



**Test Report**

No. 2529440-CH01

Date: September 14, 2011

Page 1 of 6

**Scintera Networks, Inc.  
1154 Sonora Court  
Sunnyvale, CA 94086  
United States**

Attn: Rajesh Bharadwaj

The following sample(s) was/were submitted and identified by/on behalf of the client as:

**IC Component – 9x9mm, 64 Pin QFN Package  
Color: Black/Silver**

Sample Received Date:

**9/8/2011**

Testing Period:

**9/13/2011 – 9/14/2011**

Test Requested : Please refer to the result summary.

Test Method & Results : Please refer to next page(s).

Result Summary :

Test Requested	Comment
European Directive 2011/65/EU Annex II (RoHS); recasting 2002/95/EC	PASS
Antimony content	See test results
To determine the halogen content (Cl, Br, I, F) of the submitted sample(s).	See test results

Signed for and on behalf of SGS North America

Prepared By:

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Assistant Laboratory Manager, Chemistry Laboratory

Veronica Marrero  
Report Writer, Chemistry Laboratory

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**1. European Directive 2011/65/EU Annex II (RoHS); recasting 2002/95/EC:**

Cadmium, Lead, Mercury, Hexavalent Chromium, Polybromobiphenyl (PBB) and Polybromodiphenyl ether (PBDE) content

Method : With reference to IEC 62321:2008. Lead, Cadmium and Mercury were analyzed by Inductively Coupled Argon Plasma Spectrometry, Chromium (VI) was analyzed by UV-Visible Spectroscopy and PBB, PBDE were analyzed by Gas Chromatography – Mass Spectrometry (GC-MS).

Test Item	Result (mg/kg)		Detection Limit (mg/kg)	Permissible Limit (mg/kg)
	1			
Cadmium (Cd)	ND		5	100
Lead (Pb)	ND		5	1000
Mercury (Hg)	ND		5	1000
Hexavalent Chromium (Cr(VI))	ND*		5	1000
<b>Sum of PBBs</b>	ND		--	1000
Monobromobiphenyl	ND		5	--
Dibromobiphenyl	ND		5	--
Tribromobiphenyl	ND		5	--
Tetrabromobiphenyl	ND		5	--
Pentabromobiphenyl	ND		5	--
Hexabromobiphenyl	ND		5	--
Heptabromobiphenyl	ND		5	--
Octabromobiphenyl	ND		5	--
Nonabromobiphenyl	ND		5	--
Decabromobiphenyl	ND		5	--
<b>Sum of PBDEs</b>	ND		--	1000
Monobromodiphenyl ether	ND		5	--
Dibromodiphenyl ether	ND		5	--
Tribromodiphenyl ether	ND		5	--
Tetrabromodiphenyl ether	ND		5	--
Pentabromodiphenyl ether	ND		5	--
Hexabromodiphenyl ether	ND		5	--
Heptabromodiphenyl ether	ND		5	--
Octabromodiphenyl ether	ND		5	--
Nonabromodiphenyl ether	ND		5	--
Decabromodiphenyl ether	ND		5	--
<b>Comment</b>	PASS		--	--

**Sample Description:**
**1. IC Component – 9x9mm, 64 Pin QFN Package**

*\*Total Chromium analysis by ICP-OES was not detected in submitted sample. Therefore, Hexavalent Chromium determination using UV-Visible Spectroscopy was not performed.*

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**Note :**

1. ND = Not Detected = denoted less than reporting limit

**2. Antimony Content**

Analyzed by Inductively Coupled Argon Plasma Spectrometry.

Test Item	Result (mg/kg)		Detection Limit (mg/kg)
	1		
Antimony (Sb)	ND		5

**Sample Description:**

 1. **IC Component – 9x9mm, 64 Pin QFN Package**
**Note :**

1. ND = Not Detected = denoted less than reporting limit

**3. Halogen Test Results :**

Test Items	Unit	Method	Method Detection Limit	1
Halogen – <b>Chlorine</b> (Cl) CAS # 007782-50-5	mg/kg	BS EN 14582:2007	50 ppm	<b>ND</b>
Halogen – <b>Bromine</b> (Br) CAS # 007726-95-6	mg/kg	BS EN 14582:2007	50 ppm	<b>ND</b>
Halogen – <b>Flourine</b> (F) CAS # 007782-41-4	mg/kg	BS EN 14582:2007	50 ppm	<b>ND</b>
Halogen – <b>Iodine</b> (I) CAS # 007553-56-2	mg/kg	BS EN 14582:2007	50 ppm	<b>ND</b>

