



ICP Test Report Certification Packet

Company name: Littelfuse, Inc.
Product Series: DO-214AC - SMAJ, P4SMA Series
Product #: TVS Diode
Issue Date: January 16, 2012

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 SMAJ, P4SMA, SMA6L 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 identified in Table 1

Remarks : under 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 Nickel Plating | 8-12 |
| 3 | NA | Wafer Passivation (glass) | 13-19 |
| 4 | NA | Lead Frame | 20-23 |
| 5a | NA | Solder Paster - RoHS | 24-30 |
| 5b | | Solder Paster - Phthalates, HBCDD | 31-36 |
| 6a | NA | Epoxy Molding Compound - RoHS | 37-43 |
| 6b | NA | Epoxy Molding Compound – Phthalates, HBCDD | 44-49 |
| 7 | NA | Tin Plating | 50-53 |



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
General Manager



TEST REPORT

Number : WUXH00005706S1

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 ⁶⁺) 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 ⁶⁺) | 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:

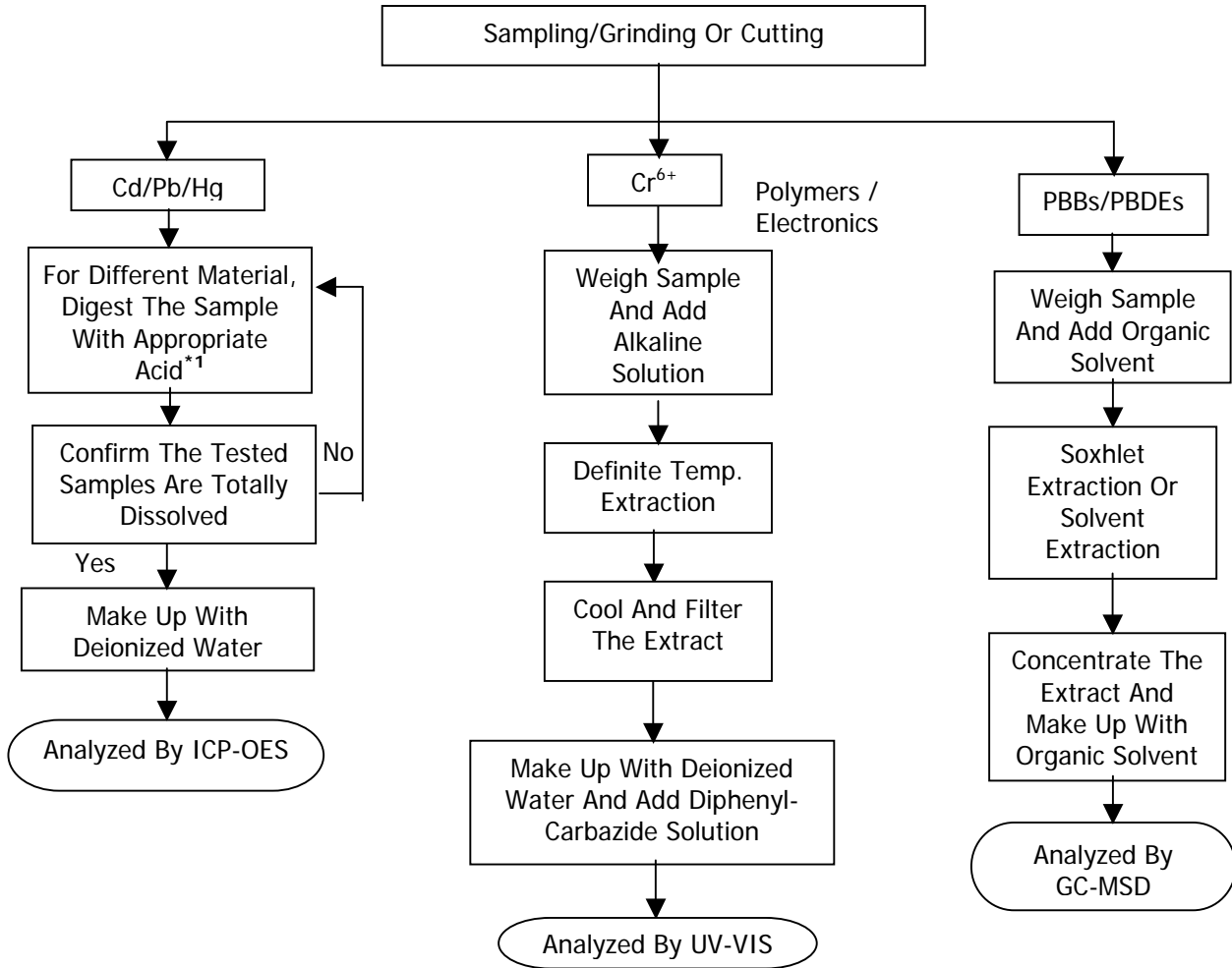
| Testing Item | Testing Method | Reporting Limit |
|---|--|------------------------|
| Cadmium (Cd)Content | With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES | 2 mg/kg |
| Lead (Pb)Content | With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And 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 ⁶⁺) 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:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |

Tests Conducted (As Requested By The Applicant)

Photo





TEST REPORT

Number : WUXH00005703

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 04, 2011

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
General Manager



TEST REPORT

Number : WUXH00005703

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) | 48 |
| Mercury (Hg) Content (mg/kg) | ND |
| Chromium (VI) (Cr ⁶⁺) 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 : WUXH00005703

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 ⁶⁺) | 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:

