Report No.:SZ11050112R05

TEST REPORT

Issued to

Shanghai Simcom Ltd

For

Wireless Module

Mark & type	:	SIM5320A
Test Item	:	Cd、Pb、Hg、Cr^{6+}、PBB、PBDE
Received Date	:	2011-05-18
Test date	:	2011-05-18~2011-05-23
Issue date	:	2011-07-07
Conclusion	:	Complied with RoHS directive 2002/95/EC， Amended Directive updated to 2005/618/EC.

By

Shenzhen MORLAB Communication Technology Co., Ltd.

Test by Wang Jie
Wang Jie
Date 2011.07.07

Approved by Billow
Billow
Date Jul.07,2011

Review by Ni Xiaoshan
Ni Xiaoshan
Date 2011.07.07

The report refers only to the sample tested and does not apply to the bulk. This report is issued in confidence to the client and it will be strictly treated as such by the Shenzhen MORLAB Communication Technology Co., Ltd. It may not be reproduced rather in its entirety or in part and it may not be used for adverting. The client to whom the report is issued may, however, show or send it . or a certified copy there of prepared by the Shenzhen MORLAB Telecommunication Co., Ltd to his customer. Supplier or others persons directly concerned. Shenzhen MORLAB Telecommunication Co., Ltd will not, without the consent of the client enter into any discussion of correspondence with any third party concerning the contents of the report. In the event of the improper use of the report, Shenzhen MORLAB Telecommunication Co., Ltd reserves the rights to withdraw it and to adopt any other remedies which may be appropriate.

Sample name: Wireless Module

Applicant company: Shanghai Simcom Ltd

Applicant company address: Building A, SIM Technology Building No.633, Jinzhong Road, Changning Disdrict, Shanghai P.R. China

Test Method：

Test item	Procedure	Apparatus
Cd、Pb、Hg、Cr、Br	With reference to IEC 62321：2008	XRF
Cd、Pb、Hg	With reference to IEC 62321：2008	ICP-AES or AAS
Cr^{6+}	With reference to IEC 62321：2008	UV-VIS
PBB&PBDE	With reference to IEC 62321：2008	GC-MS

Tested components

No.	SAMPLE No.	COMPONENTS	MATERIAL OR COLOR	REMARK
1.	A	SIM5320A	/	/
2.	A-1	LABEL		SEE THE PHOTO
3.	A-2	SHIELD COVER	SILVER METAL	SEE THE PHOTO
4.	A-3	SHIELD FRAME		SEE THE PHOTO
5.	A-4	IC	/	SEE THE PHOTO
6.	A-5	IC	/	SEE THE PHOTO
7.	A-6	IC	/	SEE THE PHOTO
8.	A-7	IC	/	SEE THE PHOTO
9.	A-8	IC	/	SEE THE PHOTO
10.	A-9	IC	/	SEE THE PHOTO
11.	A-10	IC	/	SEE THE PHOTO
12.	A-11	YELLOW CAPACITANCE	YELLOW CAPACITANCE	SEE THE PHOTO
13.	A-12	OSCILLATOR	OSCILLATOR	SEE THE PHOTO
14.	A-13	BLACK CAPACITANCE	BLACK CAPACITANCE	SEE THE PHOTO
15.	A-14	PASTER CAPACITANCE	PASTER CAPACITANCE	SEE THE PHOTO

16.	A-15	PASTER CAPACITANCE	PASTER CAPACITANCE	SEE THE PHOTO
17.	A-16	PASTER RESISTANCE	PASTER RESISTANCE	SEE THE PHOTO
18.	A-17	PCB	PCB	SEE THE PHOTO
19.	A-18	SOLDER	SILVER METAL	SEE THE PHOTO
20.	A-19	INDUCTANCE	INDUCTANCE	SEE THE PHOTO
21.	A-20	AUDION	AUDION	SEE THE PHOTO
22.	A-21	IC	/	SEE THE PHOTO
23.	A-22	IC	/	SEE THE PHOTO
24.	A-23	IC	/	SEE THE PHOTO
25.	A-24	OSCILLATOR	OSCILLATOR	SEE THE PHOTO
26.	A-25	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
27.	A-26	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
28.	A-27	IC	/	SEE THE PHOTO
29.	A-28	IC	/	SEE THE PHOTO
30.	A-29	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
31.	A-30	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
32.	A-31	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
33.	A-32	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
34.	A-33	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
35.	A-34	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
36.	A-35	IC	/	SEE THE PHOTO
37.	A-36	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
38.	A-37	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
39.	A-38	AUDION	AUDION	SEE THE PHOTO
40.	A-39	CHIP RESISTORS	CHIP RESISTORS	SEE THE PHOTO
41.	A-40	CHIP CAPACITORS	CHIP CAPACITORS	SEE THE PHOTO
42.	A-41	CHIP CAPACITORS	CHIP CAPACITORS	SEE THE PHOTO
43.	A-42	CAPACITANCE	CAPACITANCE	SEE THE PHOTO
44.	A-43	RESISTANCE	RESISTANCE	SEE THE PHOTO

