
RF Test Report

Report No.: AGC01813161203EE03

PRODUCT DESIGNATION : 3G Dual-SIM Smartphone
BRAND NAME : vonino
MODEL NAME : Volt S
CLIENT : Vonino EElectronics LTD
DATE OF ISSUE : Dec. 30, 2016
STANDARD(S) : EN 301 511 V12.1.1: 2015-06
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Dec. 30, 2016	Valid	Original Report

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1. TEST REPORT CERTIFICATION

Applicant	Vonino EElectronics LTD
Address	Miramar Tower 10F- No.1010, 132 Nathan Road, Tsim Sha Tsui, Kowloon, Hong Kong
Manufacturer	Gui zhou Fortuneship Technology Co., Ltd
Address	No. 4 Plant, High-tech Industrial Park, Xinpu Economic Development Zone) Jingkai Road, Xinpu Jingkai District, Xinpu New District, Zunyi City, Guizhou Province, P. R. China
Product Designation	3G Dual-SIM Smartphone
Brand Name	vonino
Test Model	Volt S
Date of test	Dec. 15, 2016 to Dec. 22, 2016
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-EC-2.5G1/RF

We, Attestation of Global Compliance (Shenzhen) Co., Ltd., for compliance with the requirements set forth in the European Standard ETSI EN 301 511 V12.1.1. The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

2. GENERAL INFORMATION

2.1. DESCRIPTION OF EUT

2.1.1. FINAL EQUIPMENT BUILD STATUS

Details of technical specification refer to the description in follows:

Product Name	3G Dual-SIM Smartphone
Brand Name	vonino
Test Model	Volt S
Product Type	GSM
Hardware Version	ZH066-MB-V3.0
Software Version	N/A
Frequency Bands	<input checked="" type="checkbox"/> GSM 900 <input checked="" type="checkbox"/> DCS 1800 (EU Frequency) <input checked="" type="checkbox"/> GSM 850 <input checked="" type="checkbox"/> PCS1900 (none EU Frequency)
Modulation Mode	GMSK
Antenna Type	PIFA antenna
Antenna Gain	1.0dBi
Power Class	GSM900: 4, DCS1800: 1
GSM Release Version	N/A
GPRS Class	Class 12
SIM Card Description	There are dual-SIM cards, just one for GSM/WCDMA and the other only for GSM.

2.1.2. PHOTOGRAPHS OF THE EUT

Please see APPENX 1 for photographs of the EUT.

2.1.3. IDENTIFICATION OF SAMPLES EUT

The EUT Identity consists of numerical and letter characters (see the table below), the first five numerical characters indicates the Type of the EUT defined by AGC, the next letter character indicates the test sample, and the following two numerical characters indicates the software version of the test sample.

SAMPLE A01

Sample Reference Number	A01
Manufacturer Name	Gui zhou Fortuneship Technology Co., Ltd
Test Model	Volt S
Product Type	GSM
Frequency Bands	GSM 900: 880 -915 MHz (TX); 925 - 960 MHz (RX) DCS1800: 1710 -1785 MHz (TX); 1805-1880 MHz (RX)

2.2. TYPE OF MOBILE STATION AND ADDITIONAL INFORMATION

Table A.2: Type of Mobile Station (Re. ETSI EN 301 511 Annex A)

Item	Type of Mobile Station	Support	Mnemonic
1	HSCSD Multislot MS	NO	Type_HSCSD_Multislot
2	R-GSM MS	NO	Type_R-GSM
3	Support of GPRS Multislot class on the uplink	YES	Type_GPRS_Multislot_uplink
4	EGPRS	NO	Type_EGPRS
5	EGPRS capable of 8PSK in Uplink, of all Multislot classes	NO	Type_EGPRS_8PSK_uplink
6	ER-GSM MS	NO	Type-GSM
7	DLMC MS	NO	Type DLMC

Type A.3: Additional information (Re. ETSI EN 301 511 Annex A)

Item	Additional Information	Support	Mnemonic
1	Telephony	YES	TSPC_Serv_TS11
2	Permanent Antenna Connector	YES	TSPC_AddInfo_PermAntenna

3. IDENTIFICATION OF THE RESPONSIBLE TESTING LOCATION

Test Site-1	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location 1	2/F., Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Location-2	B112-B113, Building 12, Baoan Building Materials Center, No.1 of Xixiang Inner Ring Road, Baoan District, Shenzhen, Guangdong, P.R.China

Note: Blocking and spurious response test within the scope of TAF approval.

