

CheckCode:091758 Report No.: C201802269007-19

Applicant: Shanghai SIMCom Wireless Solutions Ltd

Address: No.633 JinZhong Rd., ChangNing District Shanghai, PR China

Report on the submitted sample(s) said to be:

Name: GSM/GPRS Wireless Module SIM800C

Material No.: ----Product Series: ----Supplier Code: ----Manufacturer: -----

Date of Receipt: Mar.8, 2018 Test period: Mar.8, 2018 Mar.14, 2018

**Test Request:** Please refer to following page(s).

**Test Result:** Please refer to following page(s).

**Conclusion:** Please refer to following page(s).

Edited by 200 Tang Reviewed by Zhon Shila Approved by Yolang

GUANGZHOU GRG METROLOGY & FESTED, LTD

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**GUANGZHOU GRG METROLOGY & TEST CO., LTD.** 



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No.	Test Item	Client and Regulation Requirements	Conclusion
1	RoHS (2011/65/EU) and its amendment directives	Pb, Cd, Hg, Cr(VI), PBBs, PBDEs, DEHP, BBP, DBP, DIBP	Comply

### RoHS

### **Test Methods:**

Test Item(s)	Test method	Measuring instrument	MDL	Client's Limit
Pb, Cd, Hg, Total Cr, Total	IEC 62321-3-1:2013 /Ed. 1.0	XRF	20 mg/kg	
Lead (Pb)	IEC 62321-5:2013 Ed. 1.0	ICP-OES	2 mg/kg	600 mg/kg
Cadmium (Cd)	IEC 62321-5:2013 Ed. 1.0	> ICP-OES	2 mg/kg	60mg/kg
Mercury (Hg)	IEC 62321-4:2013 Ed. 1.0	ICP-OES	2 mg/kg	600 mg/kg
Hexavalent Chromium	IEC 62321-7-2:2017	UV-VIS	10 mg/kg	600 mg/kg
₩ [Cr(VI)] ₩ <	FEC 62321-7-1:2015	UV-VIS W	0.10 µg/cm <sup>2</sup>	1
₹ PBBs ₹	IEC 62321-6:2015 Ed. 1.0	GC-MS	10 mg/kg	600 mg/kg
PBDEs	IEC 62321-6:2015 Ed. 1.0	GC-MS	2 10 mg/kg	600 mg/kg
Bis(2-ethylhexyl) phthalate (DEHP)	IEC 62321-8:2017 Ed. 1.0	GC-MS	50 mg/kg	600 mg/kg
Butyl benzyl phthalate (BBP)	ÎEC 62321-8:2017 Ed. 1.0	GC-MS	50 mg/kg	600 mg/kg
Dibutyl phthalate (DBP)	IEC 62321-8:2017 Ed. 1.0	GC-MS	50 mg/kg	600 mg/kg
Diisobutyl phthalate (DIBP)	IEC 62321-8:2017 Ed. 1.0	GC-MS	50 mg/kg	600 mg/kg



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	<u>`\$`</u> <u>`</u> \$`	<u> </u>	<u> </u>	<u> </u>	<u> </u>
# 150 m		87 S	# 1277		22
<b>P</b>		Restricted	Results of	Result of Wet Chemical	£ 5
No.	Sample Description	29	9		Conclusion
		Substances	XRF	Testing(mg/kg)	
3	35	Pb 💸	BL	3 1	Comply
THOM:		Cd	BL		Comply
STE		Ĥġ	BL		Comply
V k		Cr(VI)	BL		Comply
1	Green "PCB"	PBBs	BL		Comply
1	oleeli FOD	> PBDEs >	DL ×	<i>∱</i>	Comply
20		DEHP 🚫	1 2	Ń.D.	Comply
-32		BBP 👸	18	N.D.	Comply
		DBP	/	N.D.	Comply
		DIBP		N.D.	Comply
V	$\overline{\mathbb{W}}$ $\overline{\mathbb{W}}$	₩Pb	₩ BL	<u> </u>	Comply
1	图 图	⟨      Cd	BL	B 1 B	& Comply &
7		⟨  ⟨  ⟨	BL 🔅	<b>*</b>	
校	Z Z	♦ Cr(VI) 🚿	BL 📈	$ar{u}$	Comply
2	Silvery metal shell (On	PBBs⊗	1	& / &	1 🕾
2	No.1)	PBDEs			A
^Z√ -ZI	75v 75v	DEHP	7.1		T. I
Mon.	Mlan Allan	BBP	1		1
74089	72H	DBP	, <sup>728</sup>	724	1244
	\(\frac{1}{2}\)	DIBP	1		7 / 7
_/	U #U	Pb w	BL 👑	#	Comply
		Cd	BL	<u> </u>	Comply
The same of the sa	H. H.	Hg	BL		Comply
7	White adhesive plastic	Cr(VI)	BL	<u> </u>	Comply
3	sheet with black & red	PBBs	× BL		Comply
	S S	PBDEs	SS		Comply
	printing (On No.2)	S DEHP	5 / / 8	S N.DS	Comply S
ì		BBP	1	N.D.	Comply
2		DBP 🔊	12	N.D.	Comply
<b>→</b>	<b>₩</b>	DIBP	1~	N.D.	Comply
6.	0. 0.	Pb ·	BĽ	6. 1 6.	Comply
5	\display \di	Cd	BL		Comply
<b>V</b>		— ≪Hg	⊗ BL		Comply
	\$ A	Cr(VI)	BL _	e le	Comply
4	Black body (On No.1)	PBBs &	BL 🍣	<u></u>	S Comply S
120	Black body (On No.1)	PBDEs	- 50 <sub>1</sub>		Comply
		DEHR	150	N.D.	Comply
CRC METROLL		BBP		N.D.	Comply
2		DBP	351	IN.D.	Comply
\$5.		DIBP	<u> </u>	N.D.	Comply



