



## RoHS TEST REPORT No. B17Z60315-SEM01

Applicant Name: Shanghai Simcom Wireless Solution Ltd.  
Applicant Address: Building A, SIM Technology Building.,No.633, Jinzhong Rd,Changning Disdriect, Shanghai, P.R.China  
Manufacture Name: Shanghai Simcom Wireless Solution Ltd.  
Manufacture Address: Building A, SIM Technology Building.,No.633, Jinzhong Rd,Changning Disdriect, Shanghai, P.R.China  
Product Name: Smart Module  
Product Model: SIM5300EA  
Date of Sample received: 2017-03-21  
Date of Test Finished: 2017-04-07  
Test Requested: With reference to RoHS Directive (EU)2015/863 amending Annex II 2011/65/EU  
Test Method: Please refer to next page(s)  
Test Result: Please refer to next page(s)  
Test Conclusion: Based on the verification results of the submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyl (PBBs), Polybrominated diphenyl ethers (PBDEs), DEHP, BBP, DBP, DIBP comply with the limits as set by RoHS Directive 2015/863 and 2011/65 Annex II; recasting 2002/95/EC.

Chief tester: Hao Xu

Approved by: 卢春阳

Audited by: Ke Zhen

Date: 2017-04-07



### Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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## Reference Method






1. With reference to IEC 62321-2:2013, review was performed for the samples disjointed from the submitted articles.
2. With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in the report.
  - (1) With reference to IEC 62321-3-1:2013, screening by EDXRF Spectroscopy;
  - (2) Wet Chemical Test Method:
    - a. With reference to IEC 62321-5:2013, determination of Cadmium and Lead by ICP-OES;
    - b. With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES;
    - c. With reference to IEC 62321-7-1:2015, determination of Hexavalent Chromium by spot test,
3. With reference to CPSC-CH-C1001-09.3 and GB/T 29786-2013, determination of DEHP, BBP, DBP, DIBP were performed for the samples indicated by the photos in the report.






## Test Results






Unit: mg/kg

Unit: mg/kg






No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
10-1	X00011000 155@1	RES MF 0R +/-5% 1/20W CH0201 RO		Pb	BL	--	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					BL
				BBP					BL
				DBP	BL				
				DIBP	BL				
10-3	X00011000 155@3	RES MF 0R +/-5% 1/20W CH0201 RO		Pb	BL	-	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					BL
				BBP					BL
				DBP	BL				
				DIBP	BL				
20	X00011020 344@1	RES MF 4.7R +/-1% 1/20W CH0201 R		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				
				PBB					
				PBDE					
				DEHP					BL
				BBP					BL
				DBP	BL				
				DIBP	BL				
30-1	X00011000 335@1	RES MF 100R +/-5% 1/20W C H0201 RO		Pb	BL	-	--	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					BL
				BBP					BL
				DBP	BL				
				DIBP	BL				
40-1	X00011000 354@1	RES MF 1.5K +/-5% 1/20W CH0201 RO		Pb	BL	-	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					BL
				BBP					BL
				DBP	BL				
				DIBP	BL				






No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
50-1	X00011000 336@1	RES MF 2.2K +/-5% 1/20W_C H0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				
				BBP	BL				
				DBP	BL				
				DIBP	BL				
60-1	X00011000 397@1	RES MF 4.7KR +/-5% 1/20W CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				
				BBP	BL				
				DBP	BL				
				DIBP	BL				
70-1	X00011000 156@1	RES MF 100K +/-5% 1/20W CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				
				BBP	BL				
				DBP	BL				
				DIBP	BL				
80	X00011000 426@1	RES MF 4.02KR +/-1% 1/16W CH0402 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				
				BBP	BL				
				DBP	BL				
				DIBP	BL				
90-4	X00011000 094@4	RES MF 0R +/-5% 1/16W CH 0402 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				
				BBP	BL				
				DBP	BL				
				DIBP	BL				

