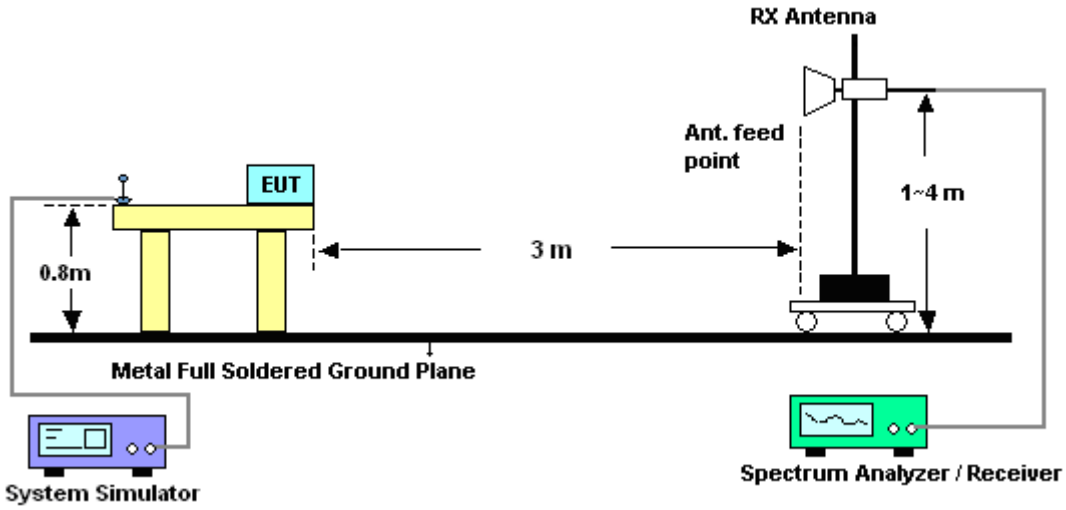
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dBuV/m) = 20 log Emission level (uV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor= Level