LIST OF EQUIPMENTS USED OF AGC

No.	Type	Manufacturer	S/N	Cal. Date	Cal. Due
1	H & T Chamber ETH225-40A	Test EQ	WIT-05121302	Feb.15,2016	Feb.14,2017
2	CMU200	R&S	120237	Feb.29,2016	Feb.28,2017
3	Wireless communication test set 8960	Agilent	GB46200384	July 18,2016	July 17,2017
4	Power Splitter 11636A	Agilent	34	Oct.10, 2016	Oct.09,2017
5	Attenuator FSC 96341	MA-CCM	2082-6192-06	Oct.10, 2016	Oct.09,2017
6	Vector Signal Generator SMU200A	R&S	104332	Oct.10, 2016	Oct.09,2017
7	VECTOR ANALYZER E4440A	Agilent	MY44303916	July 02,2016	July 01,2017
8	MXG Vector Signal Generator N5182A	AGILENT	MY50140530	Oct.10, 2016	Oct.09,2017
9	PSG Analog Signal Generator E8257D	AGILENT	MY45141029	Oct.10, 2016	Oct.09,2017
10	MXA Signal Analyzer N9020A	AGILENT	W1312-60196	Feb.29,2016	Feb.28,2017
11	Universal Switch Control Unit	JS TONSCEND	N/A	---	---
12	RF SHIELD BOX	R&S	1204.7008K02- 102590-EE	Feb.29,2016	Feb.28,2017
13	Programmable Power Supply PPT-1830	GW INSTEK	EM907629	Aug.25,2016	Aug.24,2017
14	Vibration Source SCU-200	SUSHI	3000-40-07	Feb.25,2016	Feb.24,2017
15	Attenuator FSC 96341	MA-CCM	2082-6192-06	Oct.10, 2016	Oct.09,2017
16	EMI Test Receiver ESCI	R&S	100694	Feb.29,2016	Feb.28,2017
17	Double-Ridged Waveguide Horn Antenna 3117	ETS LINDGREN	00034609	Mar.01,2016	Feb.28,2017
18	Trilog Broadband Antenna VULB 9163	SCHWARZBECK	336	Jan.31,2016	Jan.30,2017

No.	Type	Manufacturer	S/N	Cal. Date	Cal. Due
19	LOOP ANTENNA SAS-562B	A.H	/	Mar.01,2016	Feb.28,2017
20	Artificial Mains Network ENV4200	R&S	101116	July.18,2016	July.17,2017
21	Artificial Mains Network ENV216	R&S	101242	July.18,2016	July.17,2017
22	Filter Bank Notch 1(880-915MHz)	MICRO-TRONICS	010	Feb.29,2016	Feb.28,2017
23	Filter Bank Notch 2(1710-1785MHz)	MICRO-TRONICS	009	Feb.29,2016	Feb.28,2017
24	Filter Bank Notch 3(1920-1980MHz)	MICRO-TRONICS	008	Feb.29,2016	Feb.28,2017

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4. TEST RESULT

4.1. APPLIED REFERENCE DOCUMENTS

Leading reference documents for testing:

No.	Identity	Document Title
1	ETSI EN 301 511	Global System for Mobile communications (GSM); Harmonized EN for mobile stations in the GSM 900 and GSM 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)

Specific reference documents for testing:

No.	Identity	Document Title
2	ETSI TS 151 010-1	3 rd Generation Partnership Project; Technical Specification Group GSM/EDGE Radio Access Network Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification

