



EVALUATION REPORT

Applicant Name:

Samsung Electronics Co., Ltd.
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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

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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
DTS	A3LSMJ327A	WLAN DTS Report	All Sections
	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
DSS	A3LSMJ327A	Bluetooth Report	All Sections

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SPOT CHECK VERIFICATION DATA

SAR Verification Data Section

Band/Mode	Test Condition	A3LSMJ327A Reported SAR (W/kg)	A3LSMJ327T Reported SAR (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 SNNR [dB(A/m)]		A3LSMJ327T 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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