



# FCC RF Test Report

**APPLICANT** : HMD Global Oy  
**EQUIPMENT** : Smart Phone  
**BRAND NAME** : NOKIA  
**MODEL NAME** : TA-1032  
**FCC ID** : 2AJOTTA-1032  
**STANDARD** : FCC 47 CFR Part 2, 22(H), 24(E)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

This is a data re-used report which is only valid together with the original test report. We, Sporton International (KunShan) 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 (KunShan) INC., the test report shall not be reproduced except in full.

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### REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FG711304A  | Rev. 01 | Initial issue of report | Mar. 15, 2017 |
|            |         |                         |               |
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# 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/<br>HSPA+/LTE/NFC<br>WLAN 2.4GHz 802.11b/g/n HT20/<br>WLAN 5GHz 802.11a/n HT20/HT40<br>Bluetooth v3.0 + EDR / Bluetooth v 4.0 LE/<br>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

| Standards-related Product Specification |   |
|---|---|
| <b>Tx Frequency</b>                     | <b>GSM/GPRS/EDGE:</b><br>850: 824.2 MHz ~ 848.8 MHz<br>1900: 1850.2 MHz ~ 1909.8MHz<br><b>WCDMA:</b><br>Band V: 826.4 MHz ~ 846.6 MHz<br>Band II: 1852.4 MHz ~ 1907.6 MHz     |
| <b>Rx Frequency</b>                     | <b>GSM/GPRS/EDGE:</b><br>850: 869.2 MHz ~ 893.8 MHz<br>1900: 1930.2 MHz ~ 1989.8 MHz<br><b>WCDMA:</b><br>Band V: 871.4 MHz ~ 891.6 MHz<br>Band II: 1932.4 MHz ~ 1987.6 MHz    |
| <b>Antenna Type</b>                     | IFA Antenna   |
| <b>Type of Modulation</b>               | GSM: GMSK<br>GPRS: GMSK<br>EDGE: GMSK / 8PSK<br>WCDMA : BPSK (Uplink)<br>HSDPA/DC-HSDPA: QPSK (Uplink)<br>HSUPA : QPSK (Uplink)<br>HSPA+ : 16QAM (Uplink)<br>DC-HSDPA : 64QAM |



## 2 Re-use of Measured Data

### 2.1 Introduction Section

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.

### 2.2 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 B.

The re-used RF data includes the following bands provided in Appendix A (Sporton RF Report No. FG711304-01A for the reference device Model: TA-1038, FCC ID: 2AJOTTA-1038):

### 2.3 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.

### 2.4 Reference detail Section:

| Equipment Class | Reference FCC ID | Folder Test/RF Exposure    | Report Title/Section    |
|-----------------|------------------|----------------------------|-------------------------|
| PCE (2G/3G)     | 2AJOTTA-1038     | Part22H.24E (FG711304-01A) | 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<br>SS | SKU2<br>SS | SKU1<br>DS | SKU2<br>DS | SKU1<br>SS/DS       |
| Model Name                | TA-1020    | TA-1028    | TA-1032    | TA-1038    | TA-1020/<br>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<br>TA-1020 | SKU1-DS<br>TA-1032 | SKU2-SS<br>TA-1028 | SKU2-DS<br>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;<br>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;<br>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;<br>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<br>TA-1020 | SKU1-DS<br>TA-1032 | SKU2-SS<br>TA-1028 | SKU2-DS<br>TA-1038 |
|-------------------|---------------------|--------------------|--------------------|--------------------|--------------------|
| WWAN              | IC<br>(MT6169)      | No difference      |                    |                    |                    |
|                   | Component<br>on PCB | No difference      |                    |                    |                    |
|                   | Antenna 1           | No difference      |                    |                    |                    |
| BT                | IC<br>(MT6625LN)    | No difference      |                    |                    |                    |
|                   | Component<br>on PCB | No difference      |                    |                    |                    |
|                   | Antenna             | No difference      |                    |                    |                    |
|                   | Antenna             | No difference      |                    |                    |                    |
| WLAN<br>2.4GHz    | IC<br>(MT6625LN)    | No difference      |                    |                    |                    |
|                   | Component<br>on PCB | No difference      |                    |                    |                    |
|                   | Antenna             | No difference      |                    |                    |                    |
| WLAN<br>5GHz      | IC<br>(MT6625LN)    | No difference      |                    |                    |                    |
|                   | Component<br>on PCB | No difference      |                    |                    |                    |
|                   | Antenna             | No difference      |                    |                    |                    |
| NFC               | IC MT6605           | No difference      |                    |                    |                    |
|                   | Component<br>on PCB | No difference      |                    |                    |                    |
|                   | Antenna             | No difference      |                    |                    |                    |
| E-compass         | IC                  | No difference      |                    |                    |                    |
|                   | Component<br>on PCB | No difference      |                    |                    |                    |
| SAR cap<br>Sensor | IC                  | No difference      |                    |                    |                    |
|                   | Component<br>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<br>TA-1020 | SKU1-DS<br>TA-1032 | SKU2-SS<br>TA-1028 | SKU2-DS<br>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 FG711304-01A which is issued separately.