



RoHS TEST REPORT

APPLICANT : Shanghai SIMCom Wireless Solutions Limited.

PRODUCT NAME : SIM7100A

MODEL NAME : N/A

BRAND NAME : N/A

TEST REQUEST : Test as requested by client

TEST DATE : 2017-12-01 to 2017-12-08

ISSUE DATE : 2017-12-12

TEST CONCLUSION : Based on the verification results of the submitted samples,
the results comply with the limits as set by RoHS Directive
2011/65/EU and amended by (EU) 2015/863

Tested by :

Liu Rui

Liu Rui(Test engineer)

Approved by :

Xiaoshan Ni

Xiaoshan Ni (Supervisor)

NOTE: This document is issued by MORLAB, the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.



DIRECTORY

TEST REPORT DECLARATION.....	2
1. TECHNICAL INFORMATION.....	3
1.1. APPLICANT INFORMATION.....	3
2. COMPONENT DESCRIPTION.....	3
3. TEST METHODS.....	11
3.1. SCREENING TEST BY XRF SPECTROSCOPY.....	11
3.2. CHEMICAL TEST.....	11
4. TEST RESULTS AND PHOTOGRAPHS OF SAMPLE.....	12
ANNEX A GENERAL INFORMATION.....	42



1. Technical Information

Note: Provided by applicant

1.1 Applicant Information

Applicant Shanghai SIMCom Wireless Solutions Limited.
Applicant Address Building A, SIM Technology Building, No. 633, Jinzhong Road, Changning District, Shanghai P.R. China 200335
Manufacturer N/A
Manufacturer Address N/A

