

# **ICP Test Report Certification Packet**

Company name: Littelfuse, Inc.

Product Series: 3KP, 5KP, 15KPA, 20KPA, 30KPA, SLD Series

Product #: TVS Diode

Issue Date: August 15, 2011

It is hereby certified by Littelfuse, Inc. that there is neither RoHS (EU Directive 2002/95/EC)-restricted substance nor such use, for materials to be used for unit parts, for packing/packaging materials, and for additives and the like in the manufacturing processes. In addition, it is hereby reported to you that the parts and sub-materials, the materials to be used for unit parts, the packing/packaging materials, and the additives and the like in the manufacturing processes, are all composed of the following components.

Issued by: KRISTEEN BACILA

<Global EHS Engineer>

(1) Parts, sub-materials and unit parts

This document covers the 3KP, 5KP, 15KPA, 20KPA, 30KPA, SLD RoHS-Compliant series products manufactured by Littelfuse, Inc.

< Raw Materials Used
Please see Table 1

(2) The ICP data on all measurable substances

Please see appropriate pages as identifed in Table 1

Remarks: RoHS Exemptions 5 (7c-1 in the New RoHS exemption) and 7a apply to these products.



Table 1: List of Raw Materials covered by this report

Total Parts	Raw Material Part Number	Raw Material Description	Page(s)
1	NA	Chip	3-7
2	NA	Silicon Wafer with Nickle Plating	8-12
3	NA	Wafer Passivation (glass)	13-19
4	NA	Lead Wire	20-23
5	NA	Solder Wafers	24-29, 30-35
6	NA	Copper Spacer	36-39
7	NA	Silicon Rubber - RoHS	40-44
8	NA	Silicon Rubber - Halogens	45-48
9	NA	Epoxy Molding Compound	49-55
10	NA	Tin Plating	56-61
11	NA	UV Ink	62-68
12	NA	UV Ink - Phthalates	69-71
13	NA	UV Ink - HBCDD	72-75



TEST REPORT Number: WUXH00005706S1

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#,ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Date : Aug 10, 2011

THIS IS TO SUPERSEDE REPORT NO. WUXH00005706 DATED

AUG 04, 2011

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Silvery Grey Metal.

Item Name : Chip.

Vendor : Littelfuse Concord.

Component Or Part No. : Silicon+Nickel+Glass.

Test Item : Cd,Pb,Hg,CrVI,PBBs,PBDEs.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



**TEST REPORT** WUXH00005706S1 Number:

# Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	6110
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal)	ND
Polybrominated Biphenyls (PBBs)(mg/kg)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND

Remark:

mg/kg = Milligram Per Kilogram = ppm

ND = Not Detected



**TEST REPORT** Number: WUXH00005706S1

# Tests Conducted (As Requested By The Applicant)

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

### (C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Non-Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Alkaline Digestion And Determined By UV-VIS Spectrophotometer	1 mg/kg
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs)	With Reference To IEC IEC 62321 Edition 1.0: 2008, By Solvent Extraction And Determined By GC/MS And Further HPLC Confirmation When Necessary.	5 mg/kg

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

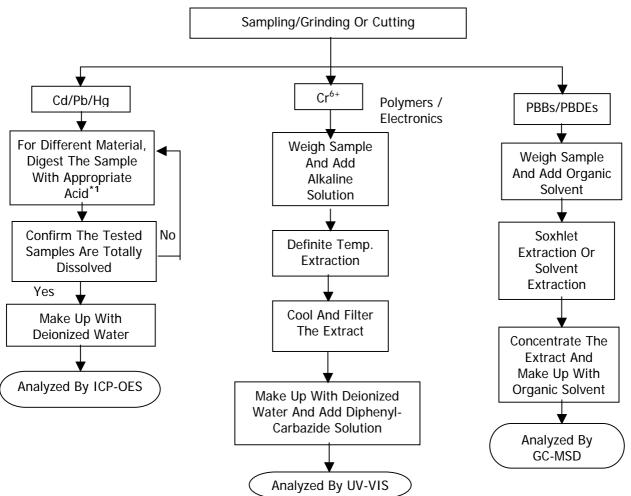


TEST REPORT Number: WUXH00005706S1

### Tests Conducted (As Requested By The Applicant)

#### (D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan) Organic (Jenny Xu/Cherry Sun)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3,</sub> HCL,HF,H <sub>2</sub> O <sub>2,</sub> H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>



**TEST REPORT** WUXH00005706S1 Number:

Tests Conducted (As Requested By The Applicant)





Date:

Aug 04, 2011

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#, ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be : **Silvery Grey Metal.**Item Name : Silicon Wafer With Nickel Plating.

Vendor : Concord. Component Or Part No. : Silicon+Nickel.

Test Item : Cd,Pb,Hg,CrVI,PBBs,PBDEs.

Remark : As Requested By The Applicant, Tested As A Whole And Sampled Randomly.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