45.	A-44	LEVEL SHIFT 2BIT DUAL	LEVEL SHIFT 2BIT DUAL	SEE THE PHOTO
46.	A-45	DIO SCHOTTKY VR	DIO SCHOTTKY VR	SEE THE PHOTO
47.	A-46	BEAD 0.25A 10R CH0402 RO	BEAD 0.25A 10R CH0402 RO	SEE THE PHOTO
48.	A-47	ESD9L5.0ST5G	ESD9L5.0ST5G	SEE THE PHOTO
49.	A-48	SUPPLY BGA8 RO	SUPPLY BGA8 RO	SEE THE PHOTO
50.	A-49	ESD9M5.0ST5G	ESD9M5.0ST5G	SEE THE PHOTO

Test result：

No.	Item	Results of EDXRF (P/F/D)	Results of Testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
A-1	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-2	Cd	P	/	＜100	P
	Cr(VI)	D	Negative	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	/	/	＜1000	P
	PBDEs	/	/	＜1000	P
A-3	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-4	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-5	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-6	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-7	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-8	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-9	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-10	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-11	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-12	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	/	/	＜1000	P
	PBDEs	/	/	＜1000	P
A-13	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-14	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-15	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-16	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-17	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-18	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-19	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-20	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-21	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-22	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-23	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-24	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-25	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-26	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-27	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-28	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-29	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-30	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-31	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-32	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-33	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-34	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-35	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-36	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-37	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-38	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-39	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-40	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-41	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-42	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-43	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	P	/	＜1000	P
	PBDEs	P	/	＜1000	P
A-44	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-45	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-46	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-47	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P

	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-48	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P
A-49	Cd	P	/	＜100	P
	Cr(VI)	P	/	＜1000	P
	Hg	P	/	＜1000	P
	Pb	P	/	＜1000	P
	PBBs	D	N.D.	＜1000	P
	PBDEs	D	N.D.	＜1000	P

Remark：

(1) It is the result on total Br while test PBBs and PBDEs by EDXRF. It is the result on total Cr while test Hexavalent Chromium by EDXRF。

(2) Results are obtained by EDXRF for primary screening, and chemical testing by ICP (for Cd, Pb, Hg),UV-VIS (Cr(VI)) and GCMS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321:2008 (unit:mg/kg)

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

P = PASS； F = FAIL； D = DETECTED；

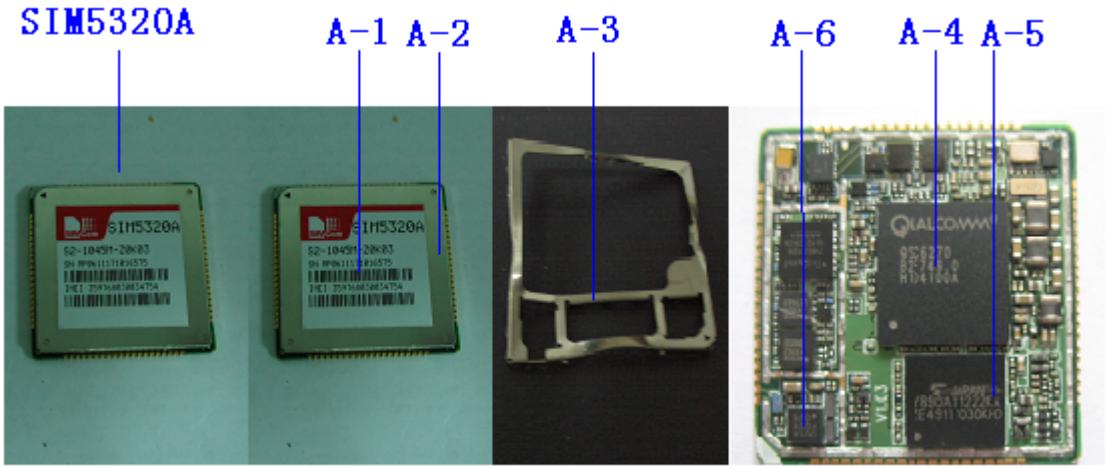
(3) mg/kg = ppm；N.D. = NOT DETECTED（＜MDL）Pb, Cd, Hg, Cr(VI)：2mg/kg； PBBs, PBDEs：5mg/kg