2. Component Description

Part No.	Sample No.	Sample Description	Sample Material
1	A-1	RES NTC 68KR +/-5% CH0402 RO	COMPOSITE
		RES NTC 68KR +/-5% CH0402 RO	COMPOSITE
2	A-2	RES MF 100K +/-1% 1/20W CH0201 RO	COMPOSITE
		RES MF 100K +/-1% 1/20W CH0201 RO	COMPOSITE
3	A-3	RES MF 0R +/-5% 1/20W CH0201 RO	COMPOSITE
		RES MF 0R +/-5% 1/20W CH0201 RO	COMPOSITE
		RES MF 0R +/-5% 1/20W CH0201 RO	COMPOSITE
4	A-4	RES MF 10K +/-5% 1/20W CH0201 RO	COMPOSITE
		RES MF 10K +/-5% 1/20W CH0201 RO	COMPOSITE
		RES MF 10K +/-5% 1/20W CH0201 RO	COMPOSITE
5	A-5	RES MF 680R +/-1% 1/20W CH0201 RO	COMPOSITE
6	A-6	RES MF 47R +/-5% 1/20W CH 0201 RO	COMPOSITE
7	A-7	RES MF 150R +/-1% 1/20W CH0201 RO	COMPOSITE
		RES MF 150R +/-1% 1/20W CH0201 RO	COMPOSITE
		RES MF 150R +/-1% 1/20W CH0201 RO	COMPOSITE
8	A-8	RES MF 20KR +/-5% 1/20W CH0201 RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
9	A-9	RES MF 240R +/-1% 1/20W CH0201 RO	COMPOSITE
		RES MF 240R +/-1% 1/20W CH0201 RO	COMPOSITE
10	A-10	RES MF 200R +/-1% 1/20W CH0201 RO	COMPOSITE
11	A-11	RES MF 4.75K +/-1% 1/20W CH0201 RO	COMPOSITE
		RES MF 4.75K +/-1% 1/20W CH0201 RO	COMPOSITE
12	A-12	CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 1UF +/-20% 6.3V CH0201 RO	COMPOSITE
13	A-13	CAP X5R 4.7UF +/-20% 10V CH0402 RO	COMPOSITE
		CAP X5R 4.7UF +/-20% 6.3V 0402 +0.03 RO	COMPOSITE
14	A-14	CAP X5R 22UF 6.3V +/-20% 0603 RO	COMPOSITE
		CAP X5R 22UF +/-20% 6.3V CH0603 RO	COMPOSITE
		CAP X5R 22UF +/-20% 6.3V CH0603*0.8 RO	COMPOSITE
		CAP X5R 22UF +/-20% 6.3V CH0603*0.6 RO	COMPOSITE
		CAP X5R 22UF 6.3V +/-20% 0603 RO	COMPOSITE
15	A-15	CAP X5R 47UF +/-20% 6.3V CH0603 0.8MM RO	COMPOSITE
		CAP X5R 47UF +/-20% 6.3V CH0603 RO	COMPOSITE
16	A-16	CAP X5R 10UF +/-20% 6.3V CH0402 RO	COMPOSITE
		CAP X5R 10UF +/-20% 6.3V CH0402 RO	COMPOSITE
17	A-17	CAP X5R 2.2UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 2.2UF +/-20% 6.3V CH0201 RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
		CAP X5R 2.2UF +/-20% 6.3V CH0201 RO	COMPOSITE
		CAP X5R 2.2UF +/-20% 6.3V CH0201 RO	COMPOSITE
18	A-18	CAP X5R 100NF +/-10% 10V CH0201 RO	COMPOSITE
		CAP X5R 100NF +/-10% 10V CH0201 RO	COMPOSITE
		CAP X5R 100NF +/-10% 10V CH0201 RO	COMPOSITE
		CAP X5R 100NF +/-10% 10V CH0201 RO	COMPOSITE
19	A-19	CAP CM1 100PF +/-5% 25V CH0201 RO	COMPOSITE
		CAP CM1 100PF +/-5% 25V CH0201 RO	COMPOSITE
20	A-20	CAP X7R 1NF +/-10% 25V CH0201 RO	COMPOSITE
		CAP X7R 1NF +/-10% 25V CH0201 RO	COMPOSITE
		CAP X7R 1NF +/-10% 25V CH0201 RO	COMPOSITE
21	A-21	CAP COG 33PF +/-5% 25V CH0201 RO	COMPOSITE
		CAP COG 33PF +/-5% 25V CH0201 RO	COMPOSITE
		CAP COG 33PF +/-5% 25V CH0201 RO	COMPOSITE
22	A-22	CAP COG 1PF +/-0.25PF 50V CH0201 RO	COMPOSITE
		CAP COG 1PF +/-0.25PF 50V CH0201 RO	COMPOSITE
23	A-23	TVS 5V 6PF 双向 DFN0603 RO	COMPOSITE
24	A-24	IND FILM 3.0NH +/-0.1NH CH0201 RO	COMPOSITE
25	A-25	IND HQ 6.8NH +/-3% CH0201 RO	COMPOSITE
26	A-26	IND HQ CHIP COIL 8.2NH +/-3% CH0201 RO	COMPOSITE
		8.2NH +/-3% CH0201 RO	COMPOSITE
27	A-27	IND HQ 1.2NH +/-0.1NH CH0201 RO	COMPOSITE
		IND HQ 1.2NH +/-0.1NH CH0201 RO	COMPOSITE
28	A-28	IND HQ 1.5NH +/-1% CH0201 RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
28		IND HQ 1.5NH +/-1% CH0201 RO	COMPOSITE
29	A-29	IND FILM HQ 2.2NH +/-0.1NH220MACH0201 RO	COMPOSITE
		IND FILM HQ 2.2NH ±0.1NH 220MACH0201 RO	COMPOSITE
30	A-30	IND HIGH 22NH +/-3% CH0201 RO	COMPOSITE
		IND HIGH 22NH +/-3% CH0201 RO	COMPOSITE
31	A-31	IND HIGH 18NH +/-3% CH0201 RO	COMPOSITE
32	A-32	IND HQ CHIP COIL 10NH +/-3% CH0201 RO	COMPOSITE
33	A-33	BEAD 220OHM@100MHZ 1400MA 0.1R CH0603 RO	COMPOSITE
		BEAD 220R/100MHZ 1.4A 0603 RO	COMPOSITE
34	A-34	IND_HIGH_15NH_+/-5%_CH0201 RO	COMPOSITE
		IND HQ CHIP COIL 15NH +/-3% CH0201 RO	COMPOSITE
35	A-35	IND FILM 9.1NH +/-3% CH0201 RO	COMPOSITE
36	A-36	IND HQ CHIP COIL 4.7NH +/-3% CH0201 RO	COMPOSITE
		IND HQ CHIP COIL 4.7NH +/-3% CH0201 RO	COMPOSITE
		IND HIGH 4.7NH +/-3% CH0201 RO	COMPOSITE
37	A-37	IND HIGH 47NH +/-5% CH0201 RO	COMPOSITE
38	A-38	IND LOW 2.2UH +/-20% 1200MA CH2016 RO	COMPOSITE
		IND LOW 2.2UH +/-20% 1200MA CH2016 RO	COMPOSITE
		IND MULTI 2.2UH ±20% 1.2A CH2016 RO	COMPOSITE
39	A-39	TCXO 19.2MHZ 7PF +/-10PPM 2.0*1.6 RO	COMPOSITE
		CRY XO 19.2MHZ 7PF +/-10PPM CH2016 RO	COMPOSITE
40	A-40	MEMO 2G8NAND+1G32DDR 1.8V BGA130 RO	COMPOSITE
		MEMO 2G8NAND+1G32DDR 1.8V BGA130 RO	COMPOSITE
41	A-41	ASW SP8T DRX GPIO 2*2*0.55MM RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
42	A-42	B41 RX SAW 2555-2655MHZ 1109 RO	COMPOSITE
43	A-43	B41 TX SAW 2555-2655MHZ 1411 RO	COMPOSITE
44	A-44	BAND40 BALANCED RX SAW 11*09MM RO	COMPOSITE
45	A-45	BAND 8 RX SAW 50R/100R 1109 RO	COMPOSITE
46	A-46	PA GSM/EDGE/UMTS/CDMA/TD/LTE 7*5 RO	COMPOSITE
47	A-47	SAW GPS/GLONASS 50/100R 1.1*0.9 RO	COMPOSITE
48	A-48	SAW RX WCDMA BAND1 50/100R 1.1*0.9MM RO	COMPOSITE
49	A-49	TRX GSM/TD/EVDO/WCDMA/LTE WLNSP142 RO	COMPOSITE
50	A-50	SAW DPX UMTS BAND1 50/100/50R 2.0*1.6 RO	COMPOSITE
51	A-51	BAND40 TX SAW FILTER 1.35*1.05 RO	COMPOSITE
52	A-52	SPDT SWITCH 1.0*1.0*0.4MM RO	COMPOSITE
		GAASVERY SMALL1BIT CONTROLSPDT SWITCH RO	COMPOSITE
53	A-53	SAW DPX BAND3 50/100R 2016 RO	COMPOSITE
54	A-54	SAW DPX WCDMA900 50/100/50R 2.0*1.6 RO	COMPOSITE
55	A-55	DIFFERENTIAL 3T SWITCH 2*2*0.55MM RO	COMPOSITE
56	A-56	DP4T SWITCH 10PIN 1.1*1.5*0.9MM RO	COMPOSITE
57	A-57	SAW RX WCDMA B3 50/100R 1.1*0.9 RO	COMPOSITE
58	A-58	NPN 50V 100MA R1=100K R2=100K SOT-723 RO	COMPOSITE
59	A-59	TVS 5V 0.55PF 双路 DFN1006-3L RO	COMPOSITE
		TVS 5V 0.5PF 双路 DFN1006-3L RO	COMPOSITE
60	A-60	PMU WLNSP-105 3.87*4.44*0.55MM 0.4P RO	COMPOSITE
61	A-61	BB EDGE/TD/EVDO/HSPA+/LTE 424NSP 550M RO	COMPOSITE
62	A-62	PAM B7/38/40/41 3*4*0.9MM RO	COMPOSITE
63	A-63	ASW SP14T GPIO QFN-22 2.5*2.9*1.0MM RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
64	A-64	PCB 8PPA00-SIM7100CE 10L HDI V1.05 RO	COMPOSITE
65	A-65	SHIELDING FRAME SIM7100 RO	METAL
		SHIELDING FRAME-NEW SIM7100 RO	METAL
66	A-66	SIM7100C SHIELDING CASE HOLE SLOT NEW RO	METAL
67	A-67	IND HQ CHIP COIL 3.9NH \pm 0.1NH CH0201 RO	COMPOSITE
68	A-68	LOW PASS FILTER 824-915MHZ 0.65*0.5 RO	COMPOSITE
69	A-69	IND HQ 1NH \pm 0.1NH CH0201 RO	COMPOSITE
70	A-70	CAP COG 0.5PF \pm 0.1PF 50V CH0201 RO	COMPOSITE
		CAP COG 0.5PF \pm 0.1PF 50V CH0201 RO	COMPOSITE
		CAP COG 0.5PF \pm 0.1PF 50V CH0201 RO	COMPOSITE
		CAP COG 0.5PF \pm 0.1PF 50V CH0201 RO	COMPOSITE
71	A-71	DP4T SWITCH 10PIN 1.1*1.5*0.9MM RO	COMPOSITE
72	A-72	IND HIGH 2.5NH \pm 1% CH0201 RO	COMPOSITE
73	A-73	CAP COG 22PF \pm 5% 50V CH0201 RO	COMPOSITE
		CAP COG 22PF \pm 5% 50V CH0201 RO	COMPOSITE
74	A-74	IND HIGH 4.3NH \pm 3% CH0201 RO	COMPOSITE
75	A-75	IND HQ CHIP COIL 5.1NH \pm 3% CH0201 RO	COMPOSITE
76	A-76	IND HIGH 3NH \pm 0.1NH CH0201 RO	COMPOSITE
		IND FILM 3.0NH \pm 0.1NH CH0201 RO	COMPOSITE
77	A-77	CAP COG 1.2P \pm 0.1PF 50V CH0201 RO	COMPOSITE
		CAP COG 1.2P \pm 0.1PF 50V CH0201 RO	COMPOSITE
		CAP COG 1.2P \pm 0.1PF 50V CH0201 RO	COMPOSITE
78	A-78	SAW RX B34/39 50/50/100R 1511 RO	COMPOSITE
79	A-79	TD B34/B39 TX SAW 2*1.25*1 RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
80	A-80	IND HIGH 2.7NH +/-0.1NH CH0201 RO	COMPOSITE
81	A-81	SAW DPX UMTS BAND5 50/100/50 2.0*1.6 RO	COMPOSITE
82	A-82	CAP COG 6PF +/-0.25PF 50V 0201 RO	COMPOSITE
		CAP COG 6PF +/-0.25PF 50V 0201 RO	COMPOSITE
		CAP COG 6PF +/-0.25PF 50V 0201 RO	COMPOSITE
		CAP COG 6PF +/-0.5PF 25V 0201 RO	COMPOSITE
83	A-83	IND HIGH 3.3NH +/-0.1NH CH0201 RO	COMPOSITE
		IND HIGH 3.3NH +/-0.1NH CH0201 RO	COMPOSITE
		IND HIGH 3.3NH +/-0.1NH CH0201 RO	COMPOSITE
84	A-84	B5 RX SAW 1.1*0.9MM RO	COMPOSITE
85	A-85	RES 68K +/-1% 1/20W CH0201 RO	COMPOSITE
		RES 68K +/-1% 1/20W CH0201 RO	COMPOSITE
86	A-86	TVS 15V 0.05PF CH0201 RO	COMPOSITE
		TVS 12V 15.5PF DFN0603-2L(0201) RO	COMPOSITE
87	A-87	IND HQ 5.6NH+/-3% 0.68R 140MA CH0201 RO	COMPOSITE
		IND 5.6NH +/-0.3NH 0.4R 150MA CH0201 RO	COMPOSITE
88	A-88	IND HIGH 2NH ±0.1NH CH0201 RO	COMPOSITE
89	A-89	CAP COG 1PF +/-0.25PF 50V CH0201 RH	COMPOSITE
		CAP COG 1PF +/-0.25PF 50V CH0201 RO	COMPOSITE
90	A-90	IND HIGH 0.6NH +/-0.1NH CH0201 RO	COMPOSITE
		IND HIGH 0.6NH +/-0.1 CH0201 RO	COMPOSITE
		IND HIGH 0.6NH +/-0.1 CH0201 RO	COMPOSITE
91	A-91	CAP COG 2.2PF +/-0.25PF 50V CH0201 RO	COMPOSITE
		CAP COG 2.2PF +/-0.25PF 50V CH0201 RO	COMPOSITE