4.2. TEST ENVIRONMENT/CONDITIONS

Normal Temperature (NT)	20 ... 25 °C
Relative Humidity	30 ... 75 %
Air Pressure	980 ... 1020 kPa
Adapter Test Model Name	VNA-V50JS
Details of Power Supply (Rated Input)	AC100-240V, 50/60Hz, 0.15A
Details of Power Supply (Rated Output)	DC 5V, 1000mA
Extreme Temperature	Low Temperature (LT) = -20°C High Temperature (HT) = 55°C
Extreme Voltage of the EUT	Normal Voltage= DC 3.80V Limit Voltage = DC 4.35V

Note: The Limit Voltage 4.35V was declared by manufacturer,
The EUT couldn't be operate normally with higher voltage.

4.3. ITEMS USED IN THE TEST RESULTS LIST

Terms in the column "Verdict" for the test results list of the section:

Verdict	Description
PASS	EUT passed this test case
FAIL	EUT failed this test case
INC.	EUT did not pass and did not fail this test case, therefore the verdict is inconclusive
N/A	Test case not applicable for the EUT, see the column "Note" for detailed

4.4. TEST RESULTS LIST

Table A.1: The EN Requirements Table (EN-RT) (Re. ETSI EN 301 511 Annex A) for SIM CARD 1

Test Case (ETSI TS 151010-1)	Test Case (EN 301 511)	Parameter	GSM 900		GSM 1800		Note	
			Sample	Result	Sample	Result		
12.1.1	4.2.12	Conducted spurious emissions - MS allocated a channel						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
12.1.2	4.2.13	Conducted spurious emissions - MS in idle mode						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
12.2.1	4.2.16	Radiated spurious emissions - MS allocated a channel						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
12.2.2	4.2.17	Radiated spurious emissions - MS in idle mode						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
13.1	4.2.1	Transmitter - Frequency error and phase error						
		NT / NV	A01	PASS	A01	PASS		
		LT / LV	A01	PASS	A01	PASS		
		LT / HV	A01	PASS	A01	PASS		
		HT / LV	A01	PASS	A01	PASS		
		HT / HV	A01	PASS	A01	PASS		
		Vibration X-axis	A01	PASS	A01	PASS		
		Vibration Y-axis	A01	PASS	A01	PASS		
Vibration Z-axis	A01	PASS	A01	PASS				
13.2	4.2.2	Transmitter - Frequency error under multipath and interference conditions						
		NT / NV	A01	PASS	A01	PASS		
		LT / LV	A01	PASS	A01	PASS		
		LT / HV	A01	PASS	A01	PASS		
		HT / LV	A01	PASS	A01	PASS		
		HT / HV	A01	PASS	A01	PASS		

13.3	4.2.5	Transmitter output power and burst timing					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT / HV	A01	PASS	A01	PASS	
13.4	4.2.6	Transmitter - Output RF spectrum					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT / HV	A01	PASS	A01	PASS	
13.16.1	4.2.4	Frequency error and phase error in GPRS multislot configuration					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT / HV	A01	PASS	A01	PASS	
		Vibration X-axis	A01	PASS	A01	PASS	
		Vibration Y-axis	A01	PASS	A01	PASS	
13.16.2	4.2.10	Transmitter output power in GPRS multislot configuration					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT/HV	A01	PASS	A01	PASS	
13.16.3	4.2.11	Output RF spectrum in GPRS multislot configuration					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT/HV	A01	PASS	A01	PASS	
14.7.1	4.2.20	Blocking and spurious response – speech channels	A01	PASS	A01	PASS	

Table A.2: The EN Requirements Table (EN-RT) (Re. ETSI EN 301 511 Annex A) for SIM CARD 2