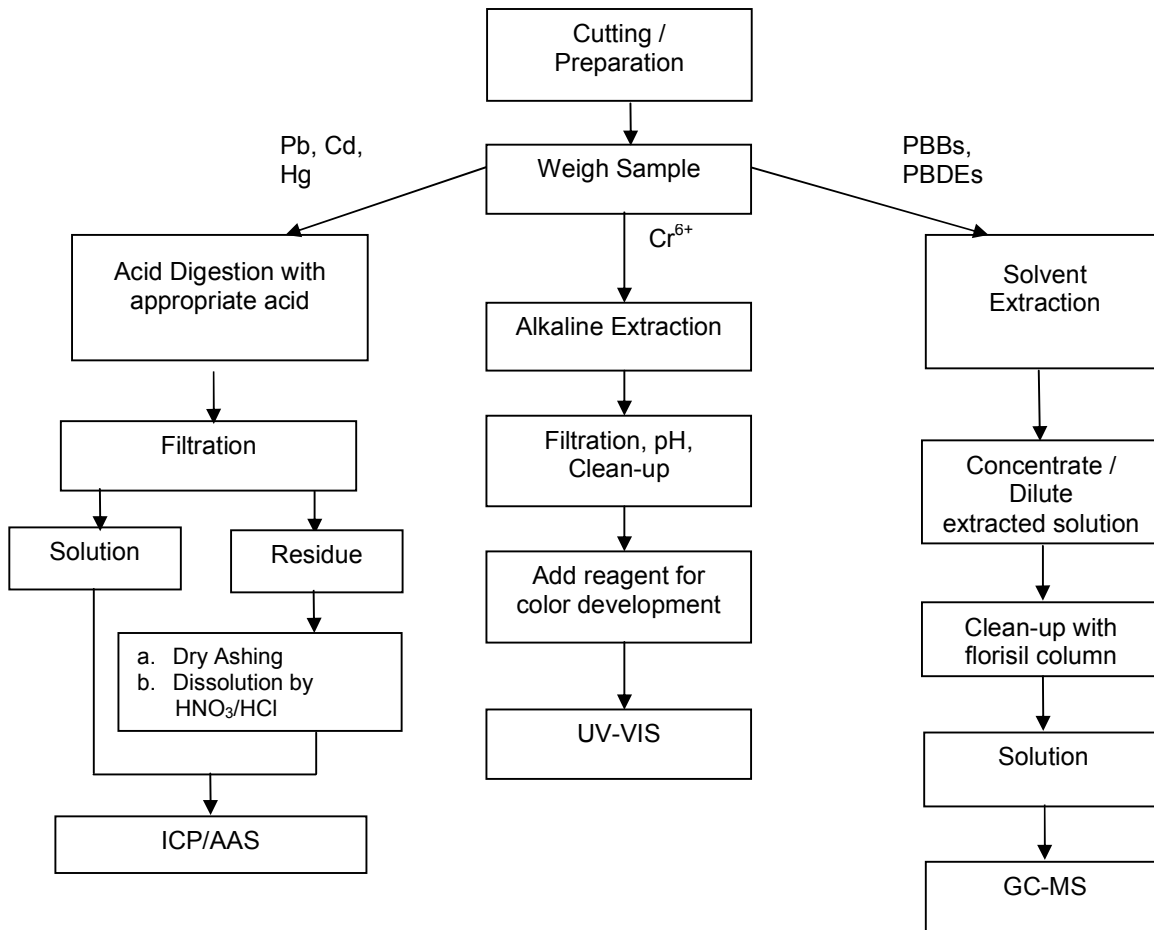
**Sample Description:**

 1. **IC Component – 9x9mm, 64 Pin QFN Package**

Note: 1. mg/kg = ppm  
 2. ND = Not Detected, reported when the reading is less than the detection limit value.