Part No.	Sample No.	Sample Description	Sample Material
92	A-92	TVS 4V 0.05PF CH0201 RO	COMPOSITE
93	A-93	TVS 5V 10PF DFN0603-2L(0201) RO	COMPOSITE
94	A-94	BI-TV5 VRWM5V10PF DFNWB0.6*0.3-2L RO	COMPOSITE
95	A-95	SAW DPX UMTS BAND5 50/100/50 2.0*1.6 RO	COMPOSITE
96	A-96	SP6T DIVERSITY SWITCH 2*2MM RO	COMPOSITE
97	A-97	LOW PASS FILTER 824-915MHZ 0.65*0.5 RO	COMPOSITE
98	A-98	SAW TX FOR BAND17 1.1*0.9MM RO	COMPOSITE
99	A-99	SAW WCDMA 1880MHZ 100R/50R 2.0*1.6 RO	COMPOSITE
100	A-100	SAW DPX UMTS BAND4 50/100/50R 2.0*1.6 RO	COMPOSITE
101	A-101	HIGH ISOLATION X-SPDT (DP4T) SWITCH RO	COMPOSITE
102	A-102	SAW RX WCDMA B25 50/100R 1.1*0.9 RO	COMPOSITE
103	A-103	BB EDGE/TD/HSPA+/LTE 424BNSP 550MHZ RO	COMPOSITE
104	A-104	RF PA FDD-LTE BAND17 3*3MM QFN10 RO	COMPOSITE
105	A-105	PCB SIM7100A 10L HDI PCB V1.03 RH	COMPOSITE
106	A-106	B2 RX SAW 1.1*0.9MM RO	COMPOSITE
107	A-107	SAW DPX WCDMA B17 50/50/100R 2.0*1.6 RO	COMPOSITE
108	A-108	TVS 4V 0.05PF CH0201 RO	COMPOSITE
109	A-109	HIGH ISOLATION X-SPDT (DP4T) SWITCH RO	COMPOSITE
110	A-110	SAW RX WCDMA B25 50/100R 1.1*0.9 RO	COMPOSITE
111	A-111	NPN 50V 100MA R1=100K R2=100K SOT-723 RO	COMPOSITE
112	A-112	TVS 5V 0.55PF 双路 DFN1006-3L RO	COMPOSITE
113	A-113	TVS 5V 0.5PF 双路 DFN1006-3L RO	COMPOSITE
114	A-114	PMU WLNSP-105 3.87*4.44*0.55MM 0.4P RO	COMPOSITE
115	A-115	BB EDGE/TD/HSPA+/LTE 424BNSP 550MHZ RO	COMPOSITE

