

FCC SAR Test Report

APPLICANT : Zebra Technologies Corporation
EQUIPMENT : Enterprise Digital Assistant (EDA)
BRAND NAME : Zebra
MODEL NAME : MC67ND
FCC ID : UZ7MC67ND
STANDARD : FCC 47 CFR Part 2 (2.1093)
ANSI/IEEE C95.1-1992
IEEE 1528-2003

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and had been in 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 INC., the test report shall not be reproduced except in full.



Reviewed by: Eric Huang / Deputy Manager



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA320416-11	Rev. 01	This is a variant report for updating 5.8GHz WLAN conducted power by FCC new rule and does not affect original SAR test results.	May 28, 2015

1. Administration Data

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978

Applicant	
Company Name	Zebra Technologies Corporation
Address	1 Zebra Plaza, Holtsville, NY 11742

Manufacturer	
Company Name	Zebra Technologies Corporation
Address	1 Zebra Plaza, Holtsville, NY 11742

2. Guidance Standard

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2003
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03
- FCC KDB 865664 D02 SAR Reporting v01r01

3. Equipment Under Test (EUT)

3.1 General Information

Product Feature & Specification	
Equipment Name	Enterprise Digital Assistant (EDA)
Brand Name	Zebra
Model Name	MC67ND
FCC ID	UZ7MC67ND
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz CDMA 2000 BC0: 824.7 MHz ~ 848.31 MHz CDMA 2000 BC1: 1851.25 MHz ~ 1908.75 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Mode	• GSM/GPRS/EGPRS • AMR/RMC 12.2Kbps • HSDPA • HSUPA • 1xRTT/1xEv-Do(Rev.0)/1xEv-Do(Rev.A) • 802.11a/b/g/n HT20 • Bluetooth v2.1+EDR
HW Version	MP
SW Version	3.51.0003
FW Version	X_2.01.0.0.091R
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark: 1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.	

4. Conducted RF Output Power (Unit: dBm)

<5.8GHz WLAN Conducted Power>

Mode	Channel	Frequency (MHz)	Average Power (dBm)							
			Power vs. Data Rate							
			6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
802.11a	CH 149	5745	14.48	14.30	14.30	14.32	14.18	14.41	14.34	14.18
	CH 153	5765	14.72	14.71	14.67	14.64	14.62	14.63	14.62	14.61
	CH 157	5785	14.42	14.36	14.34	14.36	14.24	14.39	14.31	14.20
	CH 161	5805	14.92	14.87	12.89	12.85	12.84	12.82	12.77	12.75
	CH 165	5825	14.66	14.65	14.64	14.65	14.57	14.59	14.44	14.59

Mode	Channel	Frequency (MHz)	Average Power (dBm)							
			Power vs. MCS Index							
			MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
802.11n-HT20	CH 149	5745	15.18	14.83	14.87	14.98	15.01	14.92	15.02	15.04
	CH 153	5765	14.50	14.46	14.43	14.42	14.41	14.39	14.40	14.41
	CH 157	5785	15.07	14.85	14.88	15.01	14.94	14.87	14.97	14.99
	CH 161	5805	14.82	14.81	14.79	14.77	14.75	14.76	14.75	14.74
	CH 165	5825	15.41	15.18	15.22	15.27	15.16	15.15	15.29	15.36



5. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2003, "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- [4] FCC KDB 865664 D01 v01r03, "SAR Measurement Requirements for 100 MHz to 6 GHz", Feb 2014.
- [5] FCC KDB 865664 D02 v01r01, "RF Exposure Compliance Reporting and Documentation Considerations" May 2013.