Test Case (ETSI TS 151010-1)	Test Case (EN 301 511)	Parameter	GSM 900		GSM 1800		Note	
			Sample	Result	Sample	Result		
12.1.1	4.2.12	Conducted spurious emissions - MS allocated a channel						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
12.1.2	4.2.13	Conducted spurious emissions - MS in idle mode						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
12.2.1	4.2.16	Radiated spurious emissions - MS allocated a channel						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
12.2.2	4.2.17	Radiated spurious emissions - MS in idle mode						
		NT / NV	A01	PASS	A01	PASS		
		NT / LV	A01	PASS	A01	PASS		
		NT / HV	A01	PASS	A01	PASS		
13.1	4.2.1	Transmitter - Frequency error and phase error						
		NT / NV	A01	PASS	A01	PASS		
		LT / LV	A01	PASS	A01	PASS		
		LT / HV	A01	PASS	A01	PASS		
		HT / LV	A01	PASS	A01	PASS		
		HT / HV	A01	PASS	A01	PASS		
		Vibration X-axis	A01	PASS	A01	PASS		
		Vibration Y-axis	A01	PASS	A01	PASS		
Vibration Z-axis	A01	PASS	A01	PASS				
13.2	4.2.2	Transmitter - Frequency error under multipath and interference conditions						
		NT / NV	A01	PASS	A01	PASS		
		LT / LV	A01	PASS	A01	PASS		
		LT / HV	A01	PASS	A01	PASS		
		HT / LV	A01	PASS	A01	PASS		
		HT / HV	A01	PASS	A01	PASS		
13.3	4.2.5	Transmitter output power and burst timing						

		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT / HV	A01	PASS	A01	PASS	
13.4	4.2.6	Transmitter - Output RF spectrum					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT / HV	A01	PASS	A01	PASS	
13.16.1	4.2.4	Frequency error and phase error in GPRS multislot configuration					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT / HV	A01	PASS	A01	PASS	
		Vibration X-axis	A01	PASS	A01	PASS	
		Vibration Y-axis	A01	PASS	A01	PASS	
Vibration Z-axis	A01	PASS	A01	PASS			
13.16.2	4.2.10	Transmitter output power in GPRS multislot configuration					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT/HV	A01	PASS	A01	PASS	
13.16.3	4.2.11	Output RF spectrum in GPRS multislot configuration					
		NT / NV	A01	PASS	A01	PASS	
		LT / LV	A01	PASS	A01	PASS	
		LT / HV	A01	PASS	A01	PASS	
		HT / LV	A01	PASS	A01	PASS	
		HT/HV	A01	PASS	A01	PASS	
14.7.1	4.2.20	Blocking and spurious response – speech channels	A01	PASS	A01	PASS	