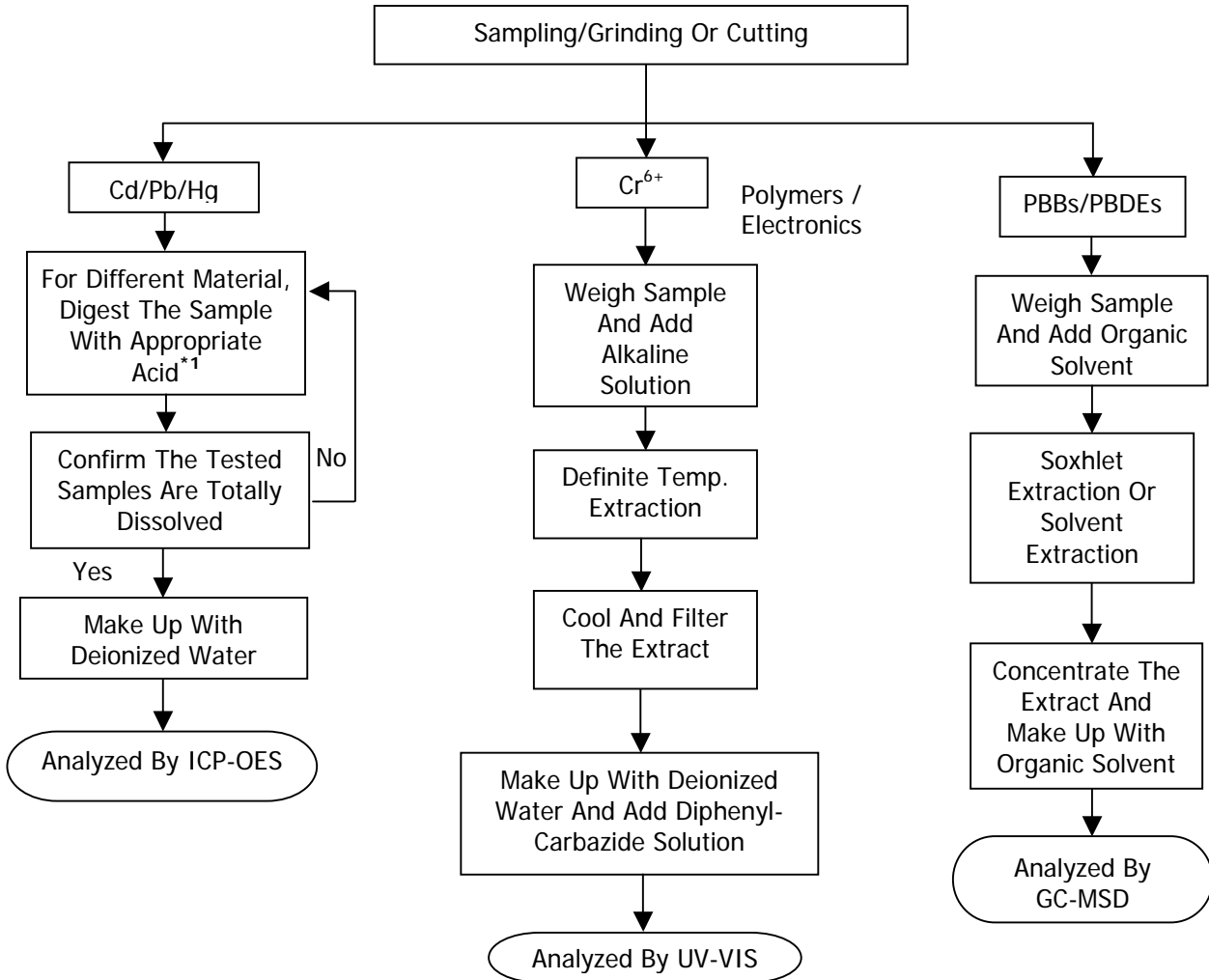
| Testing Item | Testing Method | Reporting Limit |
|---|--|------------------------|
| Cadmium (Cd)Content | With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES | 2 mg/kg |
| Lead (Pb)Content | With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And 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 ⁶⁺) 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)

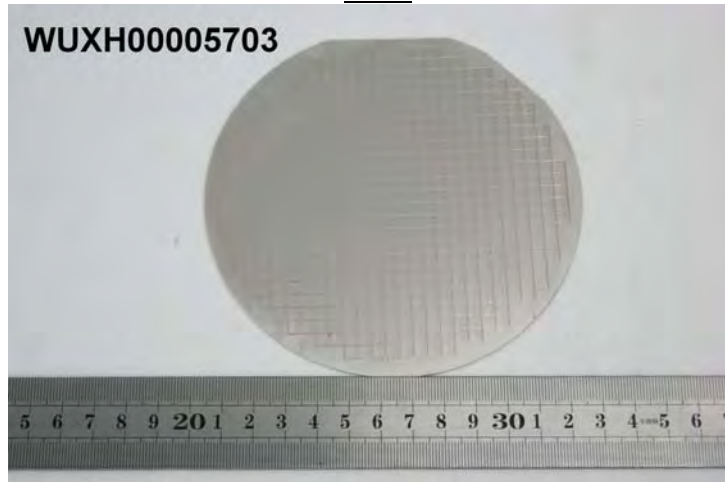
Remarks:

*1: List Of Appropriate Acid:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |

Tests Conducted (As Requested By The Applicant)

Photo





TEST REPORT

Number : WUXH00005704

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 05, 2011

Sample Description As Declared:

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

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
General Manager



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) | 185100 |
| Mercury (Hg) Content (mg/kg) | ND |
| Chromium (VI) (Cr ⁶⁺) 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 : WUXH00005704

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 ⁶⁺) | 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:

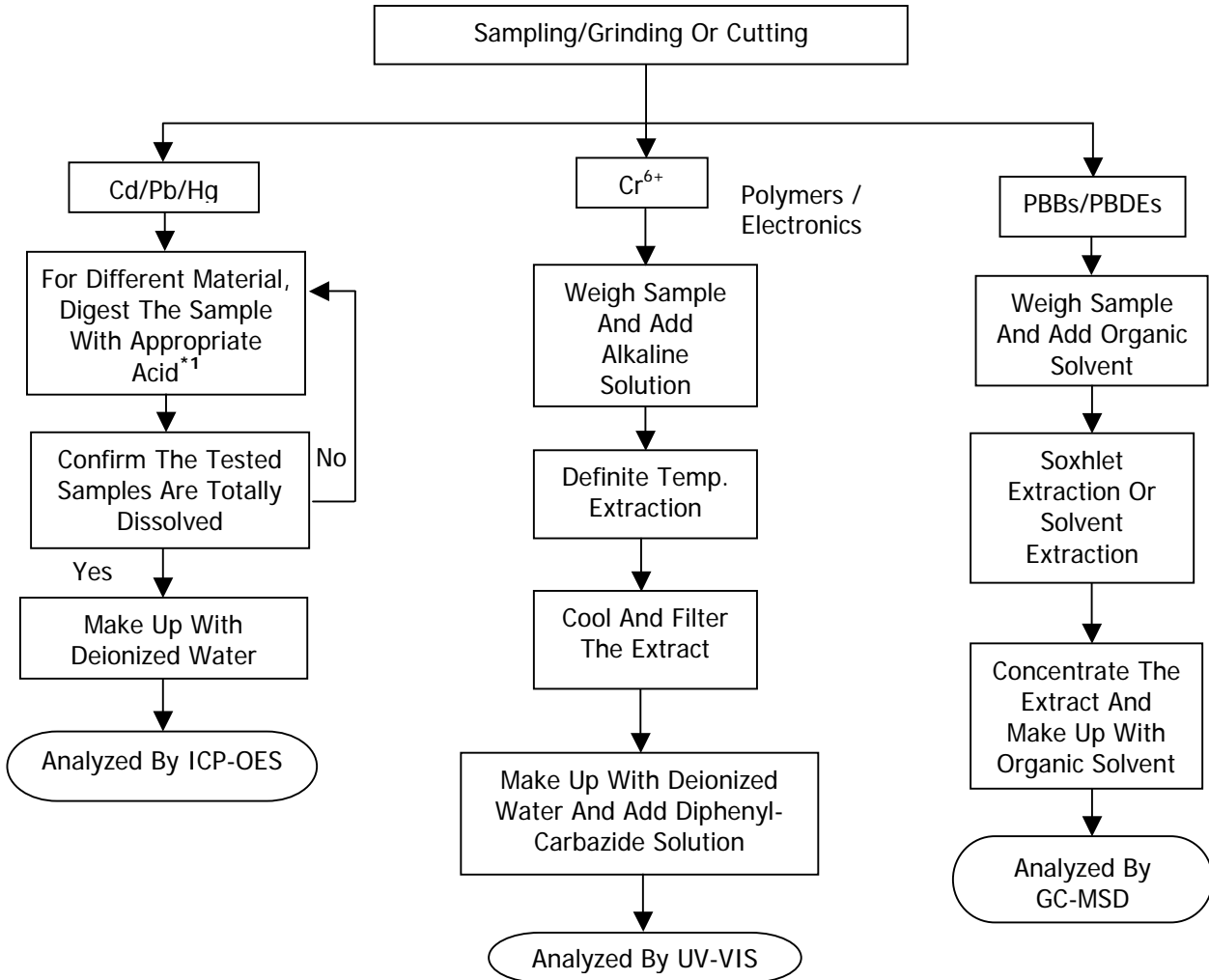
| Testing Item | Testing Method | Reporting Limit |
|---|--|-----------------|
| Cadmium (Cd)Content | With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined By ICP-OES | 2 mg/kg |
| Lead (Pb)Content | With Reference To IEC 62321 Edition 1.0: 2008, By Acid Digestion And Determined 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 ⁶⁺) 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:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |

2 Halogen Test
(I) Test Result Summary :



TEST REPORT

Number : WUXH00005704

Tests Conducted (As Requested By The Applicant)

Halogen Content:

| <u>Testing Item</u> | <u>Result (ppm)</u> |
|-----------------------|---------------------|
| Fluorine (F) Content | ND |
| Chlorine (Cl) 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 :

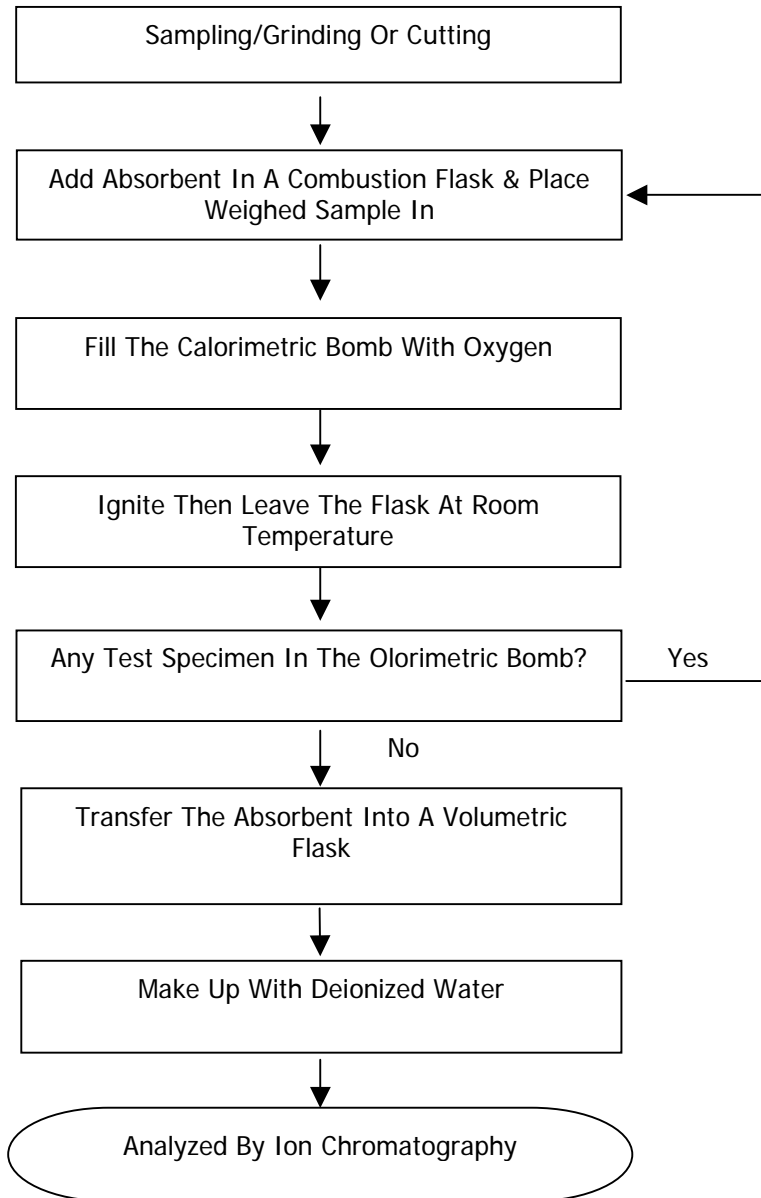
| <u>Testing Item</u> | <u>Testing Method</u> | <u>Reporting Limit</u> |
|--------------------------------|---|------------------------|
| Halogen (F, Cl, Br, I) Content | With Reference To EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography | 50 ppm |

Remarks : Reporting Limit = Quantitation Limit Of Analyte In Sample

Tests Conducted (As Requested By The Applicant)

(III) Measurement Flowchart:

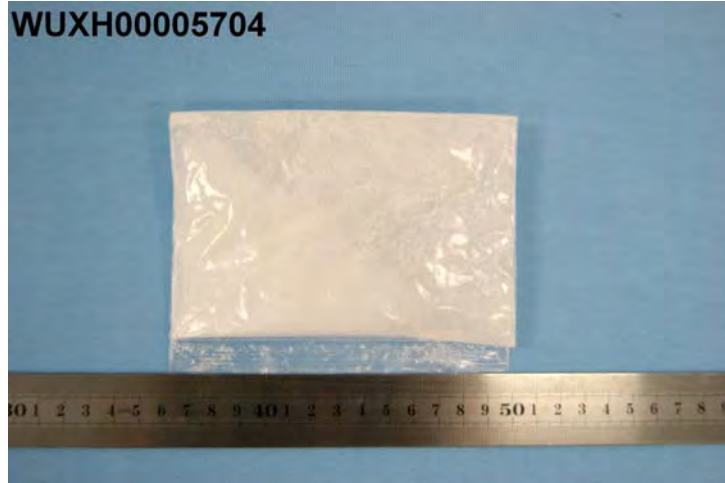
Test For Halogen Content Reference Method: EN 14582:2007