3.1.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz

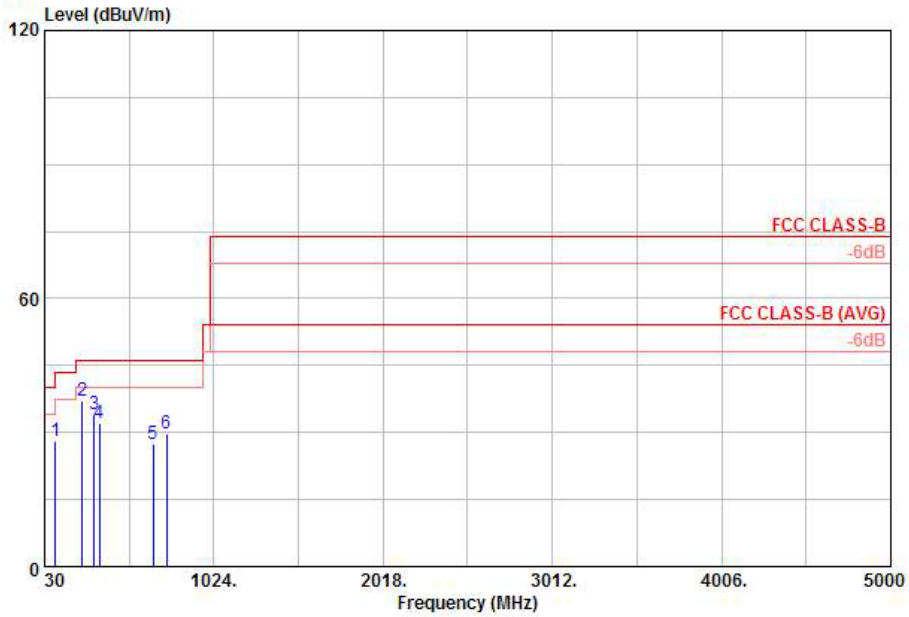


For radiated emissions above 1GHz



3.1.5. Test Result of Radiated Emission

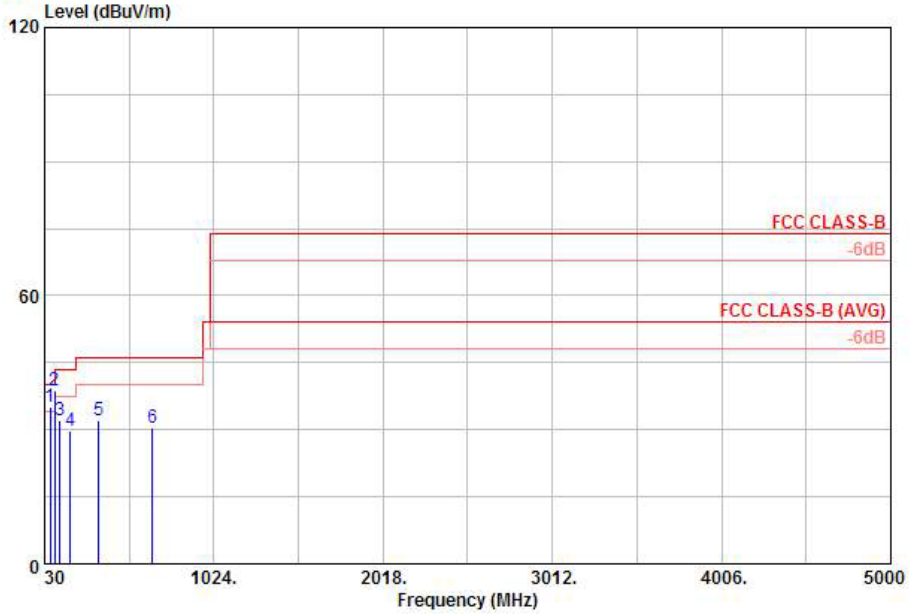
Test Mode :	Mode 1	Temperature :	25~26°C
Test Engineer :	Steven Hao	Relative Humidity :	43~44%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	CDMA2000 BC0 Idle + USB Cable (Data Link with Notebook)		



Site : 03CH01-KS
Condition: FCC CLASS-B 3m LF_ANT_100803 HORIZONTAL

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	92.08	28.01	-15.49	43.50	48.25	9.35	0.39	29.98	---	---	Peak
2	252.13	37.19	-8.81	46.00	54.34	12.03	0.67	29.85	120	225	Peak
3	321.97	34.02	-11.98	46.00	49.59	13.62	0.76	29.95	---	---	Peak
4	350.10	32.12	-13.88	46.00	46.74	14.50	0.82	29.94	---	---	Peak
5	667.29	27.40	-18.60	46.00	36.95	19.02	1.10	29.67	---	---	Peak
6	747.80	29.83	-16.17	46.00	38.32	19.88	1.18	29.55	---	---	Peak

Test Mode :	Mode 1	Temperature :	25~26°C
Test Engineer :	Steven Hao	Relative Humidity :	43~44%
Test Distance :	3m	Polarization :	Vertical
Function Type :	CDMA2000 BC0 Idle + USB Cable (Data Link with Notebook)		



Site : 03CH01-KS
Condition: FCC CLASS-B 3m LF_ANT_100803 VERTICAL

		Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	!	64.92	35.26	-4.74	40.00	59.85	5.20	0.32	30.11	100	163	Peak
2	!	89.17	38.62	-4.88	43.50	59.61	8.61	0.39	29.99	---	---	Peak
3		120.21	31.93	-11.57	43.50	49.65	11.80	0.45	29.97	---	---	Peak
4		183.26	29.62	-13.88	43.50	50.53	8.43	0.56	29.90	---	---	Peak
5		346.22	32.17	-13.83	46.00	46.88	14.42	0.81	29.94	---	---	Peak
6		665.35	30.51	-15.49	46.00	40.08	19.00	1.10	29.67	---	---	Peak

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 09, 2011	Jul. 04, 2012	Nov. 08, 2012	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 30, 2011	Jul. 04, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 08, 2011	Jul. 04, 2012	Dec. 07, 2012	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2012	Jul. 04, 2012	Jan. 05, 2013	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060007	30MHz~2GHz	Dec. 30, 2011	Jul. 04, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 30, 2011	Jul. 04, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
System Simulator	R&S	CMU200	837587/066	2G Full-Band	Dec. 30, 2011	Jul. 04, 2012	Dec. 29, 2012	Radiation (03CH01-KS)

5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.26**

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**

Appendix A. Photographs of EUT

Please refer to Sporton report number EP252204-01 as below.

Appendix C. Product Equality Declaration

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District,Shenzhen, Guangdong, 518057, P.R.China
Tel: +86-755-86360734 ; Fax: +86-755-86360734

Date: July 19, 2012

Product Equality Declaration

We, ZTE CORPORATION**,** declare on our sole responsibility for the product of **AC2787_V3** below:

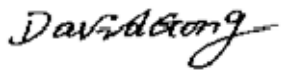
The differences between previous and current model of **AC2787_V3** are as below:

1. Change the shell.
2. In the part of DC-DC power chip, AC2787_V3 make a compatible design on the basis of AC2787_V2, remove the diode in ensure consistent performance for reduce costs.
3. In the part of power inductors, the performance is exactly the same just different appearance, should be of different brands under the same code.

Except listings above, the others are all the same as previous version.

Should you have any questions or comments regarding this matter, please have my best attention.

Sincerely yours,



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Appendix D. Original Report

Please refer to Sporton report number FC252204 as below.