APPENDIX A: PHOTOGRAPHS OF TEST SETUP
RADIATED SPURIOUS EMISSION TEST SETUP



APPENDIX B: PHOTOGRAPHS OF EUT

All VIEW OF EUT



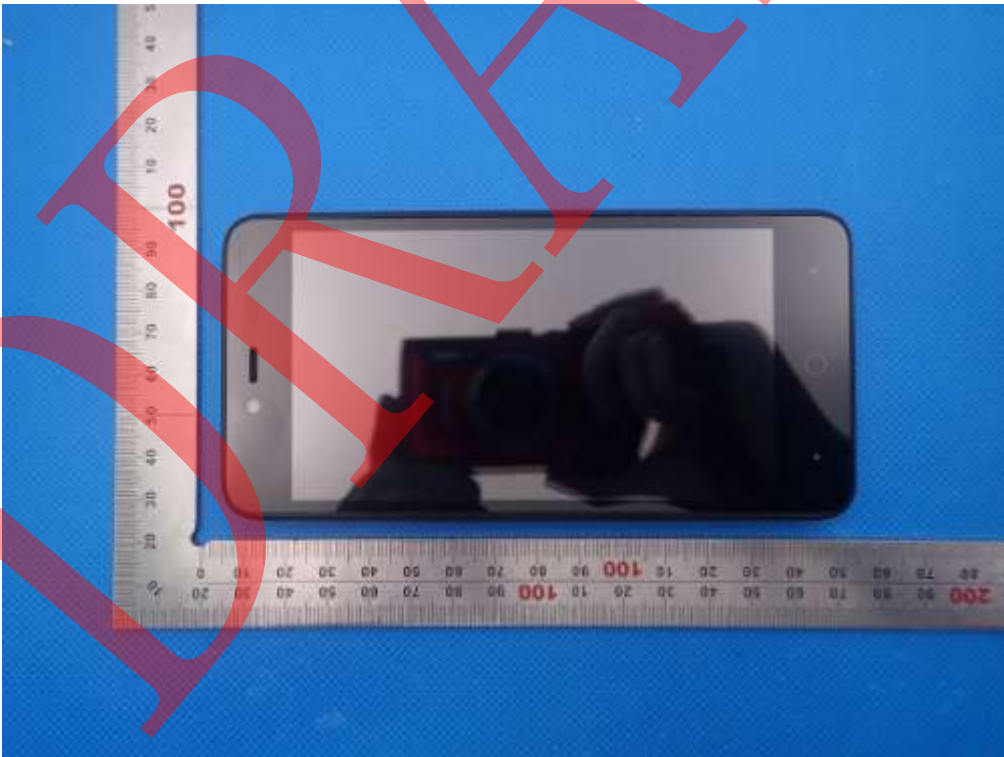
TOP VIEW OF EUT



BOTTOM VIEW OF EUT