Chemist: Fred Wang/ Ally Wan Ally Wan

Tests Conducted (As Requested By The Applicant)

Photo





TEST REPORT

Number : WUXH00005713

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 04, 2011

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be : **Golden Yellow Metal.**
Item Name : Lead Frame/Lead Frame Matrix/TO-220 Lead Frame/Heatsink.
Vendor : Jinag Jihlong Technology CO.,LTD.
Component Or Part No. : Copper.
Test Item : Cd,Pb,Hg,CrVI.

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

Summary:

| <u>Tested Sample</u> | <u>Standard</u> | <u>Result</u> |
|----------------------|--|---------------|
| Submitted Sample | 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 | PASS |

Prepared And Checked By:
For Intertek Testing Services Wuxi Ltd.

Jessica Lu
General Manager



TEST REPORT

Number : WUXH00005713

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) | 20 |
| Mercury (Hg) Content (mg/kg) | ND |
| Chromium (VI)(Cr ⁶⁺) Result (By Boiling Water Extraction On Metal) (mg/kg With 50cm ²) | N |

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm² = 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 ⁶⁺) | 0.1% (1000 mg/kg) |

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

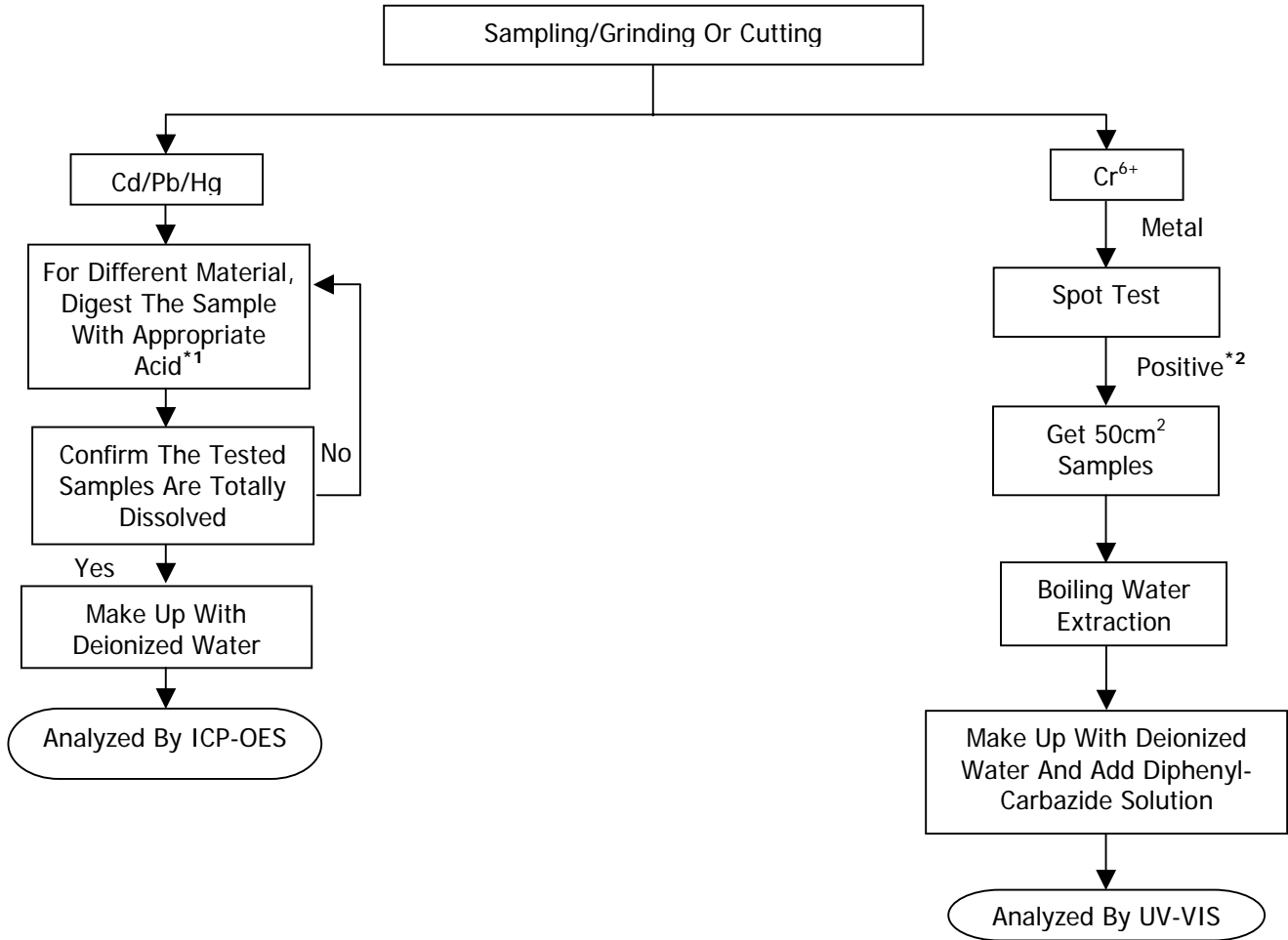
(C) Test Method:

| 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 ⁶⁺) 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 ² (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:

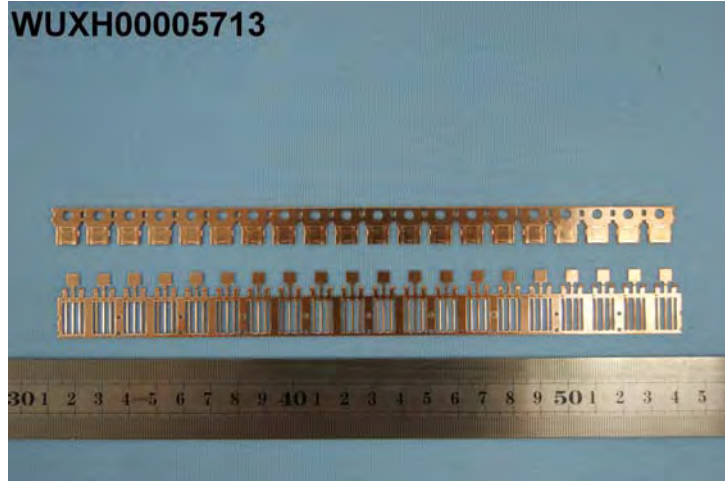
*1: List Of Appropriate Acid:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |

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

Tests Conducted (As Requested By The Applicant)

Photo





TEST REPORT

Number : WUXH00005715

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 05, 2011

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be : **Grey Paster.**

Item Name : Solder Paster.