Part No.	Sample No.	Sample Description	Sample Material
116	A-116	RF PA FDD-LTE BAND17 3*3MM QFN10 RO	COMPOSITE
117	A-117	ASW SP14T GPIO QFN-22 2.5*2.9*1.0MM RO	COMPOSITE
118	A-118	PCB SIM7100A 10L HDI PCB V1.03 RH	COMPOSITE

3. Test Methods

3.1. Screening test by XRF spectroscopy

Element	Polymer	Metal	Composite Materials
Cd	$P \leq 70 - 3\sigma < D < 130 + 3\sigma \leq F$	$P \leq 70 - 3\sigma < D < 130 + 3\sigma \leq F$	$P \leq 50 - 3\sigma < D < 150 + 3\sigma \leq F$
Pb	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 500 - 3\sigma < D < 1500 + 3\sigma \leq F$
Hg	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 700 - 3\sigma < D < 1300 + 3\sigma \leq F$	$P \leq 500 - 3\sigma < D < 1500 + 3\sigma \leq F$
Br	$P \leq 300 - 3\sigma < D$	----	$P \leq 250 - 3\sigma < D$
Cr	$P \leq 700 - 3\sigma < D$	$P \leq 700 - 3\sigma < D$	$P \leq 500 - 3\sigma < D$

Note: P = PASS

F = FAIL

The symbol “D” marks the region where further investigation is necessary.





XRF testing results are only used for reference.





3.2. Chemical Test





Test item	Procedure	Apparatus	MDL(mg/kg)
Hg	With reference to IEC 62321-4-2013	ICP-OES	2
Cd & Pb	With reference to IEC 62321-5-2013	CV-AAS or ICP-OES	2
Cr ⁶⁺	With reference to IEC 62321-7-2:2017 (For Polymer and Electronics)	UV-VIS	2
	With reference to IEC 62321-7-1:2015 [▲] (For Plating on Metals)		0.1ug/cm ²
PBBs & PBDEs	With reference to IEC 62321-6:2015	GC-MS	5
Phthalates (DBP,BBP,DEHP,DIBP)	EN14372:2004	GC-MS	10


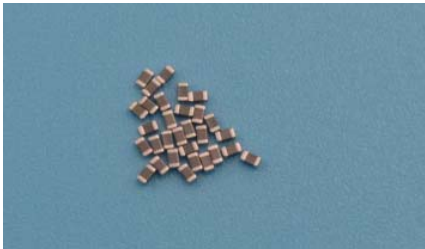
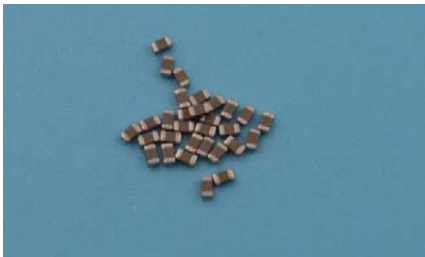

4. Test Results and Photographs of Sample

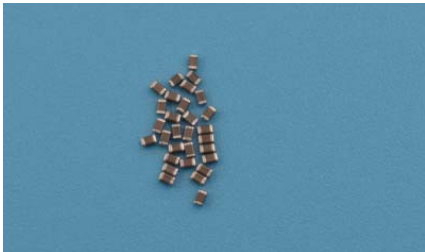



The results of XRF screening and chemical test (Unit: mg/kg)





No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
							
1	A-1		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP	N.D.			
			DIBP	N.D.			
2	A-2		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP	N.D.			
			DIBP	N.D.			
3	A-3		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP	N.D.			
			DIBP	N.D.			





No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
4	A-4		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
5	A-5		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
6	A-6		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
7	A-7		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			





No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
8	A-8		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
9	A-9		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
10	A-10		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
11	A-11		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			





No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
12	A-12		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
13	A-13		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
14	A-14		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
15	A-15		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			



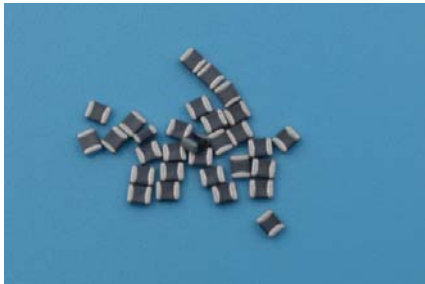
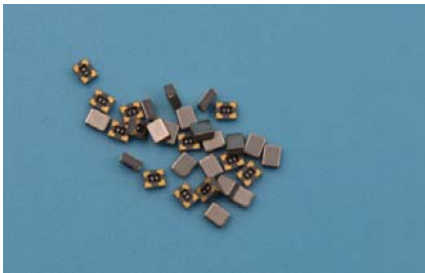
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
16	A-16		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
17	A-17		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
18	A-18		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
19	A-19		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			