No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
100	X00011020 169@1	RES NTC 10KR +/-1%? 3380 1/10W CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
110	X00012020 124@1	CAP C0G 18PF +/-5% 50V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
120-2	X00012100 149@2	CAP C0G 22PF +/-5% 50V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
120-3	X00012100 211@1	CAP CM1 22PF +/-5% 25V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
130-2	X00012020 477@2	CAP C0G 33PF +/-5% 50V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								






No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
140	X00012020 486@1	CAP NPO 39PF +/-5% 25V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				BL
				BBP	BL				BL
				DBP	BL				BL
				DIBP	BL				BL
150-2	X00012020 451@1	CAP X5R 1.0NF +/-10% 25V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				BL
				BBP	BL				BL
				DBP	BL				BL
				DIBP	BL				BL
160-1	X00012020 200@1	CAP C0G 4.7NF +/-10% 10V CH0201 RH		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				BL
				BBP	BL				BL
				DBP	BL				BL
				DIBP	BL				BL
170	X00012020 484@1	CAP X7R 10NF +/-10% 10V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				BL
				BBP	BL				BL
				DBP	BL				BL
				DIBP	BL				BL
180	X00012020 194@1	CAP X5R 47NF +/-10% 6.3V CH0201 RH		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	BL				
				PBB	BL				
				PBDE	BL				
				DEHP	BL				BL
				BBP	BL				BL
				DBP	BL				BL
				DIBP	BL				BL













No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data				
190-2	X00012100 152@2	CAP X5R 100NF +/-10% 10V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
190-8	X00012100 214@4	CAP X5R 100NF +/-10% 6.3V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
200-3	X00012100 151@3	CAP X5R 220NF +/-20% 6.3V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
210-2	X00012020 017@2	CAP X5R 1UF +/-20% 6.3V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
220-1	X00012100 088@1	CAP X5R 1UF +/-10% 6.3V CH0402 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL






No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data				
220-6	X00012100 120@2	CAP X5R 1UF +/-10% 10V CH0402 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
230-1	X00012020 057@1	CAP X5R 4.7UF +/-20% 10V CH0402 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
230-2	X00012020 102@1	CAP X5R 4.7UF +/-20% 10V CH0402 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
230-3	X00012020 268@1	CAP X5R 4.7UF +/-20% 6.3V 0402 +0.03 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
230-4	X00012100 484@1	CAP X5R 4.7UF +/-20% 6.3V CH0402 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					








No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data				
240-2	X00012020 133@1	CAP X5R 10UF +/-20% 6.3V CH0402 RO		Pb	BL	--	--	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
240-3	X00012020 073@1	CAP X5R 10UF +/-20% 6.3V CH0402 RO		Pb	BL	-	-	-	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
250	X00012020 238@1	CAP X5R 4.7UF +/-10% 10V CH0603 RH		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
260-7	X00012100 032@7	CAP X5R 10UF +/-20% 6.3V CH0603 RO		Pb	BL	-	--	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL
270-1	X00012020 077@1	CAP X5R 22UF 6.3V +/-20% 0603 RO		Pb	BL	--	-	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>					
				PBB					
				PBDE					
				DEHP	--				BL
				BBP					BL
				DBP					BL
				DIBP					BL






No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
270-2	X00012020 080@1	CAP X5R 22UF +/-20% 6.3V CH0603*0.8 RO		Pb	BL	-	--	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
				BL					
				BL					
				BL					
270-3	X00012020 146@1	CAP X5R 22UF +/-20% 6.3V CH0603 RO		Pb	BL	-	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
				BL					
				BL					
				BL					
270-4	X00012020 255@1	CAP X5R 22UF ±20% 6.3V 0603*0.8-0.2H RO		Pb	BL	-	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
				BL					
				BL					
				BL					
280	X00014120 028@1	IND HIGH 3.3NH +/-0.1NH CH0201 RO		Pb	BL	--	--	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
				BL					
				BL					
				BL					
290	X00014120 628@1	IND HQ 3.9NH +/-0.1NH CH0201 RO		Pb	BL	-	--	-	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
				BL					
				BL					
				BL					