Cadmium (Cd) Content (mg/kg)  Lead (Pb) Content (mg/kg)  Mercury (Hg) Content (mg/kg)  Mercury (Hg) Content (mg/kg)  Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal)  Polybrominated Biphenyls (PBBs)(mg/kg)  Monobrominated Biphenyls (MonoBB)  Dibrominated Biphenyls (DiBB)  Tribrominated Biphenyls (TetraBB)  ND  Tetrabrominated Biphenyls (TetraBB)  Pentabrominated Biphenyls (PentaBB)  ND  Hexabrominated Biphenyls (HexaBB)  ND  Hexabrominated Biphenyls (HexaBB)  ND  Octabrominated Biphenyls (HetraBB)  ND  Decabrominated Biphenyls (NonaBB)  ND  Decabrominated Biphenyls (NonaBB)  ND  Decabrominated Diphenyl Ethers (PBDEs)(mg/kg)  Monobrominated Diphenyl Ethers (MonoBDE)  Dibrominated Diphenyl Ethers (TetraBDE)  ND  Tetrabrominated Diphenyl Ethers (TetraBDE)  ND  Pentabrominated Diphenyl Ethers (HexaBDE)  ND  Pentabrominated Diphenyl Ethers (HexaBDE)  ND  Pentabrominated Diphenyl Ethers (HexaBDE)  ND  Decabrominated Diphenyl Ethers (HexaBDE)  ND  Decabrominated Diphenyl Ethers (HexaBDE)  ND  Decabrominated Diphenyl Ethers (NonaBDE)  ND	(A) Test Result Summary:  Testing Item  Result		
Lead (Pb) Content (mg/kg) 48  Mercury (Hg) Content (mg/kg) ND  Chromium (VI) (Cr*) Content (mg/kg)(For Non-Metal) ND  Polybrominated Biphenyls (PBBs) (mg/kg)  Monobrominated Biphenyls (MonoBB) ND  Dibrominated Biphenyls (DiBB) ND  Tribrominated Biphenyls (TriBB) ND  Tetrabrominated Biphenyls (TetraBB) ND  Pentabrominated Biphenyls (PentaBB) ND  Hexabrominated Biphenyls (HexaBB) ND  Hetxabrominated Biphenyls (HetxaBB) ND  Octabrominated Biphenyls (OctaBB) ND  Dobabrominated Biphenyls (NonaBB) ND  Polybrominated Biphenyl (DecaBB) ND  Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)  Monobrominated Diphenyl Ethers (MonoBDE) ND  Tribrominated Diphenyl Ethers (TriBDE) ND  Tetrabrominated Diphenyl Ethers (TetraBDE) ND  Pentabrominated Diphenyl Ethers (HexaBDE) ND  Pentabrominated Diphenyl Ethers (HexaBDE) ND  Octabrominated Diphenyl Ethers (HexaBDE) ND  Hexabrominated Diphenyl Ethers (HexaBDE) ND  Octabrominated Diphenyl Ethers (HexaBDE) ND  Heptabrominated Diphenyl Ethers (HexaBDE) ND  Octabrominated Diphenyl Ethers (HeptaBDE) ND  ND  NO  Octabrominated Diphenyl Ethers (HeptaBDE) ND  No  Nonabrominated Diphenyl Ethers (HeptaBDE) ND  Nonabrominated Diphenyl Ethers (HexaBDE) ND			
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Dibrominated Diphenyl Ethers (DiBDE) Tribrominated Diphenyl Ethers (TriBDE) ND Tetrabrominated Diphenyl Ethers (TetraBDE) Pentabrominated Diphenyl Ethers (PentaBDE) Hexabrominated Diphenyl Ethers (HexaBDE) Heptabrominated Diphenyl Ethers (HexaBDE) ND Heptabrominated Diphenyl Ethers (HeptaBDE) ND Octabrominated Diphenyl Ethers (OctaBDE) ND Nonabrominated Diphenyl Ethers (NonaBDE)	Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)		
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Tetrabrominated Diphenyl Ethers (TetraBDE) Pentabrominated Diphenyl Ethers (PentaBDE) ND Hexabrominated Diphenyl Ethers (HexaBDE) ND Heptabrominated Diphenyl Ethers (HeptaBDE) ND Octabrominated Diphenyl Ethers (OctaBDE) ND Nonabrominated Diphenyl Ethers (NonaBDE) ND	Dibrominated Diphenyl Ethers (DiBDE)	ND	
Pentabrominated Diphenyl Ethers (PentaBDE)  Hexabrominated Diphenyl Ethers (HexaBDE)  Heptabrominated Diphenyl Ethers (HeptaBDE)  Octabrominated Diphenyl Ethers (OctaBDE)  Nonabrominated Diphenyl Ethers (NonaBDE)  ND	Tribrominated Diphenyl Ethers (TriBDE)	ND	
Pentabrominated Diphenyl Ethers (PentaBDE)  Hexabrominated Diphenyl Ethers (HexaBDE)  Heptabrominated Diphenyl Ethers (HeptaBDE)  Octabrominated Diphenyl Ethers (OctaBDE)  Nonabrominated Diphenyl Ethers (NonaBDE)  ND	Tetrabrominated Diphenyl Ethers (TetraBDE)	ND	
Heptabrominated Diphenyl Ethers (HeptaBDE)  Octabrominated Diphenyl Ethers (OctaBDE)  Nonabrominated Diphenyl Ethers (NonaBDE)  ND	Pentabrominated Diphenyl Ethers (PentaBDE)	ND	
Heptabrominated Diphenyl Ethers (HeptaBDE)  Octabrominated Diphenyl Ethers (OctaBDE)  Nonabrominated Diphenyl Ethers (NonaBDE)  ND	Hexabrominated Diphenyl Ethers (HexaBDE)	ND	
Octabrominated Diphenyl Ethers (OctaBDE)  Nonabrominated Diphenyl Ethers (NonaBDE)  ND		ND	
Nonabrominated Diphenyl Ethers (NonaBDE) ND		ND	

Remark:

mg/kg = Milligram Per Kilogram = ppm

ND = Not Detected



# Tests Conducted (As Requested By The Applicant)

### (B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

### (C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Non-Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Alkaline Digestion And Determined By UV-VIS Spectrophotometer	1 mg/kg
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs)	With Reference To IEC IEC 62321 Edition 1.0: 2008, By Solvent Extraction And Determined By GC/MS And Further HPLC Confirmation When Necessary.	5 mg/kg

Date Sample Received: Aug 01, 2011

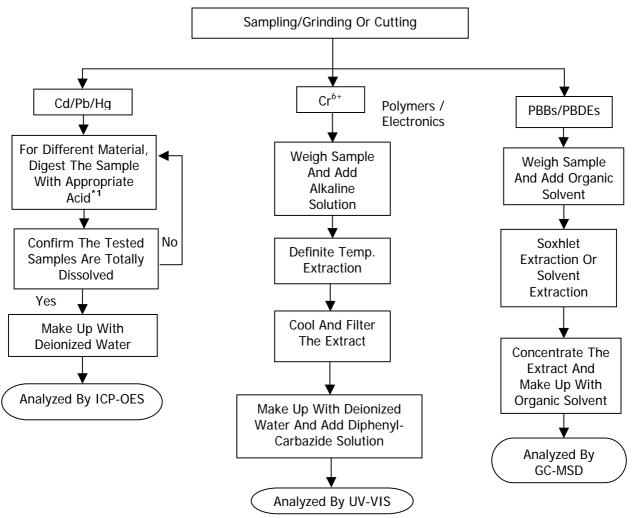
Testing Period: Aug 01, 2011 To Aug 04, 2011



#### Tests Conducted (As Requested By The Applicant)

#### (D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

Organic (Jenny Xu/Cherry Sun)

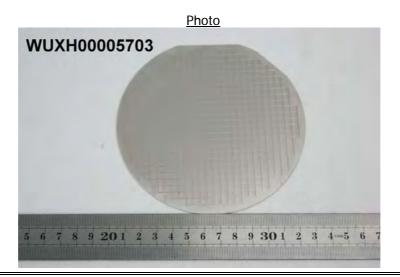
#### Remarks:

\*1: List Of Appropriate Acid:

Acid Added For Digestion
HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
HNO <sub>3,</sub> HCL,HF
HNO <sub>3</sub> ,HCL,H <sub>2</sub> O <sub>2</sub> ,HBF <sub>4</sub>



Tests Conducted (As Requested By The Applicant)





TEST REPORT Number: WUXH00005704S1

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#,ZHENFA 6 ROAD, SHUO FANG INDUSTRIAL PARK

WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE,

WUXI,JIANGSU,CHINA Attn: ZHANG XIAOPENG Date: Aug 11, 2011

THIS IS TO SUPERSEDE REPORT NO. WUXH00005704 DATED

AUG 05, 2011

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: White Powder.

Item Name : Wafer Passivation.

Vendor : Propriety. Component Or Part No. : Propriety.

Test Item : Cd,Pb,Hg,CrVI,PBBs,PBDEs,F,Cl,Br,I.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



**TEST REPORT** Number: WUXH00005704S1

Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

(A) Test Result Summary:  Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	185100
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal)	ND
Polybrominated Biphenyls (PBBs)(mg/kg)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND

Remark:

mg/kg = Milligram Per Kilogram = ppm

ND = Not Detected

#=The Result Is For Reference Only.