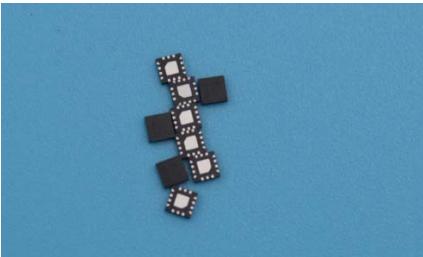
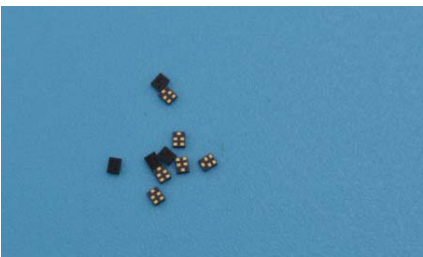
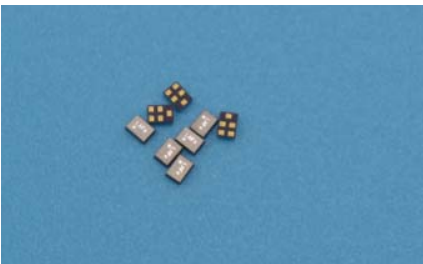
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
20	A-20		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
21	A-21		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
22	A-22		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
23	A-23		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			


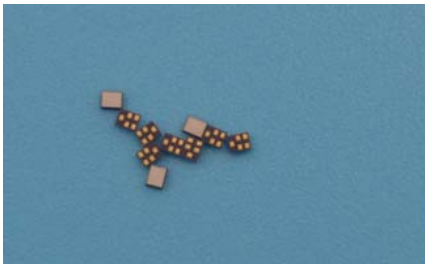
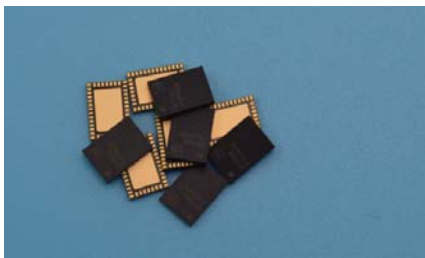

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
24	A-24		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
25	A-25		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
26	A-26		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
27	A-27		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

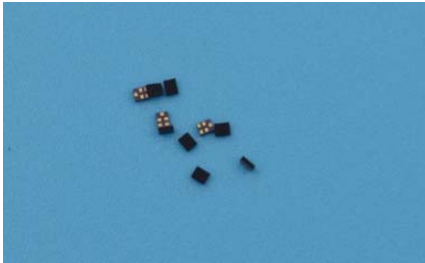
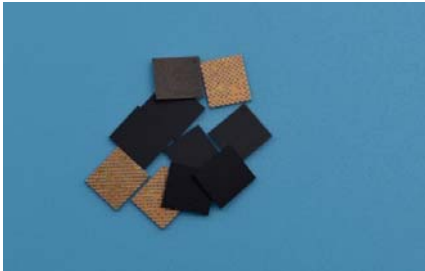

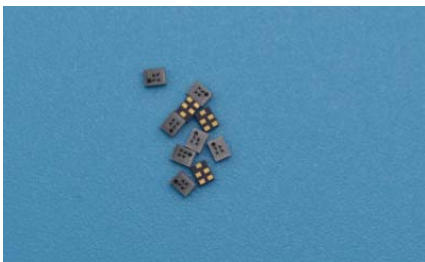
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
28	A-28		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
29	A-29		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
30	A-30		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
31	A-31		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			


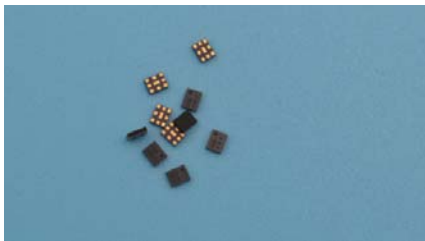
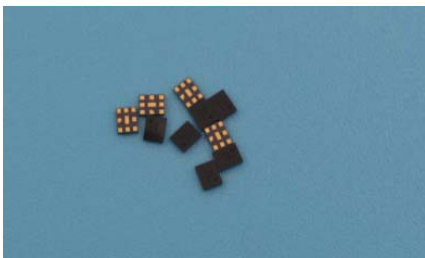
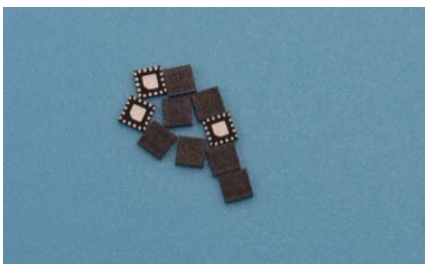
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
32	A-32		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
33	A-33		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
34	A-34		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
35	A-35		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

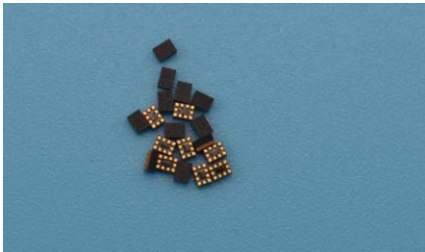



No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
36	A-36		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
37	A-37		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
38	A-38		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
39	A-39		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