No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
300-2	X00014120 093@1	IND HIGH 4.7NH +/-3% CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP	BL				
				DIBP	BL				
310	X00014120 058@1	IND HIGH 5.1NH +/-0.2NH CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP	BL				
				DIBP	BL				
320	X00014120 569@1	IND 7.5NH +/-5% 0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP	BL				
				DIBP	BL				
330	X00014100 479@1	IND HIGH 18NH +/-2% CH0402 RO		Pb	BL	--	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP	BL				
				DIBP	BL				
340	X00013520 146@1	TVS 4V 0.05PF CH0201 RO		Pb	BL	--	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP	BL				
				DIBP	BL				






No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
350	X00014120 396@1	IND 1.5UH±20% 2.2A 110MΩ 2*1.6*1MM RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
360-3	X00014100 507@1	BEAD 1KOHM@100M HZ +/-25% 0.2A 0402 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
370-1	X00014120 013@1	BEAD 220OHM@100M HZ 1400MA 0.1R CH0603 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
380-2	X00013520 135@1	TVS 5V 0.55PF DFN1006-3L RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
390-3	X00013500 010@1	ESD 5.0V VPP=20KV 50PF 1.0X0.6MM RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					

No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
400-4	X00015100 030@3	DIO SCHOTTKY VR=30V IF=200MA SOD523 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
410-2	X00014200 098@1	CRY 32.768K 12.5PF +-20% 3.2*1.5*0.9 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
420	X00013120 165@1	LDO 1.6V-5.5 VOUT 2.8V 300MA UTDFN RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
430	X00013020 424@1	MONO AUDIO CODEC QFN20 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
440-1	X00012020 585@1	CAP X7R 6.8NF +/-10% 10V CH0201 RO		Pb	BL	-	-	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				BL
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					




No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
450	X00021122 693@1	PCB SIM5300E 8L HDI PCB V1.03 RH		Pb	BL	--	--	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
460	X00011020 443@1	RES NTC 22KR +/-3%? 1/10W CH0201 RO		Pb	BL	-	-	--	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
470	X00014120 717@1	IND 3.3UH ±20% 1.0A 252MΩ 1MM 2016 RO		Pb	BL	--	--	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
480	X00013621 070@1	ISOPLEXER 3G DUAL BAND 1+8 EU VERSION RO		Pb	BL	-	--	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	-				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								
490	X00013621 073@1	FEM WITH INTEGRATED GPRS PA RO		Pb	BL	-	--	-	-
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					BL
	BL								
	BL								
	BL								



No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
500	X00013621 072@1	SAW RX2IN1INPUT DIPLEX FILTER GSM1900 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
	BL								
	BL								
	BL								
	BL								
510	X00014220 188@1	SMD XO 26MHZ +/15PPM 8PF CH2016 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	--				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
520	X00013621 075@1	2G/3G TRANSEIVER P1.0 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
	BL								
	BL								
	BL								
	BL								
530	X00013720 236@1	BB HSPA+/WCDMA /GSM NSP290 0.8*0.8*1.2 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
	BL								
	BL								
	BL								
	BL								
540	X00012020 349@1	CAP COG 1.5PF +/-0.25P 50V CH0201 RO		Pb	BL	--	--	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	BL				
				Cr <sup>6+</sup>	--				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					
	BL								
	BL								
	BL								
	BL								



No.	Part No.	Description	Figure	X-ray Screening		Spot-test/ UV-vis	ICP-OES	GC/MS for PBB/PBDE	GC/MS for PHTHALATES
				Element	Data	Cr(VI)	Pb/Hg/Cd	PBB/PBDE	DEHP/BBP DBP/DIBP
550	X00024022 053@1	SHIELDING FRAME SIM5300E RO		Pb	BL	--	-	--	--
				Cd	BL				
				Hg	BL				
				Cr	BL				
				Br	-				
				Cr <sup>6+</sup>	-				
				PBB					
				PBDE					
				DEHP					
				BBP					
				DBP					
				DIBP					