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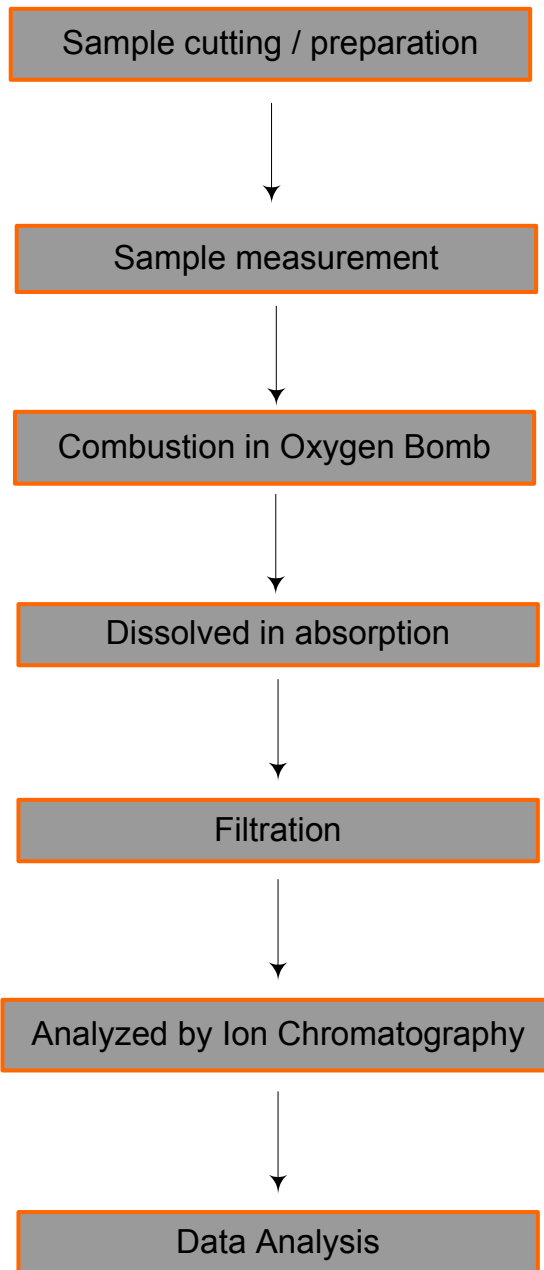
### Flowchart for RoHS Testing:



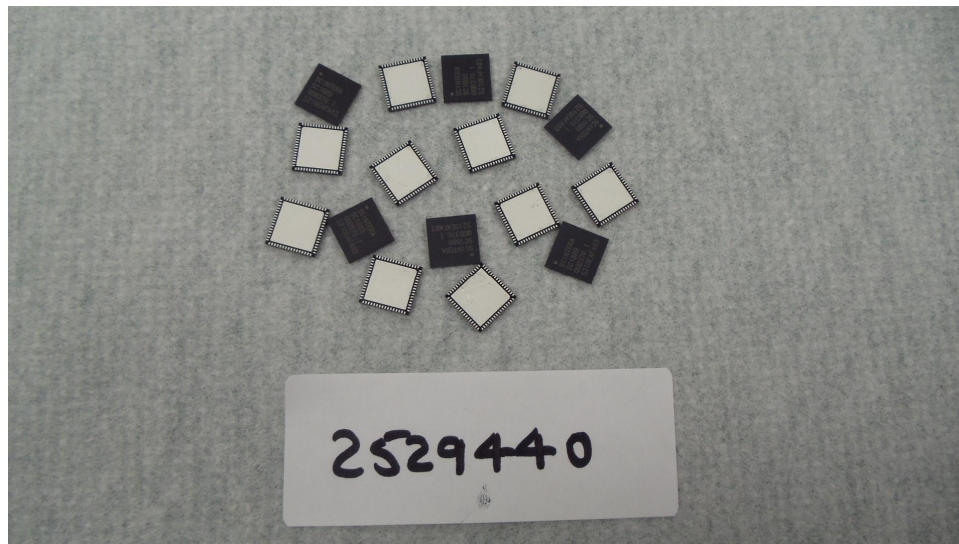
- Note : 1. For Cr(VI), spot test is adopted for metal sample.  
 2. The Cd, Pb and Hg contents test on polymeric samples were dissolved totally by pre-conditioning method according to above flow chart.

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**Halogen Testing Flow Chart**



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**Sample Photo:**

SGS authenticates the photo on the original report only  
\*\*\* End of Report \*\*\*

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