**TEST REPORT** Number: WUXH00005704S1

# Tests Conducted (As Requested By The Applicant)

### (B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

### (C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Non-Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Alkaline Digestion And Determined By UV-VIS Spectrophotometer	1 mg/kg
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs)	With Reference To IEC IEC 62321 Edition 1.0: 2008, By Solvent Extraction And Determined By GC/MS And Further HPLC Confirmation When Necessary.	5 mg/kg

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

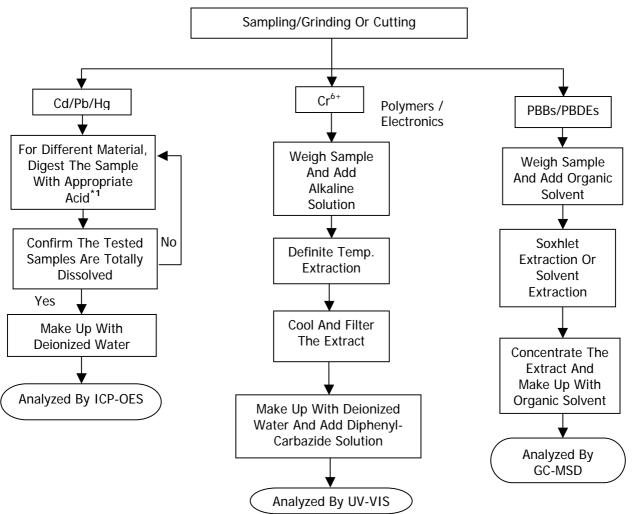


TEST REPORT Number: WUXH00005704S1

#### Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

Organic (Jenny Xu/Cherry Sun)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>

### 2 Halogen Test

(I) Test Result Summary:



**TEST REPORT** Number: WUXH00005704S1

# Tests Conducted (As Requested By The Applicant)

Halogen Content:

Testing Item	Result (ppm)
Fluorine (F) Content	ND
Chlorine (CI)Content	ND
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks : ppm = Parts Per Million = mg/kg

ND = Not Detected

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 05, 2011

(II) Test Method:

Testing Item	Testing Method	Reporting Limit
THAINDEN (F. C.L. Br. 1) CONTENT	With Reference To EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography	50 ppm

Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample

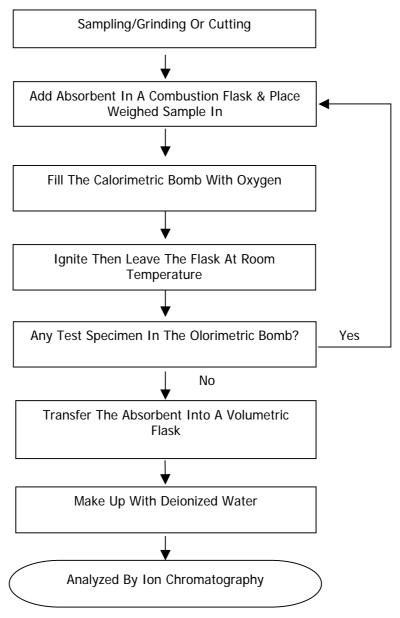


TEST REPORT Number: WUXH00005704S1

Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan



**TEST REPORT** WUXH00005704S1 Number:

Tests Conducted (As Requested By The Applicant)





Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD. Date: Aug 04, 2011

**PASS** 

EAST 1#, ZHENFA 6 ROAD, SHUO FANG INDUSTRIAL PARK

WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE,

WUXI, JIANGSU, CHINA Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Golden Yellow Metal.

Item Name : Lead Wire.

Vendor : Shanghai Bontech Enterprise.

: Alloy Copper. Component Or Part No. : Cd,Pb,Hg,CrVI. Test Item

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Summary:

**Tested Sample** Standard Result

With Reference To Test Method Of IEC 62321 Edition 1.0: 2008 And Maximum Concentration Limits Quoted **Submitted Sample** 

From RoHS Directives 2002/95/EC And Amendment

2005/618/EC

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



### Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	ND
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI)(Cr <sup>6+</sup> ) Result (By Boiling Water Extraction On Metal) (mg/kg With 50cm <sup>2</sup> )	N

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm<sup>2</sup> = Milligram Per Kilogram With 50 Square Centimeter

ND = Not Detected

N=Negative

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

### (C) Test Method:

Testing Item	<u>Testing Method</u>	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Boiling Water Extraction And Determined By UV-VIS Spectrophotometer	0.02mg/kg With 50cm <sup>2</sup> (In Testing Solution)

Date Sample Received: Aug 01, 2011

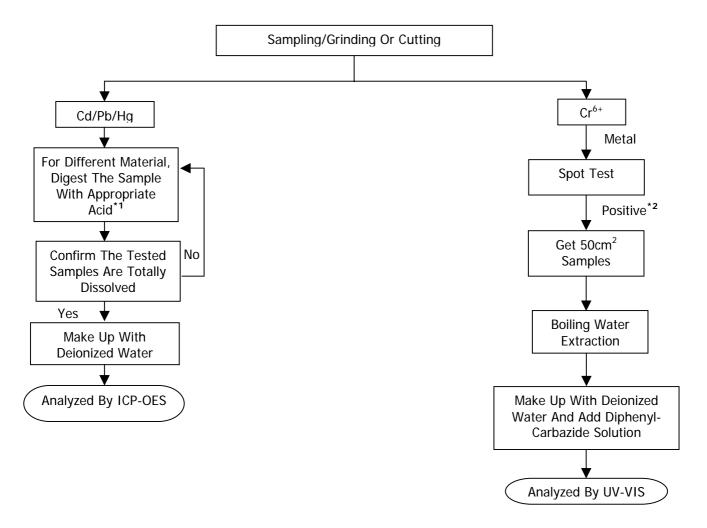
Testing Period: Aug 01, 2011 To Aug 03, 2011



Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>

<sup>\*2:</sup> If The Result Of Spot Test Is Positive, Chromium VI Would Be Determined As Detected.



**TEST REPORT** WUXH00005708 Number:

Tests Conducted (As Requested By The Applicant)





Date:

Aug 05, 2011

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#, ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Silver Metal.

Item Name : Solder Wafer.

Vendor : Jin Zhou Rongheng Electronics Co.

Component Or Part No. : Pb:Sn:Ag=92.5:5:2.5.
Test Item : Cd,Pb,Hg,CrVI,F,Cl,Br,I.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

(i) restriction of the same of		
Testing Item	Result	
Cadmium (Cd) Content (mg/kg)	ND	
Lead (Pb) Content (mg/kg)	901600	
Mercury (Hg) Content (mg/kg)	ND	
Chromium (VI)(Cr <sup>6+</sup> ) Result (By Boiling Water Extraction On Metal) (mg/kg With 50cm <sup>2</sup> )	N	

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm<sup>2</sup> = Milligram Per Kilogram With 50 Square Centimeter

ND = Not Detected

N=Negative

#=The Result Is For Reference Only.

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

## (C) Test Method:

<u>Testing Item</u>	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Boiling Water Extraction And Determined By UV-VIS Spectrophotometer	0.02mg/kg With 50cm <sup>2</sup> (In Testing Solution)

Date Sample Received: Aug 01, 2011

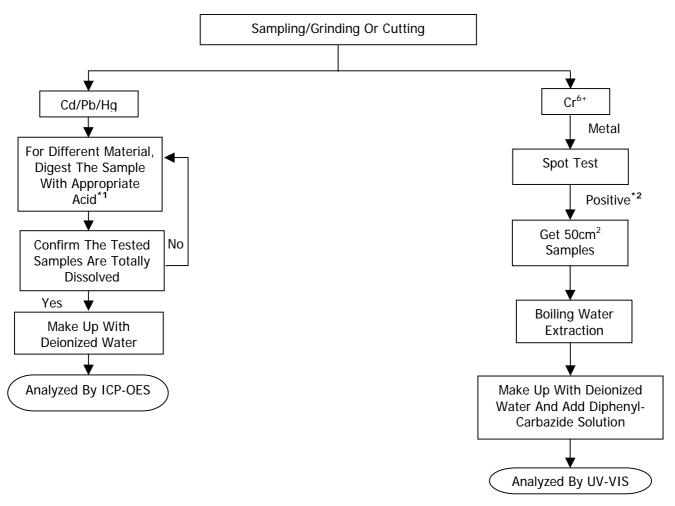
Testing Period: Aug 01, 2011 To Aug 04, 2011



Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3.</sub> HCL,HF,H <sub>2</sub> O <sub>2.</sub> H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>

<sup>\*2:</sup> If The Result Of Spot Test Is Positive, Chromium VI Would Be Determined As Detected.