**Note:**

- (1) (a) It is the result on total Br while test item on restricted substances is PBBs/PBDEs. It is the result on total Cr while test item on restricted substances is  $\text{Cr}^{6+}$ .
- (b) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Pb, Cd, Hg); UV-VIS(for  $\text{Cr}^{6+}$ ) and GC-MS (for PBBs, PBDEs, DEHP, BBP, DBP, DIBP) is recommended to be performed.
- (c) The XRF screening test for RoHs elements-The reading may be different to the actual content in the sample be of non-uniformity composition.
- (2) (a)  $\text{mg/kg}=\text{ppm}=0.0001\%$ , BL= Below Limit, N.D.= not detected, "--"= not available.
- (b) Unit and Method Detection Limit (MDL) in wet chemical test and XRF

Test Items	Pb	Cd	Hg	Cr	Br	DEHP	BBP	DBP	DIBP
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
XRF MDL	10.0	5.0	20.0	10.0	50.0	—	—	—	—
Wet Chemical Test MDL	3	3	3	—	—	—	—	—	—

(b) Unit and Method Detection Limit (MDL) in wet chemical test and XRF

The MDL for single compound of PBBs, PBDEs, DEHP, BBP, DBP, DIBP is 5 mg/kg and MDL of  $\text{Cr}^{6+}$  for polymer & composite sample is 5 mg/kg.

(c) Spot-test:

Negative = Not Detected of  $\text{Cr}^{6+}$  coating, Positive = Presence of  $\text{Cr}^{6+}$  coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed or negative)

Boiling-water-extraction:

N.D. = Not Detected of  $\text{Cr}^{6+}$  for polymer & composite sample.

Storage conditions and production date of the tested sample are unavailable and thus results of  $\text{Cr}^{6+}$  represent status of the sample at the time of testing.

- (3) When the exemptions occurred, it should be marked and specified"" according to the European Union exemptions Clauses requirement (2011-65-EU annex III) .

Sample photo:

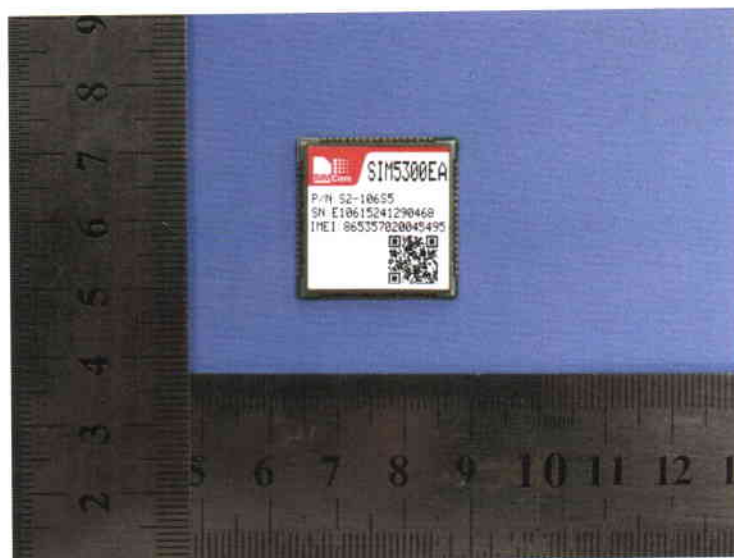


Photo 1 The front of the sample (SIM5300EA)