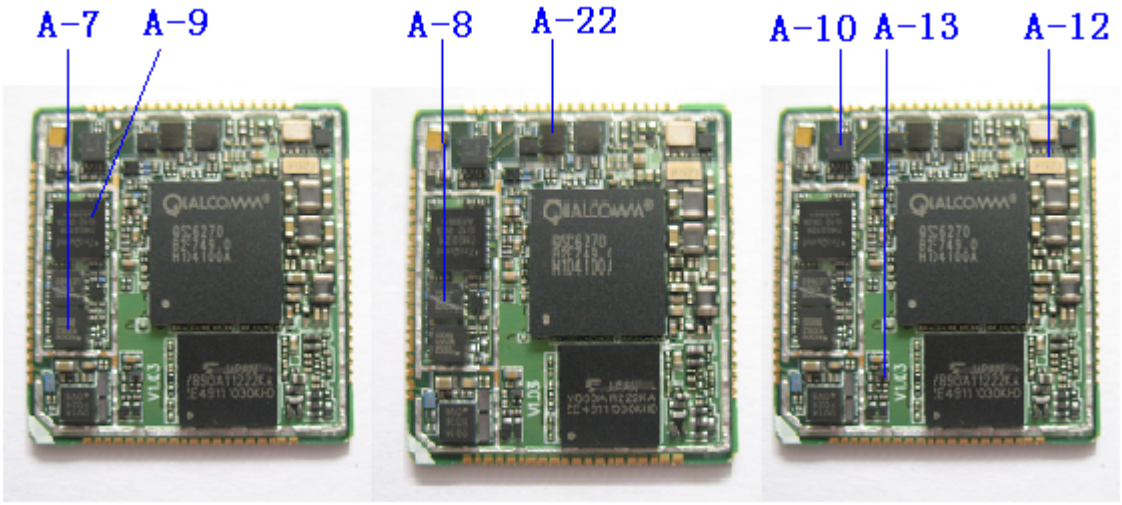
(4) &= Lead in glass/ceramic is exempted. The item is exempted from the requirements of Article 4, Item 1, (Directive 2002/95/EC).

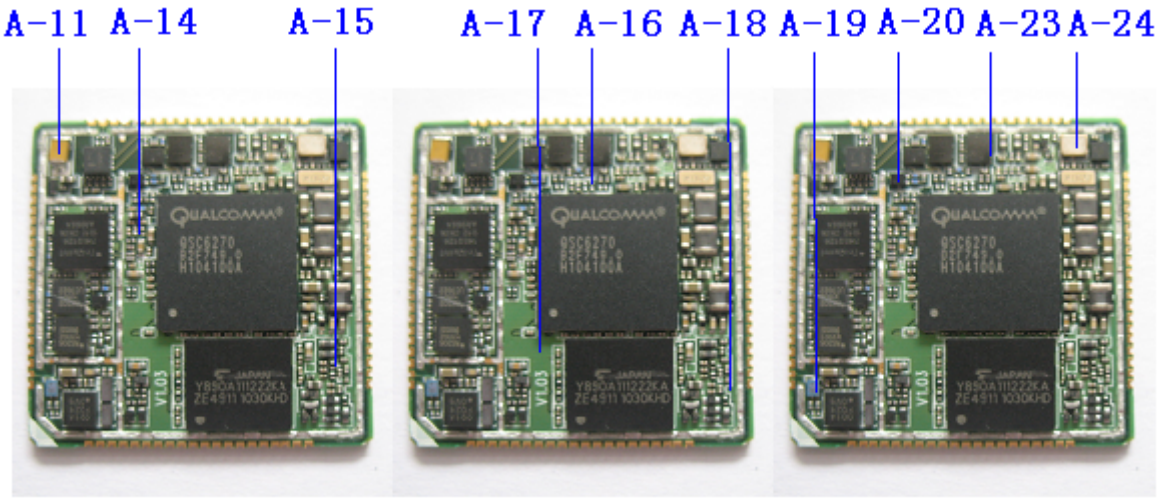
(5) Positive indicates the presence of Cr(VI) on the tested areas and result be regarded as not compliance with RoHS requirement. Negative indicates the absence of Cr(VI) on the tested areas and result be regarded as compliance with RoHS requirement.