Tests Conducted (As Requested By The Applicant)

Halogen Test

(I) Test Result Summary :

Halogen Content:

Testing Item	Result (ppm)
Fluorine (F) Content	ND
Chlorine (CI)Content	ND
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks: ppm = Parts Per Million = mg/kg

ND = Not Detected

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

(II) Test Method:

( )		
<u>Testing Item</u>	<u>Testing Method</u>	Reporting Limit
Halonon (F.C.) Br. D.Contont	With Reference To EN 14582:2007 By Combustion In A	FO nom
	Calorimetric Bomb And Determined By Ion Chromatography	50 ppm

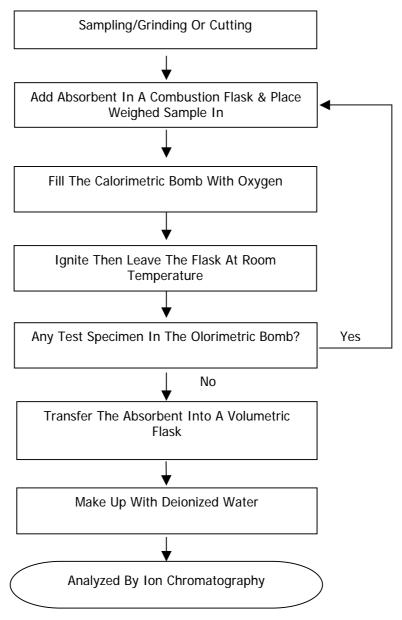
Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample



Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan



Tests Conducted (As Requested By The Applicant)





Date:

Aug 05, 2011

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#,ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Silver Metal.

Item Name: Solder Wafer.Vendor: Coining Inc.Component Or Part No.: Pb:Sn=90:10.

Test Item : Cd,Pb,Hg,CrVI,,F,Cl,Br,I.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

(ii) rect recuire cummary.	
Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	908500
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI)(Cr <sup>6+</sup> ) Result (By Boiling Water Extraction On Metal) (mg/kg With 50cm <sup>2</sup> )	N

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm<sup>2</sup> = Milligram Per Kilogram With 50 Square Centimeter

ND = Not Detected

N=Negative

#=The Result Is For Reference Only.

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

## (C) Test Method:

<u>Testing Item</u>	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Boiling Water Extraction And Determined By UV-VIS Spectrophotometer	0.02mg/kg With 50cm <sup>2</sup> (In Testing Solution)

Date Sample Received: Aug 01, 2011

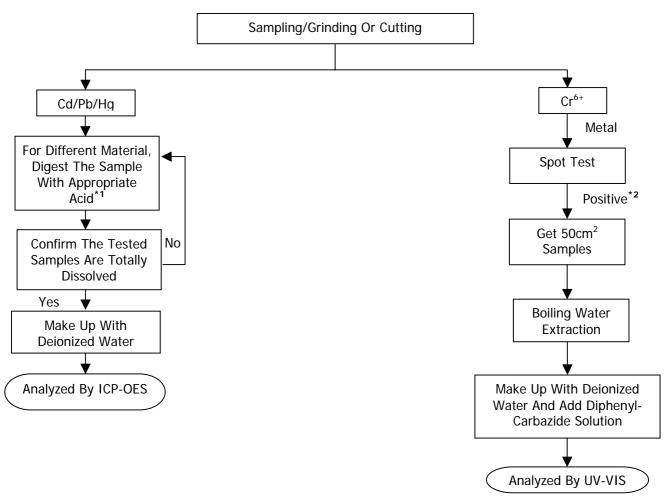
Testing Period: Aug 01, 2011 To Aug 05, 2011



Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>

<sup>\*2:</sup> If The Result Of Spot Test Is Positive, Chromium VI Would Be Determined As Detected.



Tests Conducted (As Requested By The Applicant)

Halogen Test

(I) Test Result Summary :

Halogen Content:

<u>Testing Item</u>	Result (ppm)
Fluorine (F) Content	ND
Chlorine (CI)Content	ND
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks: ppm = Parts Per Million = mg/kg

ND = Not Detected

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

(II) Test Method:

( )		
<u>Testing Item</u>	<u>Testing Method</u>	Reporting Limit
Halogon (F.C.) Br. D.Contont	With Reference To EN 14582:2007 By Combustion In A	FO nom
	Calorimetric Bomb And Determined By Ion Chromatography	50 ppm

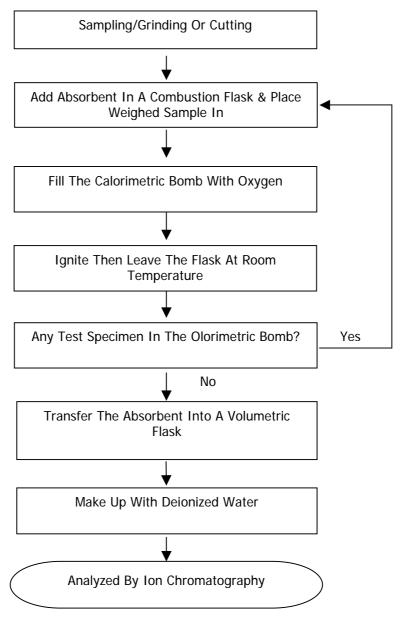
Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample



Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan



**TEST REPORT** WUXH00005736 Number:

Tests Conducted (As Requested By The Applicant)





Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

Date: Aug 04, 2011

EAST 1#, ZHENFA 6 ROAD, SHUO FANG INDUSTRIAL PARK

WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE,

WUXI, JIANGSU ,CHINA Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be : **Silvery Metal**. Item Name : Copper Spacer(Circle).

Vendor : Sung Jung Minute Industry CO., LTD.

Component Or Part No. : Copper With Ag Plating.

Test Item : Cd,Pb,Hg,CrVI.

Remark : As Requested By The Applicant, Tested As A Whole And Sampled Randomly.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Summary:

Tested Sample
With Reference To Test Method Of IEC 62321 Edition
Submitted Sample
1.0: 2008 And Maximum Concentration Limits Quoted
From RoHS Directives 2002/95/EC And Amendment
2005/618/EC

Result
PASS

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu



## Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

(r) rest result cummary:	
Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	ND
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI)(Cr <sup>6+</sup> ) Result (By Boiling Water Extraction On Metal) (mg/kg With 50cm <sup>2</sup> )	N

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm<sup>2</sup> = Milligram Per Kilogram With 50 Square Centimeter

ND = Not Detected

N=Negative

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

### (C) Test Method:

<u>Testing Item</u>	<u>Testing Method</u>	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Boiling Water Extraction And Determined By UV-VIS Spectrophotometer	0.02mg/kg With 50cm <sup>2</sup> (In Testing Solution)

Date Sample Received: Aug 01, 2011

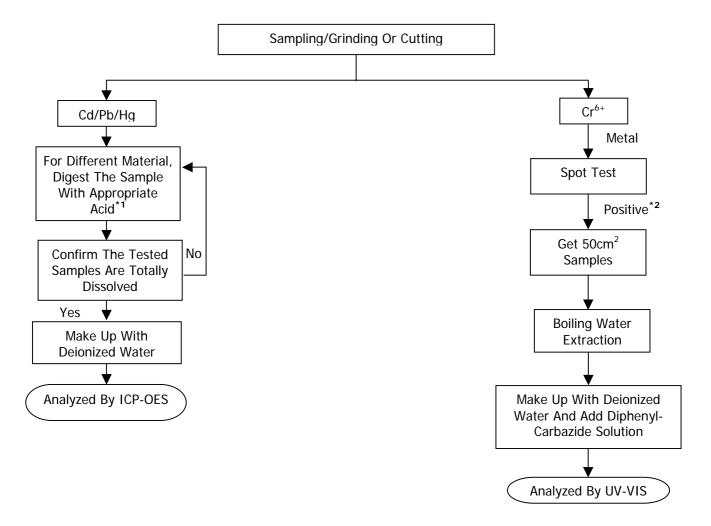
Testing Period: Aug 01, 2011 To Aug 03, 2011



Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

## Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3</sub> ,HCL,H <sub>2</sub> O <sub>2</sub> ,HBF <sub>4</sub>
	•

<sup>\*2:</sup> If The Result Of Spot Test Is Positive, Chromium VI Would Be Determined As Detected.