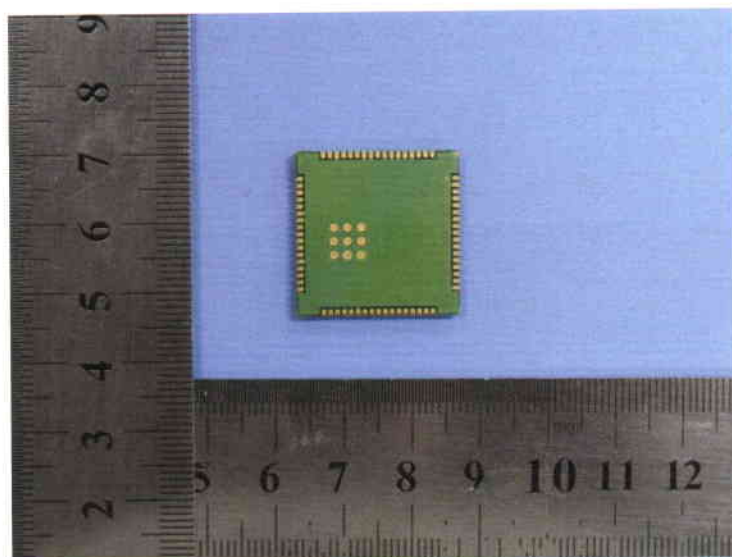


Photo 2 The back of the sample (SIM5300EA)