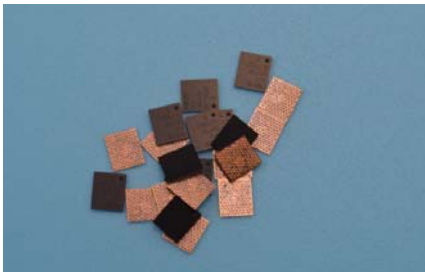

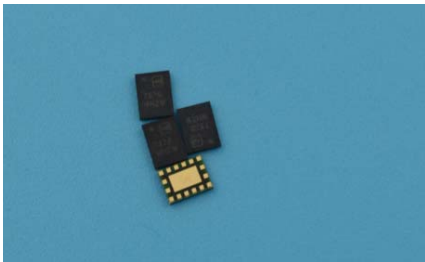
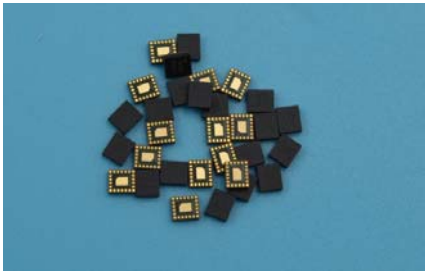
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
40	A-40		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
			DIBP				N.D.
	N.D.						
	N.D.						
	N.D.						
41	A-41		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
			DIBP				N.D.
	N.D.						
	N.D.						
	N.D.						
42	A-42		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
			DIBP				N.D.
	N.D.						
	N.D.						
	N.D.						
43	A-43		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
			DIBP				N.D.
	N.D.						
	N.D.						
	N.D.						

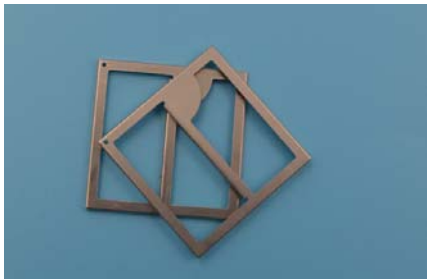
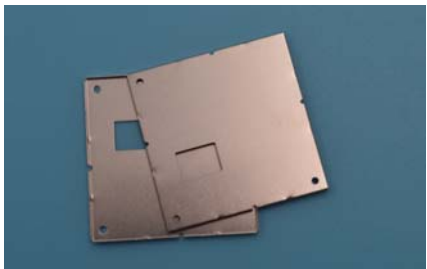

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
44	A-44		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
45	A-45		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
46	A-46		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
47	A-47		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			




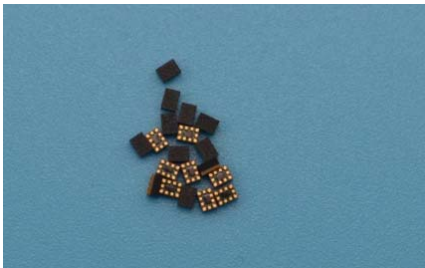
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
48	A-48		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
49	A-49		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
50	A-50		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
51	A-51		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			





No.	Sample No.	Figure	X-ray Screening		chemical test				
			Element	Data	UV-Vis	ICP-OES	GC-MS		
52	A-52		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
53	A-53		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
54	A-54		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
55	A-55		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						



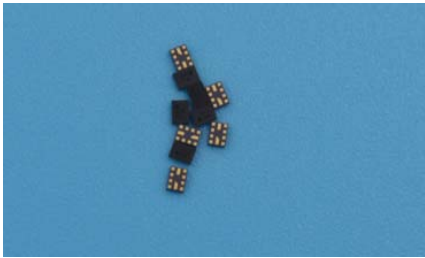

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
56	A-56		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
57	A-57		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
58	A-58		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
59	A-59		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			


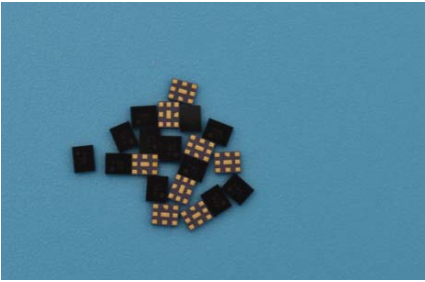


No.	Sample No.	Figure	X-ray Screening		chemical test					
			Element	Data	UV-Vis	ICP-OES	GC-MS			
60	A-60		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	N.D.						
			Cr ⁶⁺				/	/	/	
			PBBs							
			PBDEs							
			DBP							N.D.
			BBP							N.D.
			DEHP							N.D.
			DIBP							N.D.
61	A-61		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	N.D.						
			Cr ⁶⁺				/	/	/	
			PBBs							
			PBDEs							
			DBP							N.D.
			BBP							N.D.
			DEHP							N.D.
			DIBP							N.D.
62	A-62		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	N.D.						
			Cr ⁶⁺				/	/	/	
			PBBs							
			PBDEs							
			DBP							N.D.
			BBP							N.D.
			DEHP							N.D.
			DIBP							N.D.
63	A-63		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	N.D.						
			Cr ⁶⁺				/	/	/	
			PBBs							
			PBDEs							
			DBP							N.D.
			BBP							N.D.
			DEHP							N.D.
			DIBP							N.D.





No.	Sample No.	Figure	X-ray Screening		chemical test					
			Element	Data	UV-Vis	ICP-OES	GC-MS			
64	A-64		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	790.30						
			Cr ⁶⁺				/	/	N.D.	
			PBBs						N.D.	
			PBDEs						N.D.	
			DBP						N.D.	
			BBP						N.D.	
			DEHP						N.D.	
			DIBP						N.D.	
65	A-65		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	/						
			Cr ⁶⁺					/	/	/
			PBBs							
			PBDEs							
			DBP							
			BBP							
			DEHP							
			DIBP							
66	A-66		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	9.36×10 ⁴						
			Br	/						
			Cr ⁶⁺		Negative			/	/	
			PBBs							
			PBDEs							
			DBP							
			BBP							
			DEHP							
			DIBP							
67	A-67		Pb	N.D.	/	/	/			
			Cd	N.D.						
			Hg	N.D.						
			Cr	N.D.						
			Br	N.D.						
			Cr ⁶⁺				/	/	N.D.	
			PBBs						N.D.	
			PBDEs						N.D.	
			DBP						N.D.	
			BBP						N.D.	
			DEHP						N.D.	
			DIBP						N.D.	