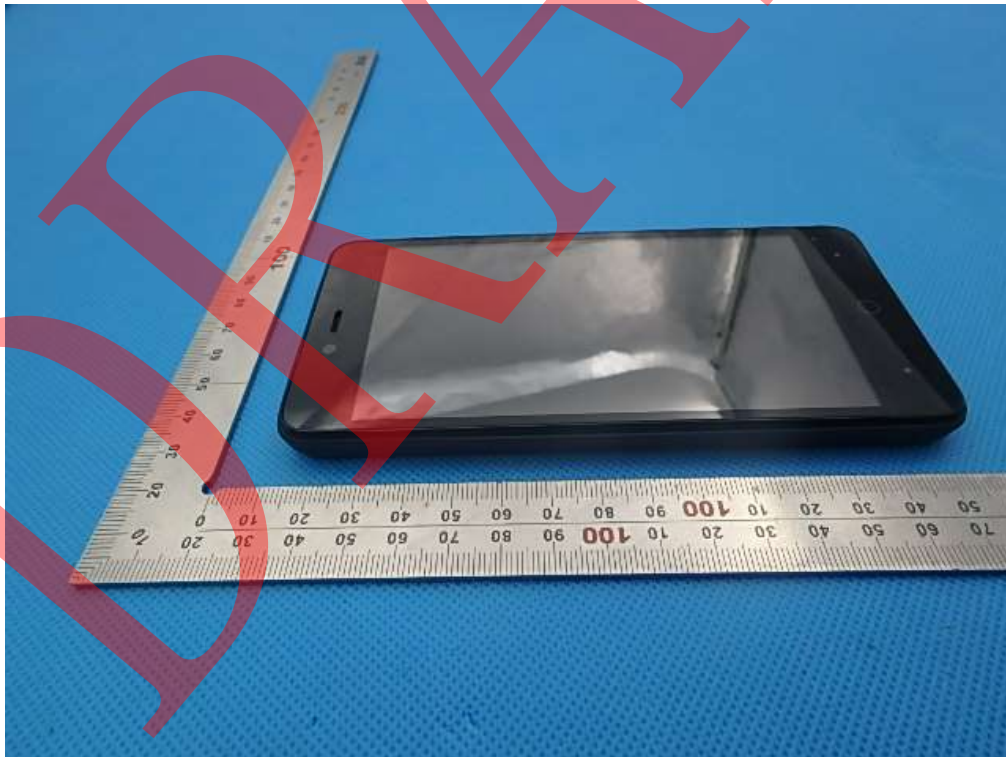
FRONT VIEW OF EUT



BACK VIEW OF EUT



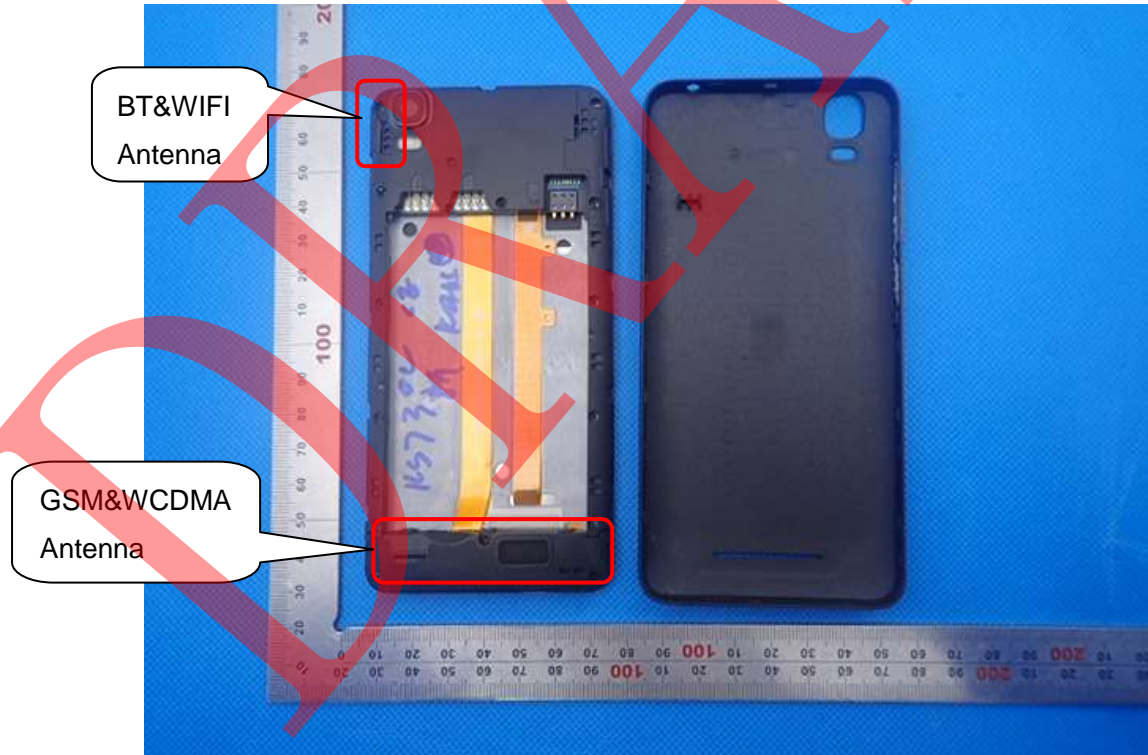
LEFT VIEW OF EUT



RIGHT VIEW OF EUT



OPEN VIEW OF EUT-1