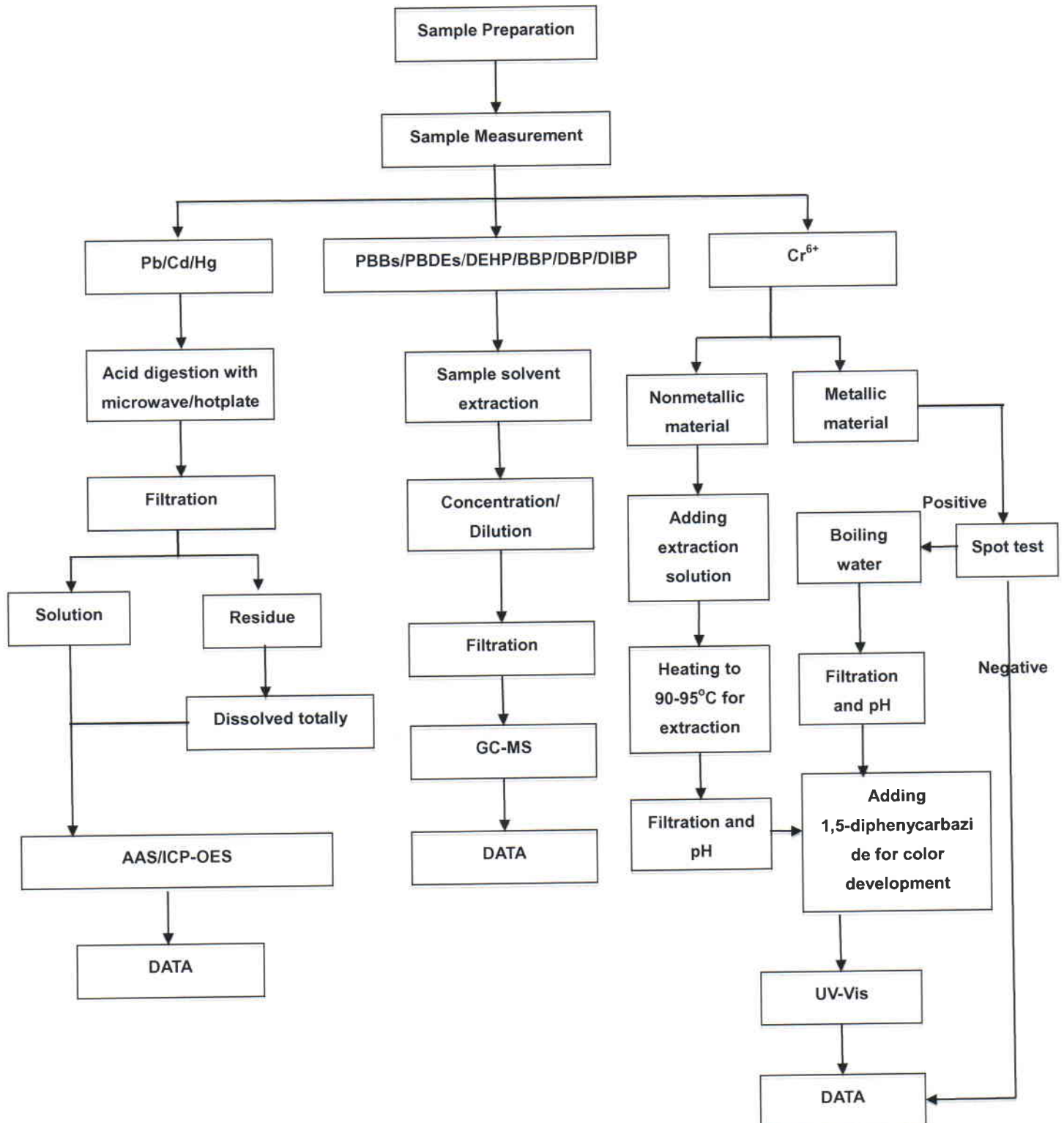


## The Main Testing Equipment list

No.	Equipment Name	Model/spec	Equipment Serial Number	Calibration valid date	(√)
1.	XRF analyzer	Ux-310	F2008AA6	2017-06-28	√
2.	XRF analyzer	Ux-310	F2009521	2017-06-28	--
3.	XRF analyzer	Ux-310	F1162	2017-06-28	--
4.	XRF analyzer	SEA6000VX	106004050001	2017-06-28	√
5.	ICP-AES	5300DV	077N5072703	2018-07-08	--
6.	GC-MS	Clarus500	GC:650N5081051 MS:651N5072702	2018-07-20	√
7.	UV-VIS	Lambda 35	101N5081605	2017-10-16	--
8.	Electronic balance	CP225D	50861713	2017-11-12	√
9.	Electronic balance	CPA225D	26192007	2018-04-01	--

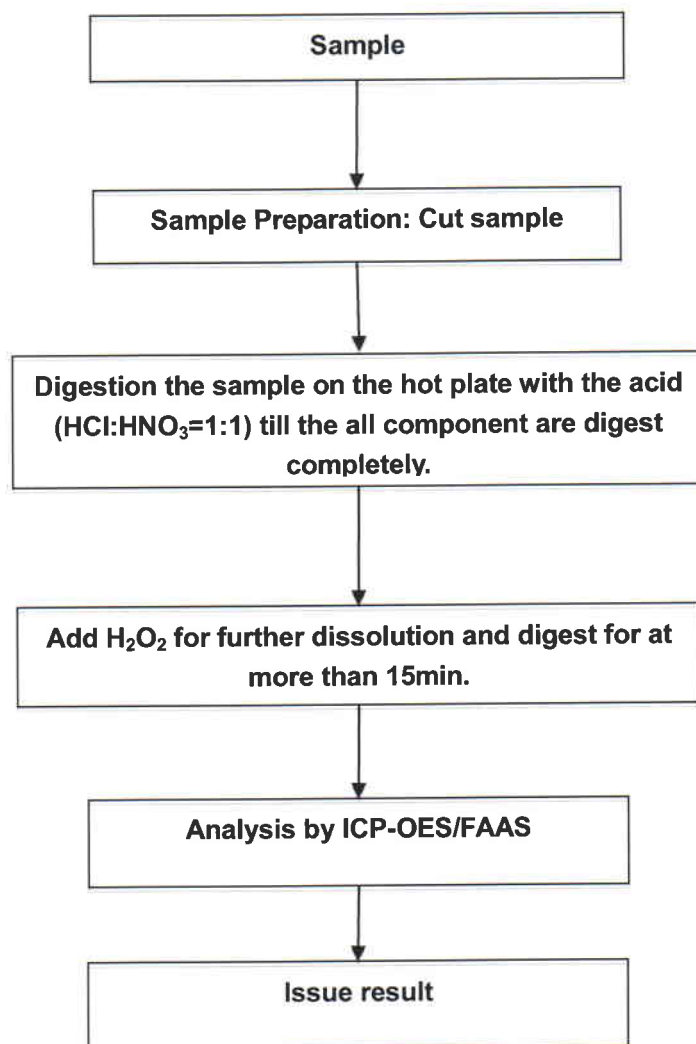
## Measurement Flow-Chart of Chemical Testing

These samples were dissolved totally by pre-conditioning method according to below flow chart.





### Test Flow Chart



\*\*\*END OF REPORT\*\*\*