



## EVALUATION REPORT

### Applicant Name:

Samsung Electronics Co., Ltd.  
129, Samsung-ro, Maetan dong,  
Yeongtong-gu, Suwon-si  
Gyeonggi-do, 16677, Korea

### Date of Evaluation:

03/01/2017

### Test Site/Location:

PCTEST Lab, Columbia, MD, USA

### FCC ID:

A3LSMJ327T

### APPLICANT:

SAMSUNG ELECTRONICS CO. , LTD.

### Test Data Re-Use Summary

#### Introduction

FCC ID: A3LSMJ327T  
Equipment Class(es): PCE, DTS, DSS  
Rule Part(s): 2, 15, 22, 24, 27, 20.19  
Frequency Bands: 2G/3G/4G, Bluetooth, and 2.4 GHz WLAN  
Attestation: The applicant takes full responsibility that the test data referenced below represents compliance for this FCC ID

#### Differences

Brief Description: The 2G3G, LTE, Bluetooth, WLAN, and ANT+ hardware and software of this device are identical to the implementation in A3LSMJ237A. The operational description includes detailed information about the changes between the devices. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.

#### Spot Check Verification Result Summary (See following pages for data)

| Category | Band/Mode   | Test Condition | Verdict |
|----------|-------------|----------------|---------|
| SAR      | GSM850      | Head           | Retest  |
|          |             | Body-Worn      | Retest  |
|          |             | Hotspot        | Retest  |
|          | GSM1900     | Head           | Retest  |
|          |             | Body-Worn      | Retest  |
|          |             | Hotspot        | Retest  |
|          | UMTS850     | Head           | Share   |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | UMTS1750    | Head           | Share   |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | UMTS1900    | Head           | Share   |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | LTE B2      | Head           | Share   |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | LTE B4      | Head           | Retest  |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | LTE B5      | Head           | Share   |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | LTE B12     | Head           | Share   |
|          |             | Body-Worn      | Share   |
|          |             | Hotspot        | Share   |
|          | 2.4GHz WLAN | Head           | Share   |
|          |             | Body-Worn      | Retest  |
|          |             | Hotspot        | Retest  |

|                                   |                                                                                     |                   |                                                                                       |                                 |
|-----------------------------------|-------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------|---------------------------------|
| FCC ID A3LSMJ327T                 |  | EVALUATION REPORT |  | Reviewed by:<br>Quality Manager |
| Date of Evaluation:<br>03/01/2017 | DUT Type:<br>Portable Handset                                                       |                   |                                                                                       | Page 1 of 4                     |

| Category | Frequency Band   | Test Condition     | Verdict |
|----------|------------------|--------------------|---------|
| EMC      | Pt. 22           | ERP                | Share   |
|          | Pt. 22           | RSE                | Share   |
|          | Pt. 24           | ERP                | Share   |
|          | Pt. 24           | RSE                | Share   |
|          | Pt. 27 (700MHz)  | ERP                | Share   |
|          | Pt. 27 (700MHz)  | RSE                | Share   |
|          | Pt. 27 (1700MHz) | ERP                | Share   |
|          | Pt. 27 (1700MHz) | RSE                | Share   |
|          | 2.4 GHz WLAN     | Band Edge          | Share   |
|          |                  | Spurious Emissions | Share   |
|          |                  | Conducted Power    | Share   |
|          | Bluetooth        | Band Edge          | Share   |
|          |                  | Spurious Emissions | Share   |
|          |                  | Conducted Power    | Share   |

| Category | Mode        | Test Condition | Verdict |
|----------|-------------|----------------|---------|
| HAC      | GSM850      | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | GSM1900     | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | UMTS850     | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | UMTS1900    | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | LTE B2      | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | LTE B4      | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | LTE B5      | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | LTE B12     | RFE            | Share   |
|          |             | T-Coil         | Share   |
|          | 2.4GHz WIFI | RFE            | Share   |

#### Reference Detail Section

| Equipment Class | Reference FCC ID | Report Title        | Shared Data                                         |
|-----------------|------------------|---------------------|-----------------------------------------------------|
| PCE             | A3LSMJ327A       | 2G3G Report         | All Sections                                        |
|                 | A3LSMJ327A       | LTE Report          | All Sections                                        |
|                 | A3LSMJ327A       | SAR Report          | All Sections except for GSM850/1900 and LTE B4 Head |
|                 | A3LSMJ327A       | RFE Report          | All Sections                                        |
|                 | A3LSMJ327A       | T-Coil Report       | All Sections                                        |
|                 | A3LSMJ327A       | WLAN DTS Report     | All Sections                                        |
| DTS             | A3LSMJ327A       | Bluetooth LE Report | All Sections                                        |
|                 | A3LSMJ327A       | SAR Report          | All 2.4 GHz WLAN Head SAR                           |
|                 | A3LSMJ327A       | RFE Report          | All Sections                                        |
|                 | A3LSMJ327A       | T-Coil Report       | All Sections                                        |
|                 | A3LSMJ327A       | Bluetooth Report    | All Sections                                        |

|                                   |                                                                                     |                   |                                                                                       |                                 |
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| Date of Evaluation:<br>03/01/2017 | DUT Type:<br>Portable Handset                                                       |                   |                                                                                       | Page 2 of 4                     |