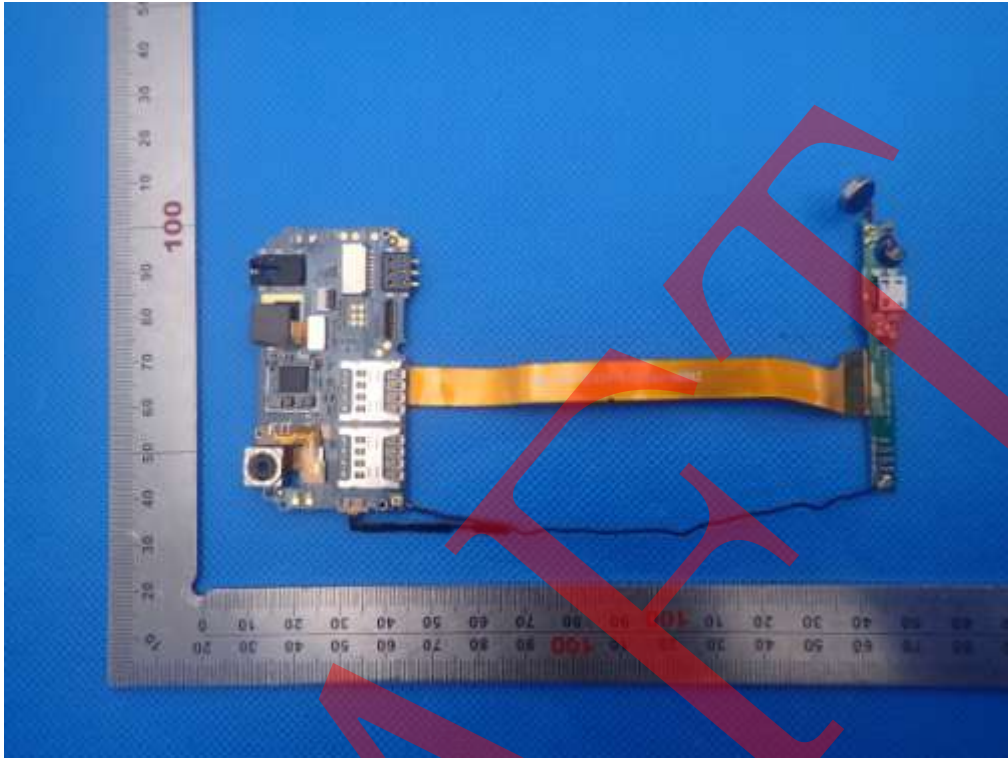
OPEN VIEW OF EUT-2



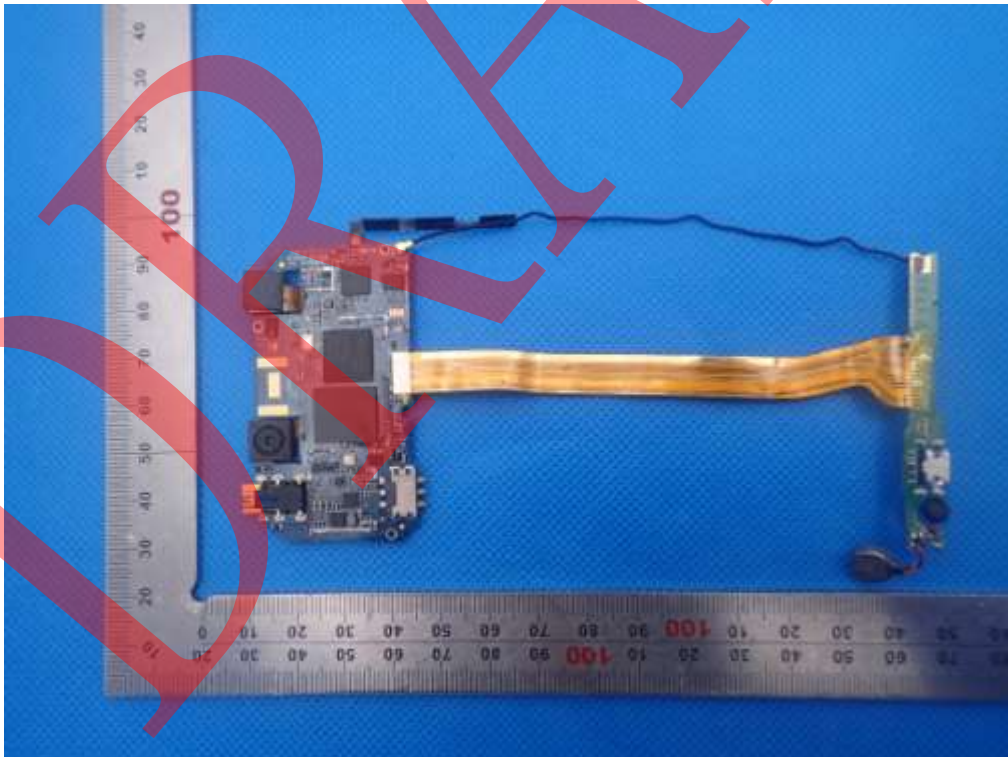
OPEN VIEW OF EUT-3



INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



----END OF REPORT----