**TEST REPORT** WUXH00005717 Number:

Tests Conducted (As Requested By The Applicant)





Date:

Aug 11, 2011

**PASS** 

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#,ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: White Rubber.

Item Name : Silicon rubber.

Vendor : Dow Corning Corporation.

Component Or Part No. : 4195L.

Test Item : Cd,Pb,Hg,CrVI,PBBs,PBDEs.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Summary:

<u>Tested Sample</u> <u>Standard</u> <u>Result</u>

With Reference To Test Method Of IEC 62321 Edition
Submitted Sample 1.0: 2008 And Maximum Concentration Limits Quoted

From RoHS Directives 2002/95/EC And Amendment

2005/618/EC

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu

General Manager



Tests Conducted (As Requested By The Applicant)

**RoHS Directives Test** 

(A) Test Result Summary:

Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	ND
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal)	ND
Polybrominated Biphenyls (PBBs)(mg/kg)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND

Remark:

mg/kg = Milligram Per Kilogram = ppm

ND = Not Detected

N=Negative



# Tests Conducted (As Requested By The Applicant)

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

## (C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Non-Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Alkaline Digestion And Determined By UV-VIS Spectrophotometer	1 mg/kg
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs)	With Reference To IEC 62321 Edition 1.0: 2008, By Solvent Extraction And Determined By GC-MSD And Further HPLC Confirmation When Necessary.	5 mg/kg

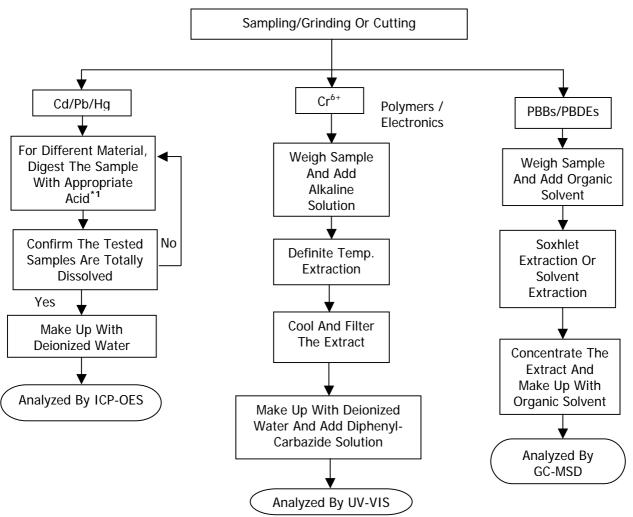
Date Sample Received: Aug 10, 2011 Testing Period: Aug 10, 2011 To Aug 11, 2011



## Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

Organic (Jenny Xu/Cherry Sun)

### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3</sub> ,HCL,H <sub>2</sub> O <sub>2</sub> ,HBF <sub>4</sub>



Tests Conducted (As Requested By The Applicant)





Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#, ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: White Rubber.

Item Name : Silicon rubber.

Vendor : Dow Corning Corporation.

Component Or Part No. : 4195L. Test Item : F,Cl,Br,I.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu

General Manager

Aug 09, 2011

Date:



Tests Conducted (As Requested By The Applicant)

1 Halogen Test

(I) Test Result Summary :

Halogen Content:

Testing Item	Result (ppm)
Fluorine (F) Content	ND
Chlorine (CI)Content	ND
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks: ppm = Parts Per Million = mg/kg

ND = Not Detected

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

(II) Test Method:

Testing Item	Testing Method	Reporting <u>Limit</u>
THAINMAN (F ( L RY L) ( ANTANT	With Reference EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography	50 ppm

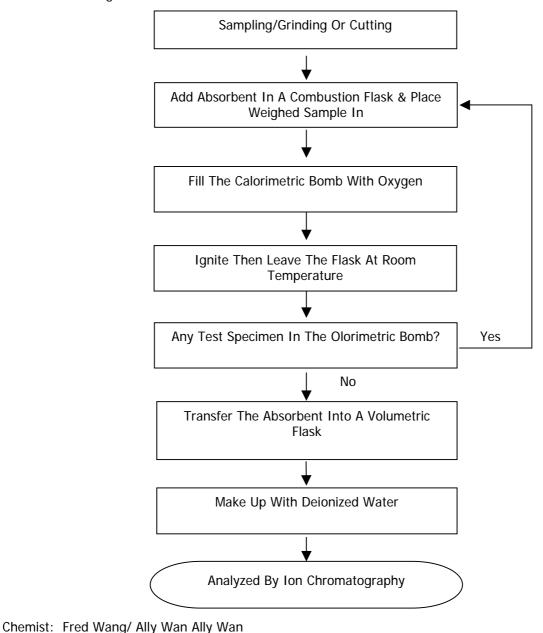
Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample



Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

Test For Halogen Content Reference Method: EN 14582:2007





**TEST REPORT** WUXH0000573802 Number:

Tests Conducted (As Requested By The Applicant)





Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

Date: Aug 05, 2011

**PASS** 

EAST 1#,ZHENFA 6 ROAD, SHUO FANG INDUSTRIAL PARK

WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE,

WUXI,JIANGSU,CHINA Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Brown Epoxy Molding Compound.

Item Name : Epoxy Molding Compound.
Vendor : Chang Chun Plastics Co.,LTD.

Component Or Part No. : EME-E110G.

Test Item : Cd,Pb,Hg,CrVI,PBBs,PBDEs,F,Cl,Br,I.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Summary:

<u>Tested Sample</u> <u>Standard</u> <u>Result</u>

With Reference To Test Method Of IEC 62321 Edition
Submitted Sample 1.0: 2008 And Maximum Concentration Limits Quoted

From RoHS Directives 2002/95/EC And Amendment

1011 Runs Directives 2002/95/EC

2005/618/EC

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu

General Manager



**TEST REPORT** WUXH00005740 Number:

Tests Conducted (As Requested By The Applicant)

**RoHS Directives Test** 

(A) Test Result Summary:

Testing Item	Result
Cadmium (Cd) Content (mg/kg)	ND
Lead (Pb) Content (mg/kg)	ND
Mercury (Hg) Content (mg/kg)	ND
Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal)	ND
Polybrominated Biphenyls (PBBs)(mg/kg)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND

Remark:

mg/kg = Milligram Per Kilogram = ppm

ND = Not Detected



# Tests Conducted (As Requested By The Applicant)

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

## (C) Test Method:

Testing Item	Testing Method	Reporting Limit	
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg	
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg	
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg	
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Non-Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Alkaline Digestion And Determined By UV-VIS Spectrophotometer	1 mg/kg	
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs)	With Reference To IEC 62321 Edition 1.0: 2008, By Solvent Extraction And Determined By GC-MSD And Further HPLC Confirmation When Necessary.	5 mg/kg	