## SPOT CHECK VERIFICATION DATA

### SAR Verification Data Section

| Band/Mode   | Test Condition | A3LSMJ327A<br>Reported SAR<br>(W/kg) | A3LSMJ327T<br>Reported SAR<br>(W/kg) | Verdict |
|-------------|----------------|--------------------------------------|--------------------------------------|---------|
| GSM850      | Head           | 0.449                                | 0.459                                | Retest  |
|             | Body-Worn      | 0.724                                | 0.627                                | Retest  |
|             | Hotspot        | 0.735                                | 0.797                                | Retest  |
| GSM1900     | Head           | 0.220                                | 0.248                                | Retest  |
|             | Body-Worn      | 0.361                                | 0.397                                | Retest  |
|             | Hotspot        | 0.433                                | 0.427                                | Retest  |
| UMTS850     | Head           | 0.409                                | 0.390                                | Share   |
|             | Body-Worn      | 0.657                                | 0.565                                | Share   |
|             | Hotspot        | 0.657                                | 0.565                                | Share   |
| UMTS1750    | Head           | 0.733                                | 0.660                                | Share   |
|             | Body-Worn      | 0.962                                | 0.936                                | Share   |
|             | Hotspot        | 0.962                                | 0.936                                | Share   |
| UMTS1900    | Head           | 0.648                                | 0.559                                | Share   |
|             | Body-Worn      | 1.035                                | 0.680                                | Share   |
|             | Hotspot        | 1.099                                | 0.719                                | Share   |
| LTE B2      | Head           | 0.630                                | 0.590                                | Share   |
|             | Body-Worn      | 0.985                                | 0.693                                | Share   |
|             | Hotspot        | 0.985                                | 0.693                                | Share   |
| LTE B4      | Head           | 0.565                                | 0.689                                | Retest  |
|             | Body-Worn      | 1.030                                | 0.979                                | Share   |
|             | Hotspot        | 1.030                                | 0.979                                | Share   |
| LTE B5      | Head           | 0.493                                | 0.501                                | Share   |
|             | Body-Worn      | 0.727                                | 0.684                                | Share   |
|             | Hotspot        | 0.727                                | 0.684                                | Share   |
| LTE B12     | Head           | 0.308                                | 0.316                                | Share   |
|             | Body-Worn      | 0.541                                | 0.475                                | Share   |
|             | Hotspot        | 0.541                                | 0.475                                | Share   |
| 2.4GHz WLAN | Head           | 0.442                                | 0.298                                | Share   |
|             | Body-Worn      | 0.218                                | 0.298                                | Retest  |
|             | Hotspot        | 0.217                                | 0.298                                | Retest  |

|                                   |                                                                                     |                   |                                                                                       |                                 |
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## EMC Verification Data Section

| Band/Mode        | Test Case | Frequency (MHz) | A3LSMJ327A | Unit   | A3LSMJ327T  | Unit   | Verdict |
|------------------|-----------|-----------------|------------|--------|-------------|--------|---------|
| Pt. 22           | ERP       | 836.6           | 29.79      | dBm    | 28.92       | dBm    | Share   |
| Pt. 22           | RSE       | 1673.2          | -16.63     | dBm    | -41.22      | dBm    | Share   |
| Pt. 24           | ERP       | 1850.2          | 30.04      | dBm    | 29.68       | dBm    | Share   |
| Pt. 24           | RSE       | 7630            | -29.24     | dBm    | -29.90      | dBm    | Share   |
| Pt. 27 (700MHz)  | ERP       | 714.5           | 18.99      | dBm    | 18.04       | dBm    | Share   |
| Pt. 27 (700MHz)  | RSE       | 3502.5          | -36.66     | dBm    | -39.26      | dBm    | Share   |
| Pt. 27 (1700MHz) | ERP       | 1732.6          | 25.52      | dBm    | 24.62       | dBm    | Share   |
| Pt. 27 (1700MHz) | RSE       | 3435            | -34.26     | dBm    | -39.45      | dBm    | Share   |
| 2.4 GHz WLAN     | Band Edge | 2412.0          | 49.45      | dBμV/m | 48.69       | dBμV/m | Share   |
| 2.4 GHz WLAN     | RSE       | 4824.0          | 42.65      | dBμV/m | 38.62       | dBμV/m | Share   |
| Bluetooth        | Band Edge | 2480.0          | 30.66      | dBμV/m | 30.08       | dBμV/m | Share   |
| Bluetooth        | RSE       | 4960.0          | 20.66      | dBμV/m | noise floor | dBμV/m | Share   |

## HAC Verification Data Section

| HAC T-Coil     |                              |        |                              |        |         |
|----------------|------------------------------|--------|------------------------------|--------|---------|
| Band/Mode      | A3LSMJ327A<br>SNNR [dB(A/m)] |        | A3LSMJ327T<br>SNNR [dB(A/m)] |        | Verdict |
|                | Axial                        | Radial | Axial                        | Radial |         |
| GSM850         | 30.35                        | 24.97  | 30.17                        | 25.99  | Share   |
| UMTS II        | 59.23                        | 43.17  | 59.84                        | 43.26  | Share   |
| LTE FDD Band 2 | 49.52                        | 41.45  | 50.84                        | 41.58  | Share   |

| HAC RFE        |                          |          |                          |          |         |
|----------------|--------------------------|----------|--------------------------|----------|---------|
| Band/Mode      | A3LSMJ327A               |          | A3LSMJ327T               |          | Verdict |
|                | Time Average Field (V/m) | MIF (dB) | Time Average Field (V/m) | MIF (dB) |         |
| GSM850         | 66.64                    | 3.54     | 60.35                    | 3.55     | Share   |
| UMTS II        | N/A                      | -20.49   | 59.84                    | -21.55   | Share   |
| LTE FDD Band 2 | N/A                      | -9.43    | 50.84                    | -9.96    | Share   |
| 2.4GHz WLAN    | N/A                      | -4.96    | 50.84                    | -6.18    | Share   |

|                                   |                                                                                     |                   |                                                                                       |                                 |
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| Date of Evaluation:<br>03/01/2017 | DUT Type:<br>Portable Handset                                                       |                   |                                                                                       | Page 4 of 4                     |