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5	\$	\$	Ś	\$ \$	Š
91.	αν.	87.	4		81.
£		Restricted	Results of	Result of Wet Chemical	£ £
No.	Sample Description	29	Ó		Conclusion
8		Substances	XRF	Testing(mg/kg)	
3		Pb 🖑	BL		Comply
		Cd	BL		Comply
		Hg	BL		Comply
N. C.		Cr(VI)	BL		Comply
5	Drawn hady (On No 1	DDDo	BL	1	Comply
5	Brown body (On No.1	> PBDEs >	DL ×	<i></i>	Comply
20		DEHP 🚫	1 50	, N.D.	Comply
		BBP	18	N.D.	Comply
		DBP	/	N.D.	Comply
		DIBP	1117	N.D.	Comply
ĬΖ	$\overline{\mathbb{W}}$ $\overline{\mathbb{W}}$	₩Pb	₩ BL	<u> </u>	Comply
77	By By	& Cd	BL		& Comply &
7		∤ Hg ∤	BL 🌾	· //>	
B	極	Cr(VI) 🐺	BL 🐺	$\bar{\mu}$	Comply
6	Dk-grey body (On No.1		BL	& / &	Comply
	Divigios body Control	PBDEs			Comply
<b>A</b>	<b>☆ ☆</b>	DEHP	1	N.D.	Comply
Dan .	Man Man	BBP	- Albani /	N.D.	Comply
797	-X -X	DBP	/ <sup>224</sup> /	N.D.	Comply
	N' N'	DIBP	1	N.D.	Comply
-/	<i>U</i> ₩ <i>J</i>	Pb	BL	7	Comply
		Cd	BL		Comply
The state of the s	1/4	Hg	BL		Comply
7	7	Cr(VI)	₹BL		Comply
<b>7</b>	Black body (On No.1)	PBBs	, BL	7	Comply
<b>ာ</b>	LS LS	PBDEs	S. S	8 18	Comply
		DEHP	5 / 6	N.D.S	Comply S
		BBP	,	N.D.	Comply
2		DBP DIP		N.D.	Comply
<u> </u>	<u>.</u> ,	DIBP	7 7	N.D.	Comply
0		Pb°	BĽ	9. 1 9.	Comply
25.5		<u>Cd</u>	BL		Comply
<b>~</b> ,′		Hg	BL	8 1 B	Comply
d	A A	Cr(VI)	BL	1	Comply
8	Brown body On No.1	) PBBs	BL 🧬	\$\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\rightarrow\vec{\pi}{\pi}\	Comply
The state of the s		PBDEs			Comply
CRC METHOLO		DEHP		N.D.	Comply
138		BBP	3	N.D.	Comply
		DBP		N.D.	Comply
32		DIBP		N.D.	Comply



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5		\$ \$	\$	\$	5
2			2		
2	A A	Restricted	Results of	Result of Wet Chemical	45 45
No.	Sample Description	20	Ó		Conclusion
E		Substances	XRF	Testing(mg/kg)	
3		Pb 🖑	BL		Comply
		Cd	BL		Comply
E TE	elle elle	Hg	BL		Comply
T V		Cr(VI)	BL		Comply
9	Black body (On No.1)	PBBs	BL		Comply
9	black body (Oll No.1)	> PBDEs	~	L	Comply
20		DEHP 🗸	150	, N.D.	Comply
3		BBP (F	18	₹N.D.	Comply
		DBP	/	N.D.	Comply
TI		DIBP	1117	N.D.	Comply
V	$\overrightarrow{\mathbb{W}}$ $\overrightarrow{\mathbb{W}}$	₩Pb	₩ BL	<u> </u>	Comply
A.V	图 图		BL	8 18	& Comply &
7		₩ Hg 🔅	BL 🔅	> <b>/</b> (>	★ Comply ★
B	Disable and Carrell ) ( O	Cr(VI) 🐼	BL 🐺	<u> </u>	Comply
10	Black body (small)(O	T BBO	BL∜	<u> </u>	Comply
	No.1 )	PBDEs			Comply
₹>	<b>A</b>	DEHP	/	N.D.	Comply
4)74	Albert Albert	BBP		N.D.	Comply
,	* *	DBP	/ /	N.D.	Comply
*	D (R)	DIBP	7	N.D.	Comply
7	±	Pb	BL		Comply
1		Cd	BL		Comply
<del>-</del> /	<del>-</del>	Hg	BL	<del></del>	Comply
		Cr(VI) PBBs	BL		Comply
<b>11</b>	Silvery body (On No.1	)	s BL	28 1 28	Comply
© 7		PBDEs DEHP	5 1	N.D.	Comply Comply
	3	BBP	7 3	N.D.	Comply
0		DBP 🔊	1.5	N.D.	Comply
5		DIBP	157	N.D.	Comply
· 0.	·6' ·6'	P6°	BĽ	6. 1 6.	Comply
~	4 4	Cd	<u></u>	A 1 A	Comply
A ST		Hg	₽ BL		Comply
÷	*	♥ Cr(VI)	BL ,	4 / 4	Comply
10	White body & On No. 4	S DDD- S		g g	© Comply
12	White body On No.1	PBDEs PBDEs	BL DIS		Comply
		DEHR	18	N.D.	Comply
12		BBP	d	S N.D.	Comply
~ E		DBP	351	N.D.	Comply
		DIBP	<u></u>	N.D.	Comply