Date Sample Received: Aug 01, 2011

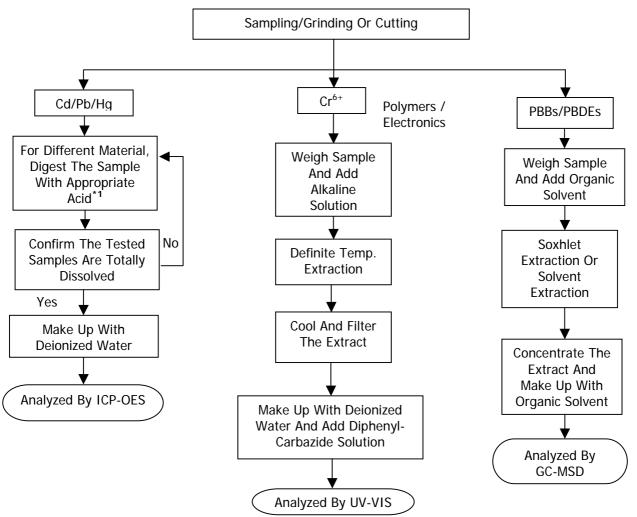
Testing Period: Aug 01, 2011 To Aug 04, 2011



Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

Organic (Jenny Xu/Cherry Sun)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>



Tests Conducted (As Requested By The Applicant)

2 Halogen Test

(I) Test Result Summary :

Halogen Content:

Testing Item	Result (ppm)
Fluorine (F) Content	ND
Chlorine (CI)Content	ND
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks: ppm = Parts Per Million = mg/kg

ND = Not Detected

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

(II) Test Method:

<u>Testing Item</u>	<u>Testing Method</u>	Reporting <u>Limit</u>
Halonon (F.C.) Br. D.Contont	With Reference EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography	50 ppm

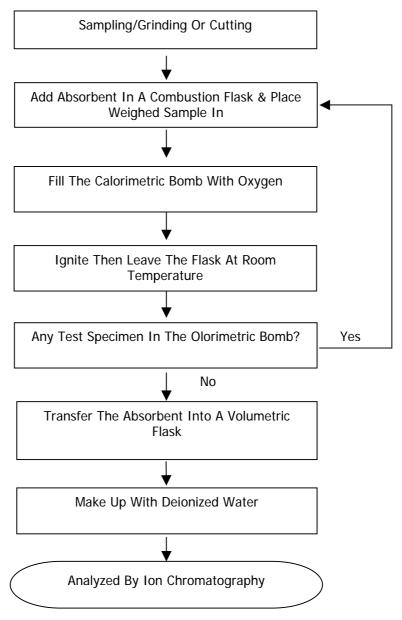
Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample



Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan



**TEST REPORT** WUXH00005740 Number:

Tests Conducted (As Requested By The Applicant)





Date:

Aug 04, 2011

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#, ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Black Plastic With Silvery Metal Pin.

Item Name : Tin Plating-Axial.

Vendor : Zhangjiagang Liangshen Plating Co.,.

Component Or Part No. : Pure Matte Tin.

Test Item : Cd,Pb,Hg,CrVI,F,Cl,Br,I.

Tests Conducted:

As Requested By The Applicant, For Details Refer To Attached Pages

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu

General Manager



Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

Testing Item	Result
resting item	(1)
Cadmium (Cd) Content (mg/kg)/Plating	ND
Lead (Pb) Content (mg/kg)/Plating	68
Mercury (Hg) Content (mg/kg)/Plating	ND
Chromium (VI)(Cr <sup>6+</sup> ) Result (By Boiling Water Extraction On	N
Metal) (mg/kg With 50cm <sup>2</sup> )	N

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm<sup>2</sup> = Milligram Per Kilogram With 50 Square Centimeter

ND = Not Detected

N=Negative

**Tested Component:** 

(1) Metal Pin Plating.

(B)RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

(C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	ercury (Hg)Content  With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Boiling Water Extraction And Determined By UV-VIS Spectrophotometer	0.02mg/kg With 50cm <sup>2</sup> (In Testing Solution)

Date Sample Received: Aug 01, 2011

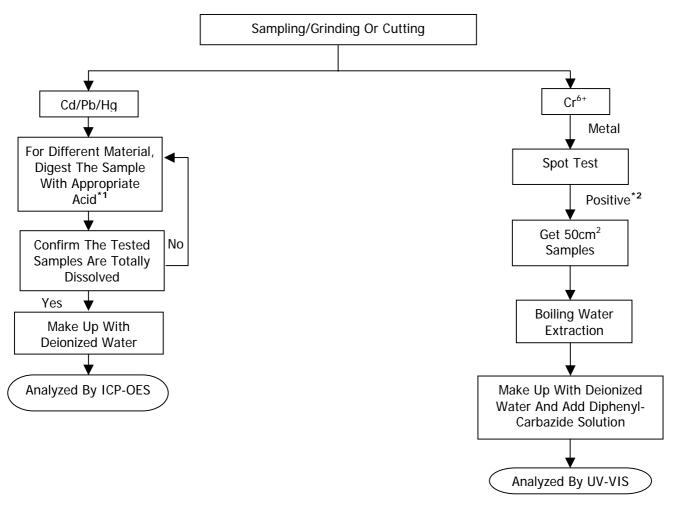
Testing Period: Aug 01, 2011 To Aug 04, 2011



Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

#### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3.</sub> HCL,HF,H <sub>2</sub> O <sub>2.</sub> H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>

<sup>\*2:</sup> If The Result Of Spot Test Is Positive, Chromium VI Would Be Determined As Detected.



Tests Conducted (As Requested By The Applicant)

2 Halogen Test

(I) Test Result Summary:

Halogen Content:

Tooting Itom	Result (ppm)
<u>Testing Item</u>	(2)
Fluorine (F) Content	ND
Chlorine (CI)Content	94
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks : ppm = Parts Per Million = mg/kg

ND = Not Detected

Tested Component: (2) Black Plastic.

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 04, 2011

(II) Test Method:

(11) 1001 1110111011		
Testing Item	Testing Method	Reporting Limit
Halogen (F,Cl, Br,I) Content	With Reference To EN 14582:2007 By Combustion In A	50 ppm
rialogen (1,01, br,1) content	Calorimetric Bomb And Determined By Ion Chromatography	эо ррпп

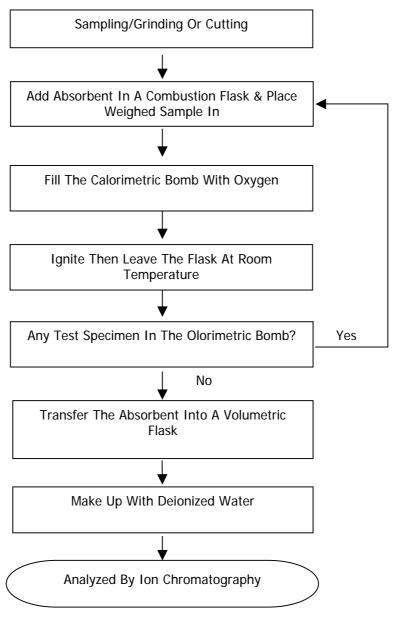
Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample



Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

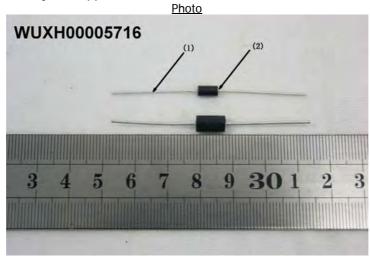
Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan



Tests Conducted (As Requested By The Applicant)





Date:

Aug 05, 2011

**PASS** 

Applicant: CONCORD SEMICONDUCTOR(WUXI) CO., LTD.