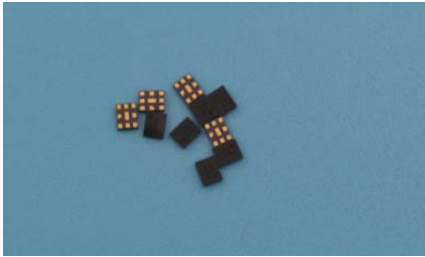


No.	Sample No.	Figure	X-ray Screening		chemical test				
			Element	Data	UV-Vis	ICP-OES	GC-MS		
68	A-68		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
69	A-69		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
70	A-70		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
71	A-71		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						


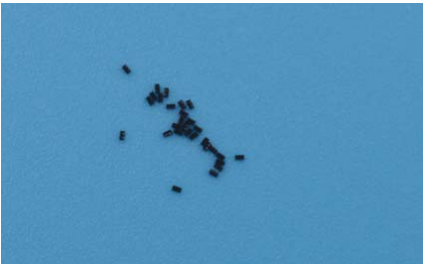


No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
72	A-72		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
73	A-73		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
74	A-74		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
75	A-75		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			



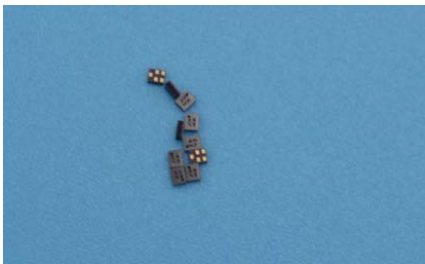
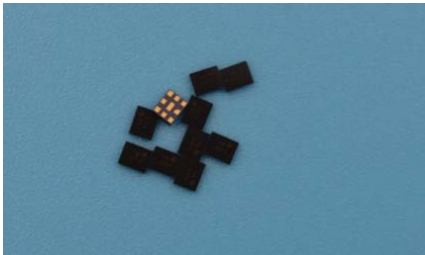
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
76	A-76		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
77	A-77		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
78	A-78		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
79	A-79		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.


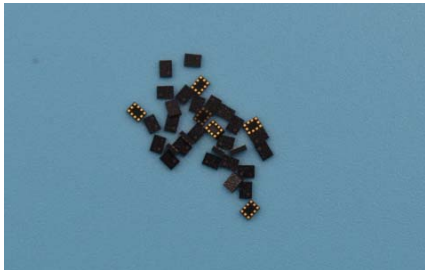
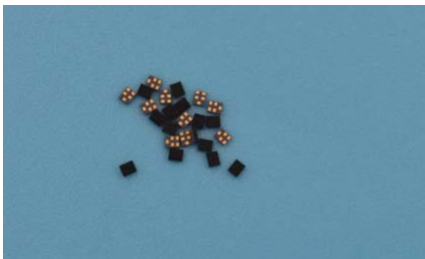
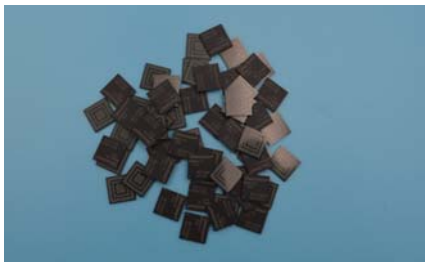
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
			DIBP				N.D.
80	A-80		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				N.D.
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
81	A-81		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				N.D.
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
82	A-82		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				N.D.
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
83	A-83		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				N.D.
			PBBs				
			PBDEs				
			DBP				
			BBP				
			DEHP				
			DIBP				

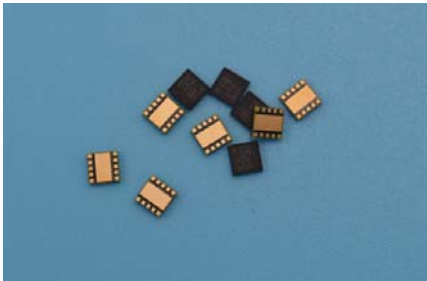
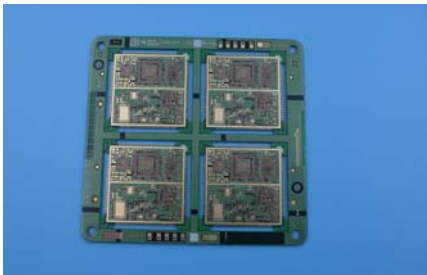

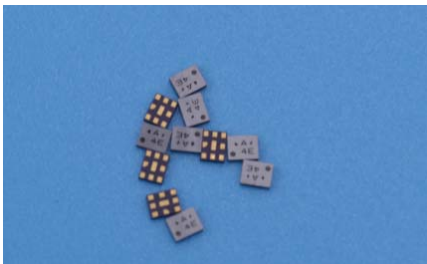
No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
84	A-84		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
85	A-85		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
86	A-86		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
87	A-87		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			


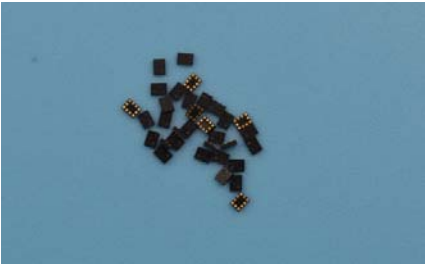
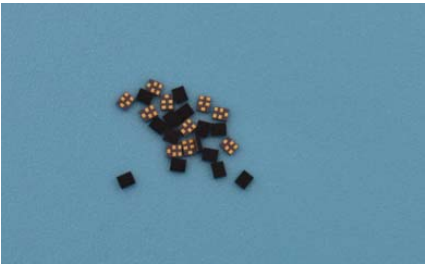

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
88	A-88		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
89	A-89		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
90	A-90		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
91	A-91		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