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100	ZÝ ZÝ	27	Z.	\$	Z)
No.	Sample Description	Restricted Substances	Results of XRF	Result of Wet Chemical  Testing(mg/kg)	Conclusion
35		Pb 💝	BL		Comply
		Cd	BL		Comply
Elix	Ell'	Hg	BL		Comply
\$ P		Cr(VI)	₹ BL		Comply
13	Silvery metal solder (On	PBBs	9		
10	No. <u>1</u> )	PBDEs >	, ,	<i></i>	× 1 ×
50		Ç DEHP 🚫	1 5	3 19	
		BBP	13		13
	,	DBP	/	1	1
TI		DIBP	12		TITY

### Remark: x/o

- (1) XRF result is on total Br while test item on restricted substances is PBBs/PBDEs. XRF result is on total Cr while test item on restricted substances is Cr(VI).
- (2) The XRF result is for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for Cr(VI)) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to the client's limits (unit: mg/kg)

Element	Polymer	Metal	Composite Materials	
Cd	BL ≤(40-3σ)< X <(80+3σ)≤OL	BL ≤(40-3σ)< X <(80+3σ)≤OL	LOD < X <(90+3σ)≤ OL	
Pb	BL ≤(420-3σ)< X<(780+3σ)≤ OL	BL ≤(420-3σ)< X <(780+3σ)≤ OL	BL ≤(300-3σ)< X<(900+3σ)≤ OL	
Hg	BL ≤(420-3σ)< X <(780+3σ)≤ OL	BL ≤(420-3σ)< X <(780+3σ)≤ OL	BL ≤(300-3σ)< X <(900+3σ)≤ OL	
Br 🔊	BL ≤ (180-3σ)< X		BL ≤ (150-3σ)< X	
Cr	BL ≤ (420-3σ)< X	BL ≤ (420-3σ)< X	BL ≤ (300-3σ)< X	

- (3) BL=Below limit, IN = Inconclusive, OL=Over limit, LOD=Limit of Detection;
- (4) mg/kg = ppm = 0.0001%;
- (5) "/ "= Not Conducted;
- (6) "N.D." Not Detected (Below Method Detection Limit);
- (7) For metal sample
  - a. The sample is negative for Cr(VI) if Cr(VI) is N.D.(concentration less than 0.10 μg/cm²). The sample coating is considered a non-Cr(VI) based coating.
  - b. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm<sup>2</sup>. The sample coating is considered to contain Cr(VI).

### **GUANGZHOU GRG METROLOGY & TEST CO., LTD.**



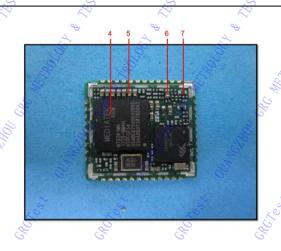
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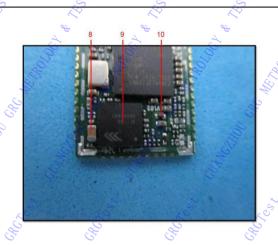
c. The result between 0.10 μg/cm² and 0.13 μg/cm² is considered to be inconclusive. unavoidable coating variations may influence the determination.

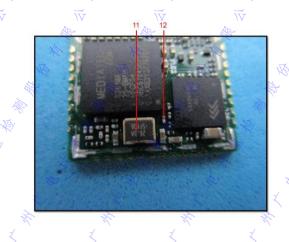
# 

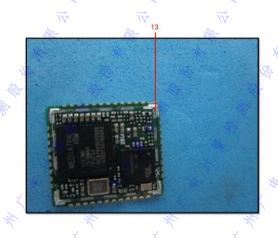


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-----End of Report-----