EAST 1#,ZHENFA 6 ROAD, SHUO FANG

INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA

Attn: ZHANG XIAOPENG

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be: Silvery Ink.

Item Name : UV Ink. Vendor : Bon Mark.

Test Item : Cd,Pb,Hg,CrVI,PBBs,PBDEs,F,Cl,Br,I.

Tests Conducted:

**Submitted Sample** 

As Requested By The Applicant, For Details Refer To Attached Pages

Summary:

<u>Tested Sample</u> <u>Standard</u> <u>Result</u>

With Reference To Test Method Of IEC 62321 Edition 1.0: 2008 And Maximum Concentration Limits Quoted

From RoHS Directives 2002/95/EC And Amendment

2005/618/EC

Prepared And Checked By:

For Intertek Testing Services Wuxi Ltd.

Jessica Lu

General Manager



**TEST REPORT** WUXH00005743 Number:

Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

Testing Item Cadmium (Cd) Content (mg/kg) Lead (Pb) Content (mg/kg) Mercury (Hg) Content (mg/kg) Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal) Polybrominated Biphenyls (PBBs)(mg/kg) Monobrominated Biphenyls (MonoBB) Dibrominated Biphenyls (DiBB) Tribrominated Biphenyls (TriBB) ND Tetrabrominated Biphenyls (TetraBB) Pentabrominated Biphenyls (PentaBB) ND Hexabrominated Biphenyls (PentaBB) ND Heptabrominated Biphenyls (HexaBB) ND Heptabrominated Biphenyls (HexaBB) ND Octabrominated Biphenyls (OctaBB) ND Nonabrominated Biphenyls (NonaBB) Decabrominated Biphenyl (DecaBB) ND Polybrominated Diphenyl Ethers (PBDEs)(mg/kg) Monobrominated Diphenyl Ethers (DiBDE) ND	
Lead (Pb) Content (mg/kg)21Mercury (Hg) Content (mg/kg)NDChromium (VI) (Cr6+) Content (mg/kg)(For Non-Metal)NDPolybrominated Biphenyls (PBBs)(mg/kg)NDMonobrominated Biphenyls (MonoBB)NDDibrominated Biphenyls (DiBB)NDTribrominated Biphenyls (TriBB)NDTetrabrominated Biphenyls (TetraBB)NDPentabrominated Biphenyls (PentaBB)NDHexabrominated Biphenyls (HexaBB)NDHeptabrominated Biphenyls (HeptaBB)NDOctabrominated Biphenyls (OctaBB)NDNonabrominated Biphenyls (NonaBB)NDDecabrominated Biphenyl (DecaBB)NDPolybrominated Diphenyl Ethers (PBDEs)(mg/kg)Monobrominated Diphenyl Ethers (MonoBDE)NDDibrominated Diphenyl Ethers (DiBDE)ND	
Mercury (Hg) Content (mg/kg) Chromium (VI) (Cr <sup>6+</sup> ) Content (mg/kg)(For Non-Metal) Polybrominated Biphenyls (PBBs)(mg/kg) Monobrominated Biphenyls (MonoBB) ND Dibrominated Biphenyls (DiBB) Tribrominated Biphenyls (TriBB) ND Tetrabrominated Biphenyls (TetraBB) Pentabrominated Biphenyls (PentaBB) ND Hexabrominated Biphenyls (PentaBB) ND Heptabrominated Biphenyls (HexaBB) ND Heptabrominated Biphenyls (HeptaBB) ND Octabrominated Biphenyls (OctaBB) ND Nonabrominated Biphenyls (NonaBB) ND Decabrominated Biphenyl (DecaBB) Polybrominated Biphenyl Ethers (PBDEs)(mg/kg) Monobrominated Diphenyl Ethers (MonoBDE) ND Dibrominated Diphenyl Ethers (DiBDE)	
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Polybrominated Biphenyls (PBBs) (mg/kg)  Monobrominated Biphenyls (MonoBB)  Dibrominated Biphenyls (DiBB)  Tribrominated Biphenyls (TriBB)  Tetrabrominated Biphenyls (TetraBB)  Pentabrominated Biphenyls (PentaBB)  Hexabrominated Biphenyls (HexaBB)  Hexabrominated Biphenyls (HexaBB)  ND  Heptabrominated Biphenyls (HeptaBB)  Octabrominated Biphenyls (OctaBB)  ND  Nonabrominated Biphenyls (NonaBB)  ND  Decabrominated Biphenyl (DecaBB)  Polybrominated Biphenyl (DecaBB)  ND  Polybrominated Diphenyl Ethers (PBDEs) (mg/kg)  Monobrominated Diphenyl Ethers (MonoBDE)  Dibrominated Diphenyl Ethers (DiBDE)	
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Polybrominated Diphenyl Ethers (PBDEs)(mg/kg)  Monobrominated Diphenyl Ethers (MonoBDE)  Dibrominated Diphenyl Ethers (DiBDE)  ND	
Monobrominated Diphenyl Ethers (MonoBDE)  Dibrominated Diphenyl Ethers (DiBDE)  ND	
Dibrominated Diphenyl Ethers (DiBDE) ND	
1 2	
T. I	
Tribrominated Diphenyl Ethers (TriBDE) ND	
Tetrabrominated Diphenyl Ethers (TetraBDE) ND	
Pentabrominated Diphenyl Ethers (PentaBDE) ND	
Hexabrominated Diphenyl Ethers (HexaBDE) ND	
Heptabrominated Diphenyl Ethers (HeptaBDE) ND	
Octabrominated Diphenyl Ethers (OctaBDE) ND	
Nonabrominated Diphenyl Ethers (NonaBDE) ND	
Decabrominated Diphenyl Ether (DecaBDE) ND	

Remark:

mg/kg = Milligram Per Kilogram = ppm

ND = Not Detected



# Tests Conducted (As Requested By The Applicant)

## (B)RoHS Requirement:

Restricted Substances	Limits	
Cadmium (Cd)	0.01% (100 mg/kg)	
Lead (Pb)	0.1% (1000 mg/kg)	
Mercury (Hg)	0.1% (1000 mg/kg)	
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)	
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)	
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)	

The Above Limits Were Quoted From 2002/95/EC And Amendment 2005/618/EC For Homogeneous Material.