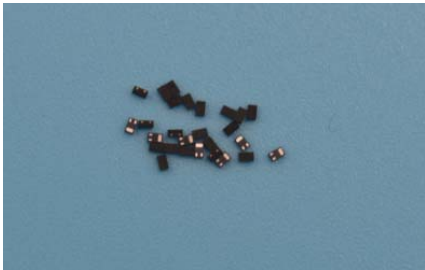

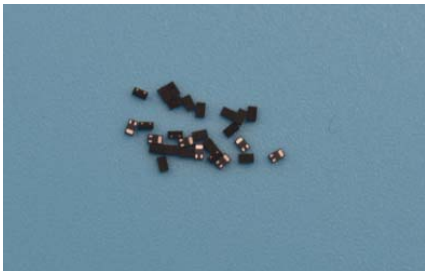
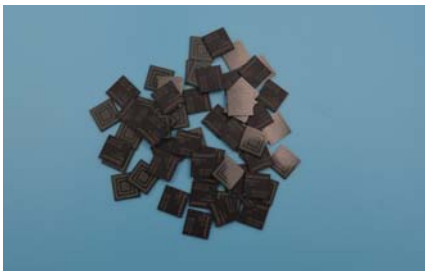
No.	Sample No.	Figure	X-ray Screening		chemical test				
			Element	Data	UV-Vis	ICP-OES	GC-MS		
92	A-92		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						N.D.
			PBDEs						N.D.
			DBP						N.D.
			BBP						N.D.
			DEHP						N.D.
			DIBP						N.D.
93	A-93		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						N.D.
			PBDEs						N.D.
			DBP						N.D.
			BBP						N.D.
			DEHP						N.D.
			DIBP						N.D.
94	A-94		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						N.D.
			PBDEs						N.D.
			DBP						N.D.
			BBP						N.D.
			DEHP						N.D.
			DIBP						N.D.
95	A-95		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						N.D.
			PBDEs						N.D.
			DBP						N.D.
			BBP						N.D.
			DEHP						N.D.
			DIBP						N.D.

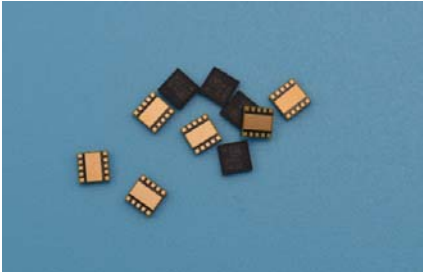
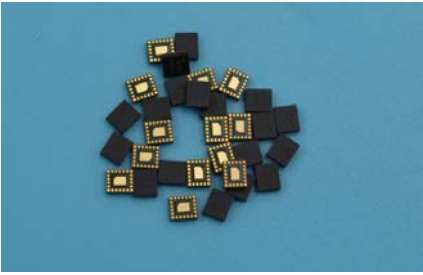

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
96	A-96		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
97	A-97		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
98	A-98		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
99	A-99		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
100	A-100		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
101	A-101		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
102	A-102		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
103	A-103		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

No.	Sample No.	Figure	X-ray Screening		chemical test				
			Element	Data	UV-Vis	ICP-OES	GC-MS		
104	A-104		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	/
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
	N.D.								
	N.D.								
	N.D.								
	N.D.								
105	A-105		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	1.72×10 ³					
			Cr ⁶⁺				/	/	/
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
	N.D.								
	N.D.								
	N.D.								
	N.D.								
106	A-106		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	/
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
	N.D.								
	N.D.								
	N.D.								
	N.D.								
107	A-107		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	/
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
	N.D.								
	N.D.								
	N.D.								
	N.D.								

No.	Sample No.	Figure	X-ray Screening		chemical test				
			Element	Data	UV-Vis	ICP-OES	GC-MS		
108	A-108		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
109	A-109		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
110	A-110		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						
111	A-111		Pb	N.D.	/	/	/		
			Cd	N.D.					
			Hg	N.D.					
			Cr	N.D.					
			Br	N.D.					
			Cr ⁶⁺				/	/	N.D.
			PBBs						
			PBDEs						
			DBP						
			BBP						
			DEHP						
			DIBP						

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
112	A-112		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
113	A-113		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
114	A-114		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
115	A-115		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

No.	Sample No.	Figure	X-ray Screening		chemical test		
			Element	Data	UV-Vis	ICP-OES	GC-MS
116	A-116		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
117	A-117		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	N.D.			
			Cr ⁶⁺				
			PBBs				
			PBDEs				
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			
118	A-118		Pb	N.D.	/	/	/
			Cd	N.D.			
			Hg	N.D.			
			Cr	N.D.			
			Br	1.72×10 ³			
			Cr ⁶⁺				
			PBBs				N.D.
			PBDEs				N.D.
			DBP				N.D.
			BBP				N.D.
			DEHP				N.D.
			DIBP	N.D.			

Remark:

(1) mg/kg=ppm

(2) N.D. = Not Detected (< MDL);

(3)"/"= Not Conducted

(4)MDL = Method Detection Limit

(5) ^a= a. The sample is negative for Cr⁶⁺ - the Cr⁶⁺ concentration is below the limit 0.10ug/cm². The coating is considered a non-Cr⁶⁺ based coating.

b. The sample positive for Cr⁶⁺ if the Cr⁶⁺ concentration is greater than 0.13ug/cm². The sample coating is considered to contain Cr⁶⁺.

c. The result between 0.10ug/cm² and 0.13ug/cm² is considered to be inconclusive unavoidable



coating variations may influence the determination.

Annex A General Information

1.1 Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Department:	Morlab Laboratory
Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Responsible Test Lab Manager:	Mr. Su Feng
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

1.2 Test Equipments Utilized

No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	X-Ray Fluorescence Spectroscopy(XRF)	0102	EDX-1800B	Skyray	2017.05.23	2018.05.23
2	gas chromatograph-mass spectrometer (GC-MS)	CN10617090	6890-5975I	Agilent	2017.05.23	2018.05.23
3	ultraviolet-visible spectrophotometer(UV-Vis)	0153	UV-1100	Labtech	2017.05.23	2018.05.23
4	IPC-OES	842320072001	iCAP7200	Thermo	2017.05.23	2018.05.23

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