Vendor : Heraeus Materials Technology Shanghai Ltd.

Component Or Part No. : AG3-D3-NC237-0(Pb:Sn:Ag=92.5:5:2.5).

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
General Manager



TEST REPORT

Number : WUXH00005715

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) | 956200 |
| Mercury (Hg) Content (mg/kg) | ND |
| Chromium (VI) (Cr ⁶⁺) 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 : WUXH00005715

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 ⁶⁺) | 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 ⁶⁺) 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 |

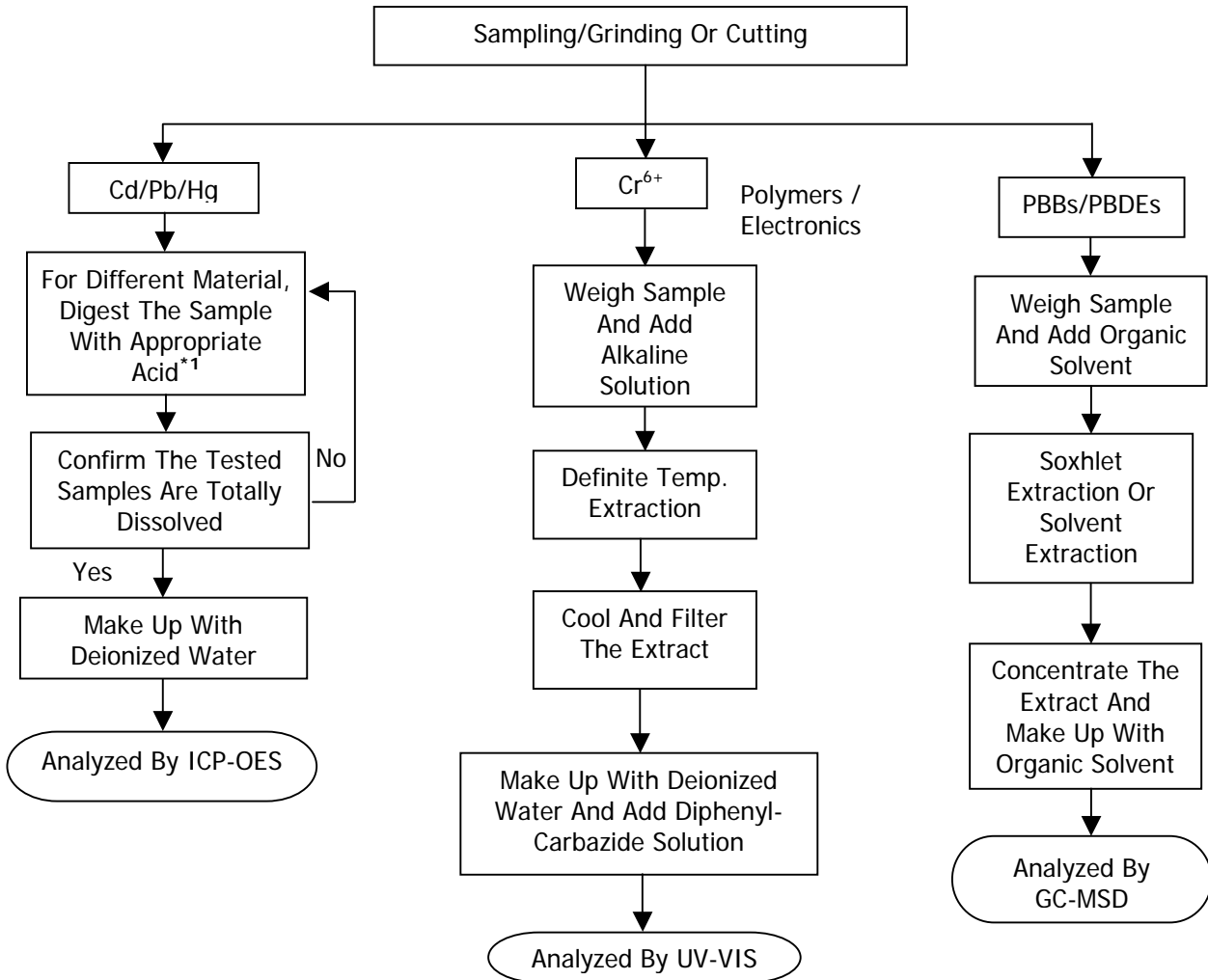
Date Sample Received: Aug 01, 2011

Testing Period: Aug 01, 2011 To Aug 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)
 Organic (Jenny Xu/Cherry Sun)

Remarks:

*1: List Of Appropriate Acid:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |

Tests Conducted (As Requested By The Applicant)

2 Halogen Test

(I) Test Result Summary :

Halogen Content:

| <u>Testing Item</u> | <u>Result (ppm)</u> |
|----------------------|---------------------|
| Fluorine (F) Content | ND |
| Chlorine (Cl)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 :

