

DYNAMIC FREQUENCY SELECTION

DFS Test Report

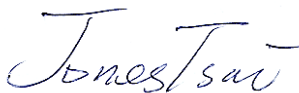
APPLICANT : HMD Global Oy
EQUIPMENT : Smart Phone
BRAND NAME : NOKIA
MODEL NAME : TA-1032
FCC ID : 2AJOTTA-1032
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

This is a data re-used report which is only valid together with the original test report. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has 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: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FZ711304	Rev. 01	Initial issue of report	Mar. 15, 2017

1 General Description

1.1 Applicant

HMD Global Oy
Karaportti 2, 02610 Espoo, Finland

1.2 Manufacturer

HMD Global Oy
Karaportti 2, 02610 Espoo, Finland

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	NOKIA
Model Name	TA-1032
FCC ID	2AJOTTA-1032
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20/ WLAN 5GHz 802.11a/n HT20/HT40 Bluetooth v3.0 + EDR / Bluetooth v 4.0 LE/ Bluetooth v4.1 LE / Bluetooth v4.2 LE
HW Version	DVT1.5
SW Version	000C_1_26A
EUT Stage	Production Unit

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

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
DFS Function	Client without radar detection function
Tx/Rx Channel Frequency Range	5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
EUT support WLAN function	<5260 MHz ~ 5320 MHz> 802.11a 802.11n HT20 802.11n HT40 <5500 MHz ~ 5700 MHz > 802.11a 802.11n HT20 802.11n HT40
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)

Remark: 5600~5650MHz is notched.



2 Re-use of Measured Data

This application re-uses data collected on a similar device. The subject device of this application (Model: TA-1032, FCC ID: 2AJOTTA-1032) is electrically identical to the reference device (Model: TA-1038, FCC ID: 2AJOTTA-1038) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 178919 D01.

2.1 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., please refer to the Product Equality Declaration as Appendix A.

The re-used RF data includes the following bands provided in Appendix B (Sporton RF Report No. FZ711304-01 for the reference device Model: TA-1038, FCC ID: 2AJOTTA-1038):

2.2 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for radiated spurious emission, the test result were consistent with FCC ID: 2AJOTTA-1038.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

2.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test/RF Exposure	Report Title/Section
NII (DFS)	2AJOTTA-1038	Part15E (FZ711304-01)	All sections applicable



Appendix A. Product Equality Declaration

HMD Global Oy

Tel:

Date:

Product Equality Declaration

We, HMD Global Oy declares on our sole responsibility for the product as below:

Certification information					
SKU	Row	LatAm	Row	LatAm	APAC
Number of SIM's supported	SKU1	SKU2	SKU1	SKU2	SKU1
	SS	SS	DS	DS	SS/DS
Model Name	TA-1020	TA-1028	TA-1032	TA-1038	TA-1020/ TA-1032

The differences between Row, Latam, APAC as below:

■ RF section

1. Antenna pattern and matching has no difference

2. Frequency band difference

• Radio Functionality Matrix -Same Row indicates Signal Path is Shared among SKUs					
Bands / Model	SKU1-SS TA-1020	SKU1-DS TA-1032	SKU2-SS TA-1028	SKU2-DS TA-1038	Remark
GSM 850	V	V	V	V	No difference
GSM 900	V	V	V	V	No difference
GSM 1800	V	V	V	V	No difference
GSM 1900	V	V	V	V	No difference
LTE 1	V	V	X	X	No difference
LTE 2	X	X	V	V	U3404 for SKU1 SMT is B40 DRX SAW; U3404 for SKU2 is B2DRX SAW
LTE 3	V	V	V	V	No difference
LTE 4	X	X	V	V	U3304 Only for W_B4 Tx/PRX; LTE B4 TX/PRX
LTE 5	V	V	X	X	U3408 only for SKU1 LTE B5 DRX
LTE 7	V	V	V	V	No difference
LTE 8	V	V	X	X	Z3404 only for SKU1 LTE band8 DRX
LTE 12	X	X	V	V	U3311 SMT is different, SKU1 SMT is the Duplexer of B20, SKU2 SMT is the Duplexer of B12/B17.
LTE 17	X	X	V	V	U3311 SMT is different, SKU1 SMT is the Duplexer of B20, SKU2 SMT is the Duplexer of B12/B17.
LTE 20	V	V	X	X	U3311 SMT is different, SKU1 SMT is the Duplexer of B20, SKU2 SMT is the Duplexer of B12/B17
LTE 28	V	V	V	V	NUL3336 SMT is different for SKU1& SKU2.
LTE 38	V	V	V	V	No difference
LTE 40	V	V	X	X	U3404 SKU1 SMT is the DRX SAW of LTE B40, SKU2 SMT is the DRX of LTE B2; U3202 is only for SKU1Tx/PRx of LTE B40.
WCDMA 1	V	V	V	V	No difference
WCDMA 2	V	V	V	V	No difference
WCDMA 4	X	X	V	V	U3304 Only for W_B4 Tx/PRX;LTE B4 TX/PRX
WCDMA 5	V	V	V	V	No difference
WCDMA 8	V	V	V	V	No difference
WLAN 2.4GHz	V	V	V	V	No difference
WLAN 5GHz	V	V	V	V	No difference
Bluetooth	V	V	V	V	No difference
NFC	V	V	V	V	No difference

3. Board difference

		SKU1-SS TA-1020	SKU1-DS TA-1032	SKU2-SS TA-1028	SKU2-DS TA-1038
WWAN	IC (MT6169)	No difference			
	Component on PCB	No difference			
	Antenna 1	No difference			
BT	IC (MT6625LN)	No difference			
		No difference			
	Component on PCB	No difference			
	Antenna	No difference			
WLAN 2.4GHz	IC (MT6625LN)	No difference			
	Component on PCB	No difference			
	Antenna	No difference			
WLAN 5GHz	IC (MT6625LN)	No difference			
	Component on PCB	No difference			
	Antenna	No difference			
NFC	IC MT6605	No difference			
	Component on PCB	No difference			
	Antenna	No difference			
E-compass	IC	No difference			
	Component on PCB	No difference			
SAR cap Sensor	IC	No difference			
	Component on PCB	No difference			

■ SW section

There is no different for SW design. Only the UI will show different model name.

■ Mechanical section

There is only one different for the structure of SIM Card. For hardware system design is the same.

SKU	SKU1-SS TA-1020	SKU1-DS TA-1032	SKU2-SS TA-1028	SKU2-DS TA-1038	Remark
SIM Slot	Single SIM	Dual SIM	Single SIM	Dual SIM	NA

Except listings above, the others are all the same.

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Appendix B. Reference Report

Please refer to Sporton report number FZ711304-01 which is issued separately.