



TEST REPORT

Report No.: SZ10010077R02
Sample Name: GSM&GPRS module
Mark & type: SIM900A
Test Item: Cd、Pb、Hg、Cr⁶⁺、PBB、PBDE
Date: 2010-02-02

prepared for

Shanghai Sincom Limited

Building A, SIM Technology Building, No.633, Jinzhong Road, Changning District,
Shanghai P.R. China



**Shenzhen Electronic Product Quality Testing Center
Morlab Laboratory**

3/F, Electronic Testing Building, Shahe Road, Xili,
Nanshan District, Shenzhen, 518055 P. R. China

Tel: +86 755 86130398

Fax: +86 755 86130218



NOTE: This test report can be duplicated completely for the legal use with the approval of the applicant, it shall not be reproduced except in full, without the written approval of Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. Any objections should be raised to us within thirty workdays since the date of issue.



Sample Name: GSM&GPRS module

Sample Received Date: 2010-01-28

Testing Date: 2010-01-28~2010-02-01

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

Test Result: The delivery sample complied with RoHS directive 2002/95/EC

Checked by:


2010.02.02

Approved by:



**Tested components**

No.	SAMPLE No.	COMPONENTS	MATERIAL OR COLOR	REMARK
1	A-1	SSP-T7-F(12.5PF,±20PPM)	MIXED	SEE THE PHOTO
2	A-2	IC SAW GSM1800/GSM900 1.8*1.4 RO	MIXED	SEE THE PHOTO
3	A-3	CRY UNIT 26M 10PF +/-10PPM CH3225 RO	MIXED	SEE THE PHOTO
4	A-4	IC BAS+RF TRANCEIVER+PM RO	MIXED	SEE THE PHOTO
5	A-5	IC MEMO 64M NOR+32M PSRAM BGA 56PIN RO	MIXED	SEE THE PHOTO
6	A-6	BEAD 120OHM +/-25% 500MA CH0402 RO	MIXED	SEE THE PHOTO
7	A-7	SHIELD COVER SIM900 22.4*22.6 RO	METAL	SEE THE PHOTO
8	A-8	SHIELD FRAME SIM900 22.0*22.2 RO	METAL	SEE THE PHOTO
9	A-9	PCB SIM900 MAIN HDI PCB V2.03 RO	MIXED	SEE THE PHOTO
10	A-10	IC TRANSMIT MODULE D-BAND 6.63*5.24 RO	MIXED	SEE THE PHOTO
11	A-11	RES MF 0R +/-5% 1/16W CH 0402 RO	MIXED	SEE THE PHOTO
12	A-12	RES NTC 10KR +/-1% 1/10W CH 0402 RO	MIXED	SEE THE PHOTO
13	A-13	RES MF 0.1R +/-1% 1/4W CH0805 RO	MIXED	SEE THE PHOTO
14	A-14	CAP X5R 22UF +/-20% 6.3V CH0805 RO	MIXED	SEE THE PHOTO
15	A-15	CAP X5R 4.7UF +/-10% 10V CH0603 RO	MIXED	SEE THE PHOTO
16	A-16	CAP X5R 100NF +/-10% CH0402 16V RO	MIXED	SEE THE PHOTO
17	A-17	CAP X5R 22UF +/-20% 6.3V CH0805 RO	MIXED	SEE THE PHOTO
18	A-18	CAP X5R 22UF +/-20% 6.3V CH0805 RO	MIXED	SEE THE PHOTO
19	A-19	IND HIGH 2.7NH +/-0.1NH CH 0402 RO	MIXED	SEE THE PHOTO



Report No.: SZ10010077R02

20	A-20	IND_HIGH_2.7NH_+/-0.3NH_CH0 201 RO	MIXED	SEE THE PHOTO
21	A-21	IND LOW 4.7UH +/-20% CH 1008 RO	MIXED	SEE THE PHOTO
22	A-22	IND LOW 4.7UH +/-20% NR3010 RO	MIXED	SEE THE PHOTO
23	A-23	IND HIGH 3.3NH +/-0.3NH CH0402 RO	MIXED	SEE THE PHOTO
24	A-24	IND COIL 15NH +/-5% CH0402 RO	MIXED	SEE THE PHOTO
25	A-25	IND 4.7UH RO	MIXED	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	D	$*1.15 \times 10^4$	<1000	P
	PBBs	P	/	<1000	P
	PBDEs	P	/	<1000	P
A-2	Cd	P	/	<100	P
	Cr(VI)	P	/	<1000	P
	Hg	P	/	<1000	P
	Pb	D	$*7.37 \times 10^4$	<1000	P
	PBBs	P	/	<1000	P
	PBDEs	P	/	<1000	P
A-3	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-4	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-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	P	/	<1000	P



Report No.: SZ10010077R02

	PBDEs	P	/	<1000	P
A-7	Cd	P	/	<100	P
	Cr(VI)	D	Negative	See remark(5)	P
	Hg	P	/	<1000	P
	Pb	P	/	<1000	P
	PBBs	/	/	<1000	P
	PBDEs	/	/	<1000	P
A-8	Cd	P	/	<100	P
	Cr(VI)	P	/	<1000	P
	Hg	P	/	<1000	P
	Pb	P	/	<1000	P
	PBBs	/	/	<1000	P
	PBDEs	/	/	<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	P	/	<1000	P
	PBDEs	P	/	<1000	P
A-11	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-12	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-13	Cd	P	/	<100	P



Report No.: SZ10010077R02

	Cr(VI)	P	/	<1000	P
	Hg	P	/	<1000	P
	Pb	P	/	<1000	P
	PBBs	P	/	<1000	P
	PBDEs	P	/	<1000	P
A-14	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-15	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-16	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-17	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-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
--	-------	---	---	-------	---

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	$P \leq 70-3 \sigma < D < 130+3 \sigma \leq F$	$P \leq 70-3 \sigma < D < 130+3 \sigma \leq F$	$P \leq 50-3 \sigma < D < 150+3 \sigma \leq F$
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	$P \leq 700-3 \sigma < D$	$P \leq 700-3 \sigma < D$	$P \leq 500-3 \sigma < D$

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 High-temperature solder 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

—End of Report—

Annex: Photo of Sample