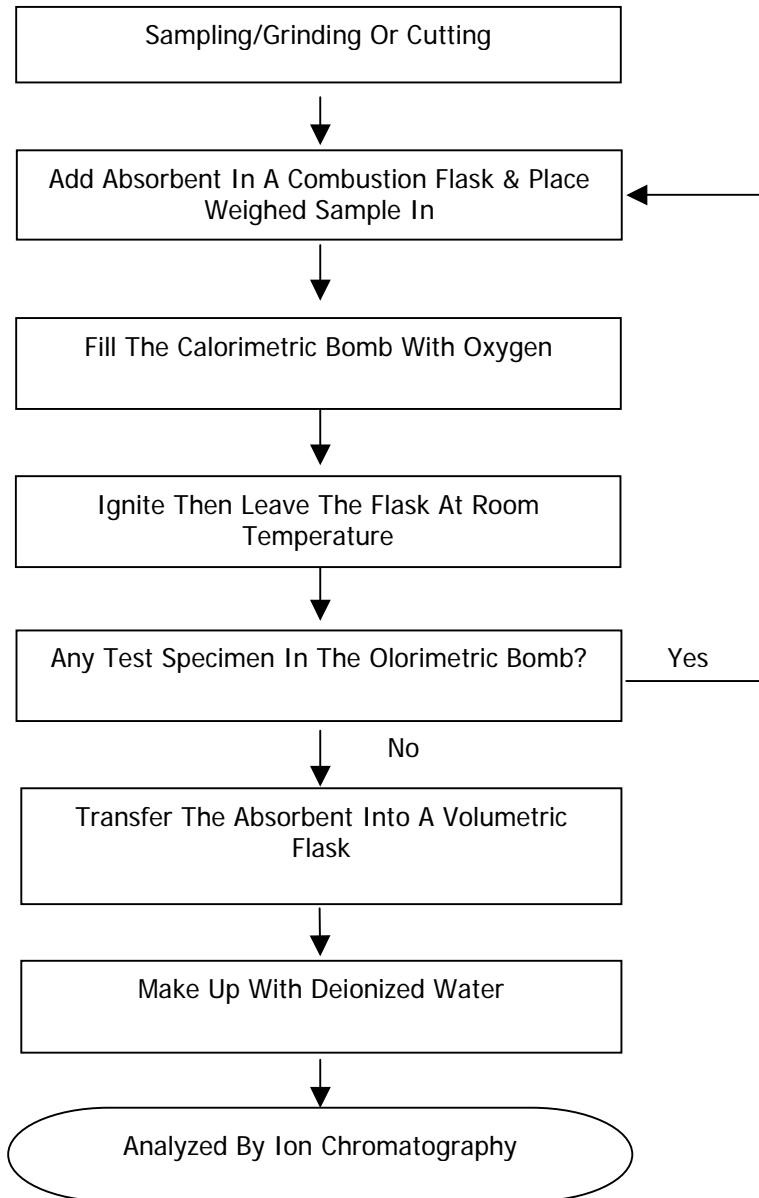
| <u>Testing Item</u> | <u>Testing Method</u> | <u>Reporting Limit</u> |
|------------------------------|--|------------------------|
| Halogen (F,Cl, Br,I) Content | With Reference EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography | 50 ppm |

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

Tests Conducted (As Requested By The Applicant)

Photo





Number : WUXH00007433

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 : Jan 10, 2012

Sample Description As Declared:

One (1) Piece Of Submitted Sample Said To Be : **Dark Grey Paste.**

Item Name : Solder Paste.
Vendor : Heraeus.
Component Or Part No. : AG3-D3-NC237-0(6).
Test Item : Phthalate, HBCD.

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



Number : WUXH00007433

Tests Conducted (As Requested By The Applicant)

1 Phthalate Content Test

With Reference To EN14372, By Gas Chromatographic-Mass Spectrometric (GC-MSD) Analysis.

| <u>Tested Compound</u> | <u>Result (%W/W)</u> | <u>Limit(%W/W)</u> (Max.) |
|-------------------------------|----------------------|------------------------------|
| Dibutyl Phthalate (DBP) | ND | --- |
| Diethyl Hexyl Phthalate(DEHP) | ND | --- |
| Benzyl Butyl Phthalate (BBP) | ND | --- |
| Sum Of Three Phthalates | ND | 0.1 |
| Di-Iso-Nonyl Phthalate (DINP) | ND | --- |
| Di-N-Octyl Phthalate (DNOP) | ND | --- |
| Di-Iso-Decyl Phthalate (DIDP) | ND | --- |
| Sum Of Three Phthalates | ND | 0.1 |

Remark : The Above Limit Was Quoted According To Annex XVII Items 51 & 52 Of The Reach Regulation (EC) No. 1907/2006 (Formerly Known As Directive2005/84/EC) For Phthalate Content In Toys And Children Care Articles.

Detection Limit = 0.01%(W/W)

ND = Not Detected

Date Sample Received : Jan 5,2012

Testing Period : Jan 5,2012 To Jan 10,2012

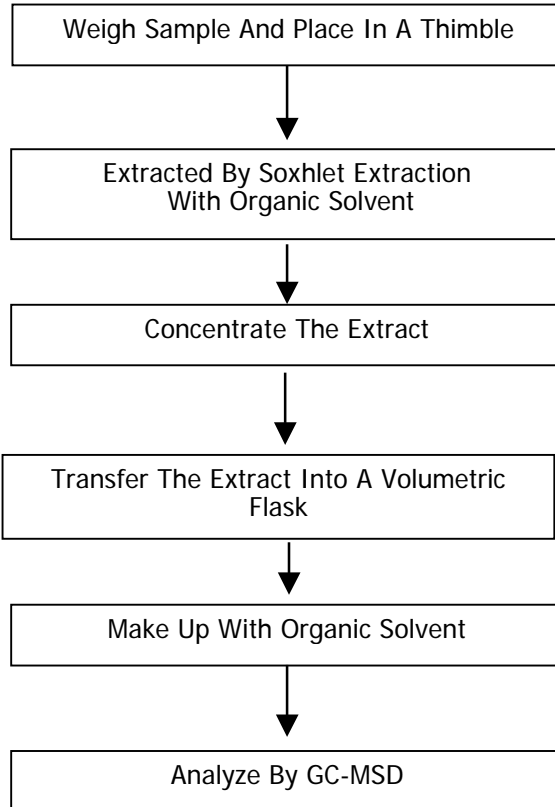
Comment :

The Phthalate Content Test Result Of Tested Sample Did Not Exceed The Limit Of 0.1% By Weight As Stated In Annex XVII Items 51 & 52 Of The Reach Regulation (EC) No. 1907/2006 (Formerly Known As Directive 2005/84/EC) Relating To Restrictions On Phthalates In Toys And Children Care Articles.