## (C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Lead (Pb)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Mercury (Hg)Content	With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES	2 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content (For Non-Metal)	With Reference To IEC 62321 Edition 1.0: 2008, By Alkaline Digestion And Determined By UV-VIS Spectrophotometer	1 mg/kg
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs)	With Reference To IEC IEC 62321 Edition 1.0: 2008, By Solvent Extraction And Determined By GC/MS And Further HPLC Confirmation When Necessary.	5 mg/kg

Date Sample Received: Aug 01, 2011

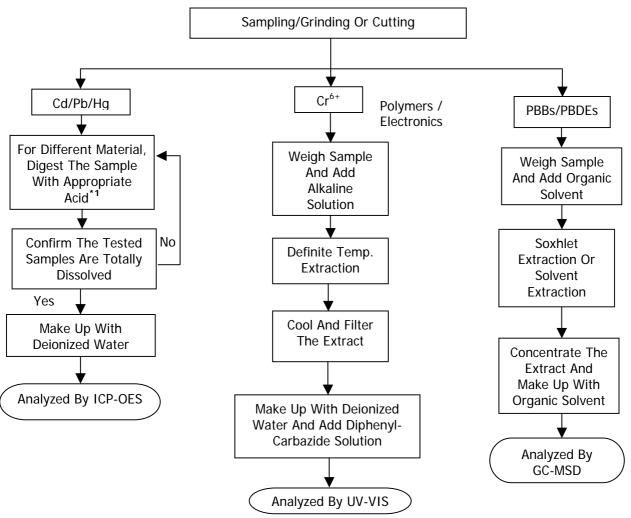
Testing Period: Aug 01, 2011 To Aug 04, 2011



### Tests Conducted (As Requested By The Applicant)

(D) Measurement Flowchart:

Reference Standard: IEC 62321 Edition 1.0: 2008



Chemist: Inorganic (Ann Luo/Fred Wang/Ally Wan)

Organic (Jenny Xu/Cherry Sun)

### Remarks:

\*1: List Of Appropriate Acid:

<u>Material</u>	Acid Added For Digestion
Polymers	HNO <sub>3</sub> ,HCL,HF,H <sub>2</sub> O <sub>2</sub> ,H <sub>3</sub> BO <sub>3</sub>
Metals	HNO <sub>3,</sub> HCL,HF
Electronics	HNO <sub>3,</sub> HCL,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub>

## 2 Halogen Test

(I) Test Result Summary:



# Tests Conducted (As Requested By The Applicant)

Halogen Content:

Testing Item	Result (ppm)
Fluorine (F) Content	126
Chlorine (CI)Content	ND
Bromine (Br) Content	ND
Iodine (I) Content	ND

Remarks : ppm = Parts Per Million = mg/kg

ND = Not Detected

Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 05, 2011

(II) Test Method:

Testing Item	Testing Method	Reporting Limit
THAIDOEN (F.C.L. Br. 1) CONTENT	With Reference To EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography	50 ppm

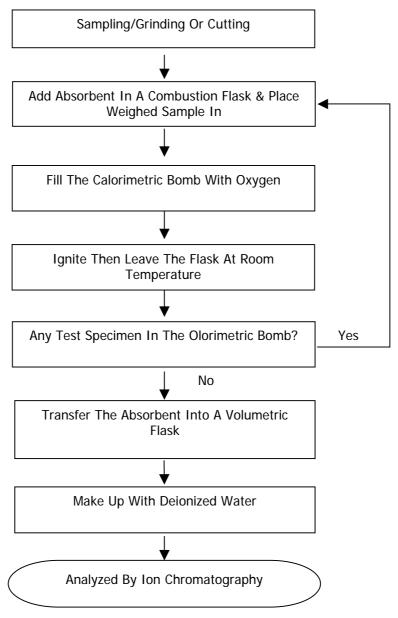
Remarks: Reporting Limit = Quantitation Limit Of Analyte In Sample



Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan



**TEST REPORT** WUXH00005743 Number:

Tests Conducted (As Requested By The Applicant)





APPLICANT: CONCORD SEMICONDUCTOR (WUXI) CO.,

DATE: OCT 11, 2010

NUMBER: WUXH00003256

LTD.

EAST 1#, ZHENFA 6 ROAD, SHUO FANG INDUSTRIAL PARK WUXI NATIONAL HIGH-

TECH DEVELOPMENT ZONE, WUXI, JIANGSU, CHINA ATTN: ZHANG XIAOPENG

SAMPLE DESCRIPTION:

ONE(1) PIECE OF SUBMITTED SAMPLE SAID TO BE :SILVER INK.

ITEM NAME : UV INK(PRODUCED BY BON MARK).

\*

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TO BE CONTINUED

PREPARED AND CHECKED BY:
FOR INTERTEK TESTING SERVICES WUXI LTD.

JESSICA LU

GENERAL MANAGER



NUMBER: WUXH00003256

TESTS CONDUCTED

### PHTHALATE CONTENT TEST

WITH REFERENCE TO EN14372, BY GAS CHROMATOGRAPHIC-MASS SPECTROMETRIC (GC-MS) ANALYSIS.

TESTED COMPOUND	RESULT (%,W/W)	LIMIT(%,W/W)
		(MAX.)
DIBUTYL PHTHALATE (DBP)	ND	
DIETHYL HEXYL PHTHALATE (DEHP)	ND	
BENZYL BUTYL PHTHALATE (BBP)	ND	
DI-ISO-NONYL PHTHALATE (DINP)	ND	
DI-N-OCTYL PHTHALATE (DNOP)	ND	04 F 4
DI-ISO-DECYL PHTHALATE (DIDP)	ND	

REMARK : THE ABOVE LIMIT WAS QUOTED ACCORDING TO ANNEX XVII

ITEMS 51 & 52 OF THE REACH REGULATION (EC) NO.

1907/2006 (FORMERLY KNOWN AS DIRECTIVE 2005/84/EC) FOR PHTHALATE CONTENT IN TOYS AND CHILDREN CARE ARTICLES.

DETECTION LIMIT = 0.01%(W/W)

ND = NOT DETECTED

DATE SAMPLE RECEIVED : SEP 29, 2010

TESTING PERIOD: SEP 29, 2010 TO OCT 8, 2010

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TO BE CONTINUED



NUMBER: WUXH00003256

TESTS CONDUCTED





\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

END OF REPORT



NUMBER: WUXH00003471

APPLICANT: CONCORD SEMICONDUCTOR (WUXI) CO.,

DATE: NOV 04, 2010

LTD.

EAST 1#, ZHENFA 6 ROAD, SHUO FANG INDUSTRIAL PARK WUXI NATIONAL HIGH-TECH DEVELOPMENT ZONE,

WUXI, JIANGSU, CHINA ATTN: ZHANG XIAOPENG

SAMPLE DESCRIPTION:

ONE (1) PIECE OF SUBMITTED SAMPLE SAID TO BE : SILVER UV INK.

ITEM NAME

: UV INK.

VENDOR

: BONMARK.

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S) \*

TO BE CONTINUED

PREPARED AND CHECKED BY:

FOR INTERTEK TESTING SERVICES WUXI LTD.

JESSICA LU

GENERAL MANAGER

PAGE 1 OF 4



NUMBER: WUXH00003471

TESTS CONDUCTED

(A) TEST RESULT SUMMARY:

TESTING ITEM	RESULT (ppm)	
HBCD (HEXABROMOCYCLODODECANE)	ND	

REMARKS:

ppm = PARTS PER MILLION = mg/kg

ND = NOT DETECTED

(B) TEST METHOD :

TESTING ITEM		TESTING METHOD	REPORTING LIMIT
HBCD		WITH REFERENCE TO USEPA 3540C, BY SOLVENT EXTRACTION AND DETERMINED BY GC/MS	10 ppm

DATE SAMPLE RECEIVED :OCT 29,2010 TESTING PERIOD:OCT 29,2010 TO NOV 3, 2010

TO BE CONTINUED



NUMBER: WUXH00003471

TESTS CONDUCTED

MEASUREMENT FLOWCHART:

TEST FOR HBCD (Hexabromocyclododecane) CONTENT

Weigh sample and place into a thimble I Soxhlet extraction with organic solvent Concentrate the extract I Transfer the extract into a volumetric flask I Make up with organic solvent Ū Analyze by GC-MSD

TO BE CONTINUED

\*



TESTS CONDUCTED

PHOTO



END OF REPORT

NUMBER: WUXH00003471