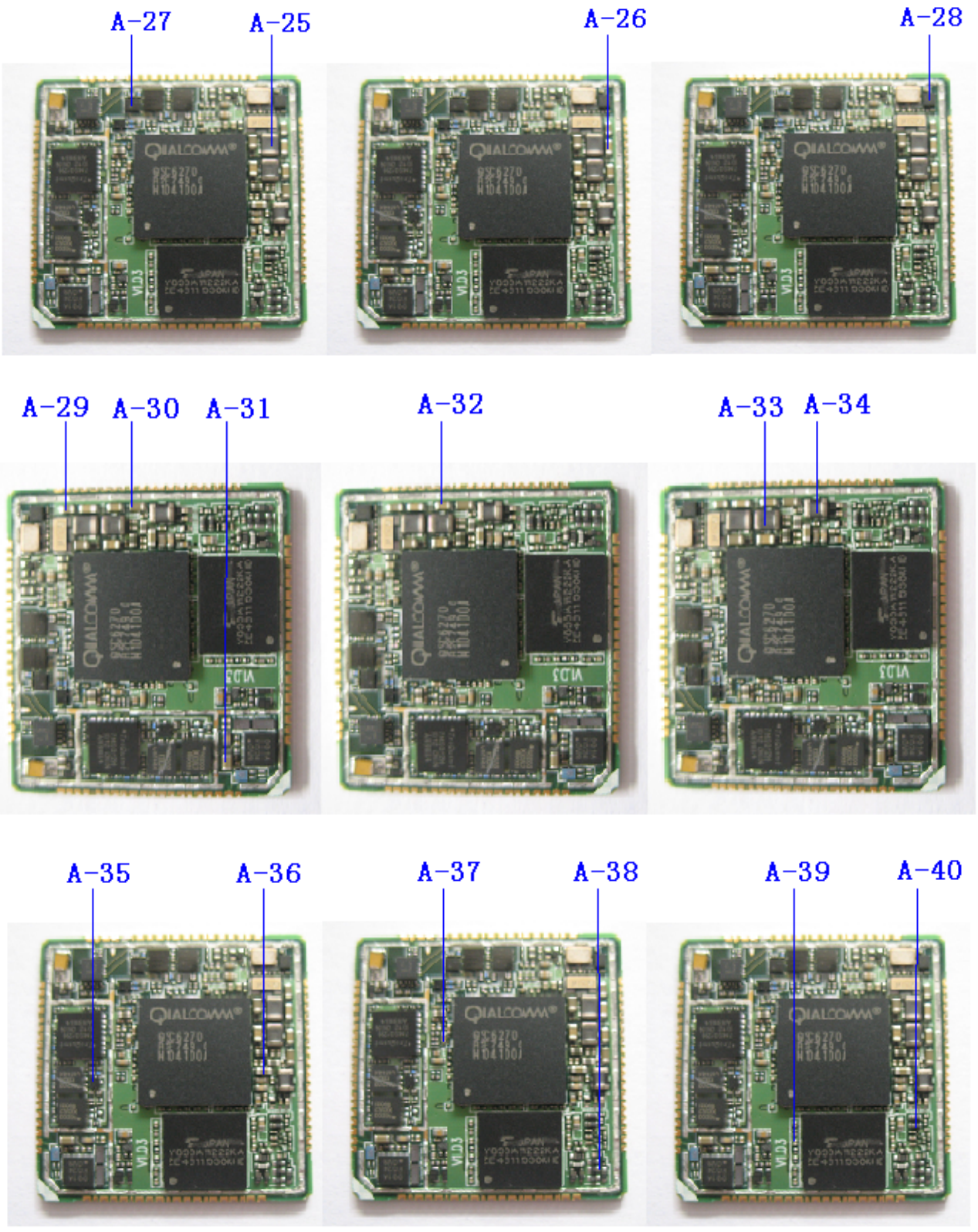
(6) According to IEC 62321:2008, result on Cr(VI) for metal sample is shown as Positive/Negative. Positive = Presence of Cr(VI) coating, Negative = Absence of Cr(VI) coating