Tests Conducted (As Requested By The Applicant)

Measurement Flowchart:

Test For Phthalates Contents



Chemist: Organic (Jenny Xu/Cherry Sun)



Number : WUXH00007433

Tests Conducted (As Requested By The Applicant)

HBCD (Hexabromocyclododecane)

(A) Test Result Summary:

| <u>Testing Item</u> | <u>Result(ppm)</u> |
|-------------------------------|--------------------|
| HBCD (Hexabromocyclododecane) | ND |

Remarks:

ppm = Parts Per Million = mg/kg

ND = Not Detected

(B) Test Method :

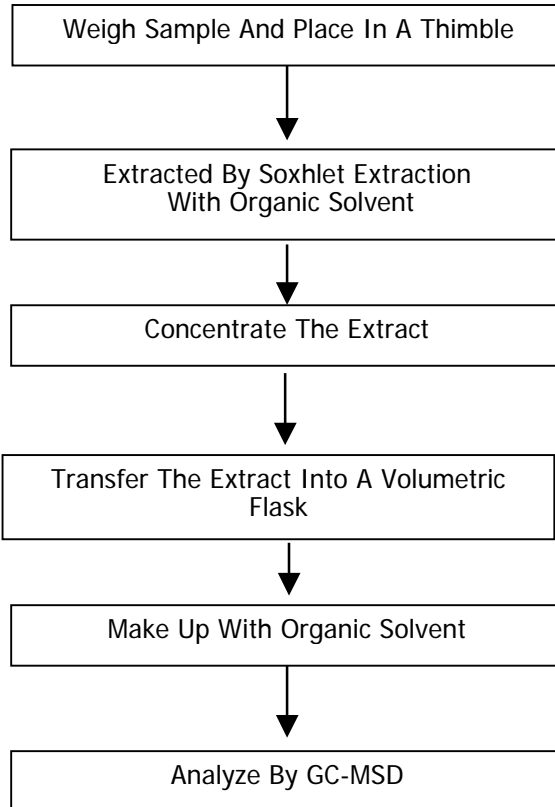
| <u>Testing Item</u> | <u>Testing Method</u> | <u>Reporting Limit</u> |
|-------------------------------|--|------------------------|
| HBCD (Hexabromocyclododecane) | With Reference To US EPA 3540C, By Solvent Extraction And Determined By GC-MSD | 10 ppm |

Date Sample Received : Jan 5,2012

Testing Period : Jan 5,2012 To Jan 10,2012

Tests Conducted (As Requested By The Applicant)
Measurement Flowchart:

Test For HBCD (Hexabromocyclododecane) Content



Chemist: Organic (Jenny Xu/Cherry Sun)

Tests Conducted (As Requested By The Applicant)

Photo





TEST REPORT

Number : WUXH00005740

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 05, 2011

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> |
|----------------------|--|---------------|
| Submitted Sample | 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 | PASS |

Prepared And Checked By:
For Intertek Testing Services Wuxi Ltd.

Jessica Lu
General Manager



TEST REPORT

Number : WUXH00005740

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 ⁶⁺) 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 : WUXH00005740

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 ⁶⁺) | 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 ⁶⁺) 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 |

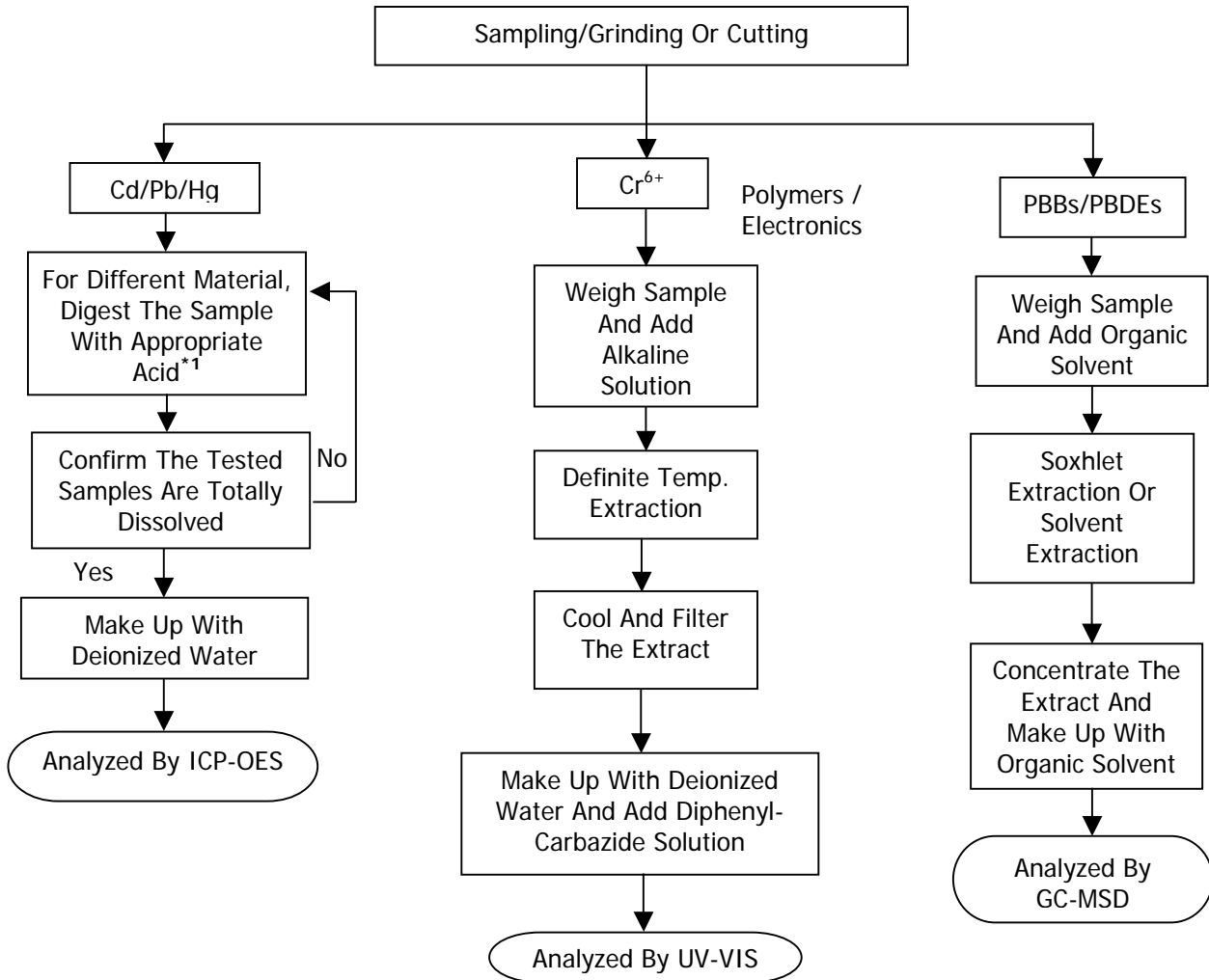
Date Sample Received: Aug 01, 2011

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:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |



TEST REPORT

Number : WUXH00005740

Tests Conducted (As Requested By The Applicant)

2 Halogen Test

(I) Test Result Summary :

Halogen Content:

| <u>Testing Item</u> | <u>Result (ppm)</u> |
|----------------------|---------------------|
| Fluorine (F) Content | ND |
| Chlorine (Cl)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 :