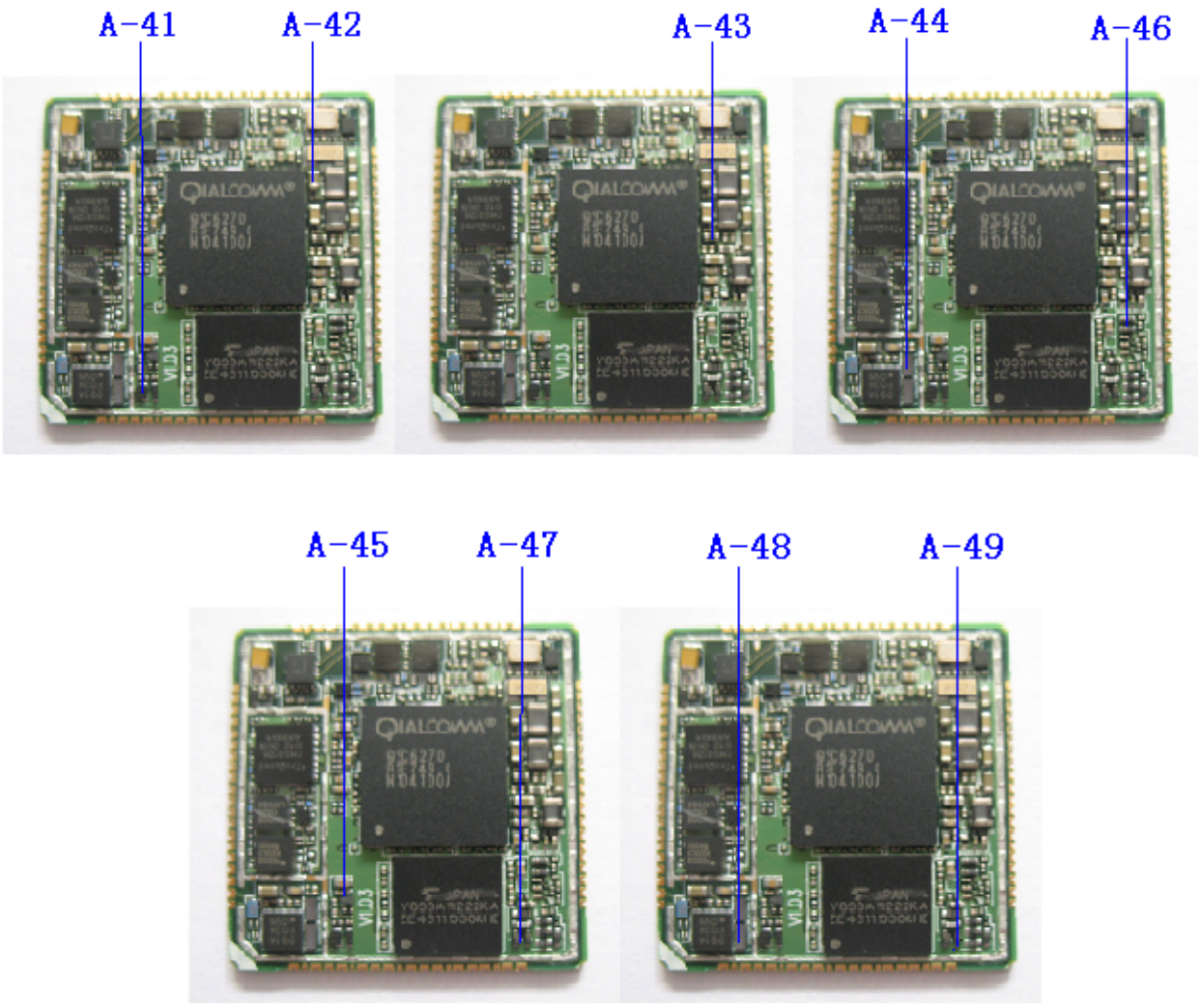
Annex：Photo of Sample








A-27
A-25
A-26
A-28
A-29
A-30
A-31
A-32
A-33
A-34
A-35
A-36
A-37
A-38
A-39
A-40



—End of Report—