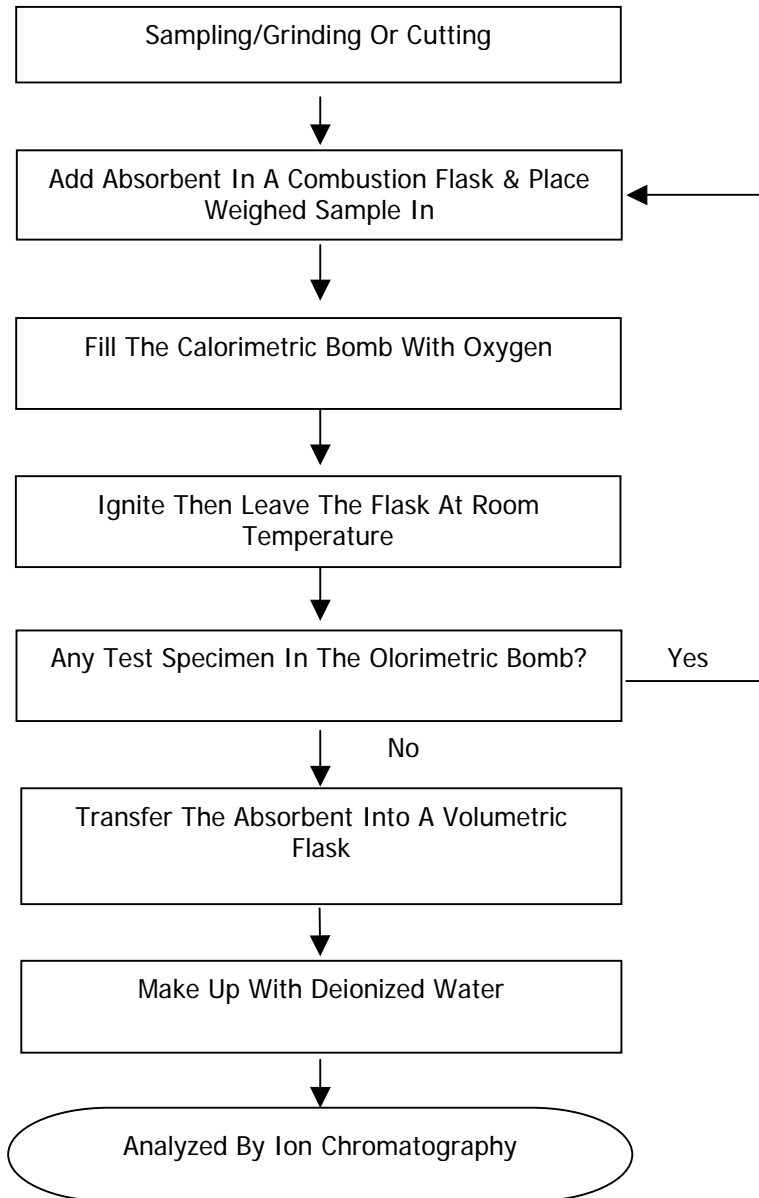
| <u>Testing Item</u> | <u>Testing Method</u> | <u>Reporting Limit</u> |
|------------------------------|--|------------------------|
| Halogen (F,Cl, Br,I) Content | With Reference EN 14582:2007 By Combustion In A Calorimetric Bomb And Determined By Ion Chromatography | 50 ppm |

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

Tests Conducted (As Requested By The Applicant)

Photo





Number : WUXH00006446

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 : Oct 28, 2011

Sample Description As Declared:

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

Item Name : Epoxy Molding Compound.
Vendor : Chang Chun Plastics Co., Ltd.
Component Or Part No. : EME-E110G.
Test Item : Phthalate, HBCD.

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



Number : WUXH00006446

Tests Conducted (As Requested By The Applicant)

1 Phthalate Content Test

With Reference To EN14372, By Gas Chromatographic-Mass Spectrometric (GC-MSD) Analysis.

| <u>Tested Compound</u> | <u>Result (%W/W)</u> | <u>Limit(%W/W)</u> (Max.) |
|-------------------------------|----------------------|------------------------------|
| Dibutyl Phthalate (DBP) | ND | --- |
| Diethyl Hexyl Phthalate(DEHP) | ND | --- |
| Benzyl Butyl Phthalate (BBP) | ND | --- |
| Sum Of Three Phthalates | ND | 0.1 |
| Di-Iso-Nonyl Phthalate (DINP) | ND | --- |
| Di-N-Octyl Phthalate (DNOP) | ND | --- |
| Di-Iso-Decyl Phthalate (DIDP) | ND | --- |
| Sum Of Three Phthalates | ND | 0.1 |

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)

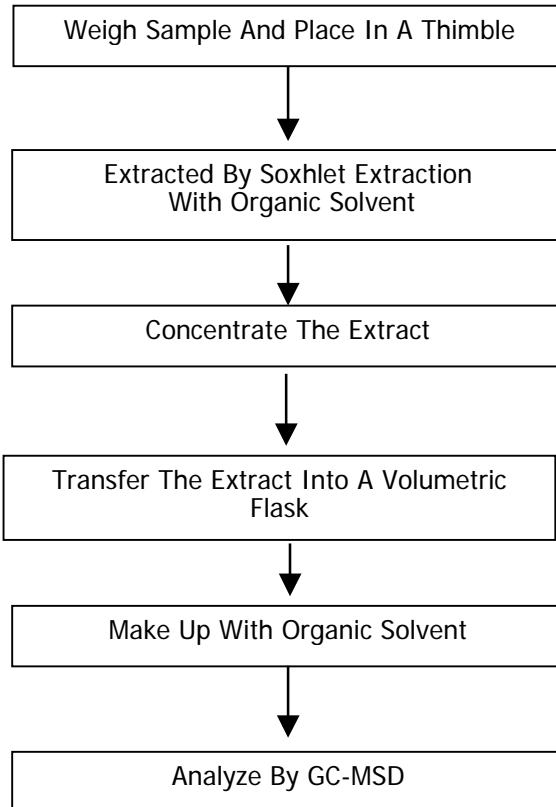
ND = Not Detected

Date Sample Received : Oct 25, 2011

Testing Period : Oct 25, 2011 To Oct 27, 2011

Tests Conducted (As Requested By The Applicant)
Measurement Flowchart:

Test For Phthalates Contents



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



Number : WUXH00006446

Tests Conducted (As Requested By The Applicant)

2 HBCD (Hexabromocyclododecane)

(A) Test Result Summary:

| <u>Testing Item</u> | <u>Result(ppm)</u> |
|-------------------------------|--------------------|
| HBCD (Hexabromocyclododecane) | ND |

Remarks:

ppm = Parts Per Million = mg/kg

ND = Not Detected

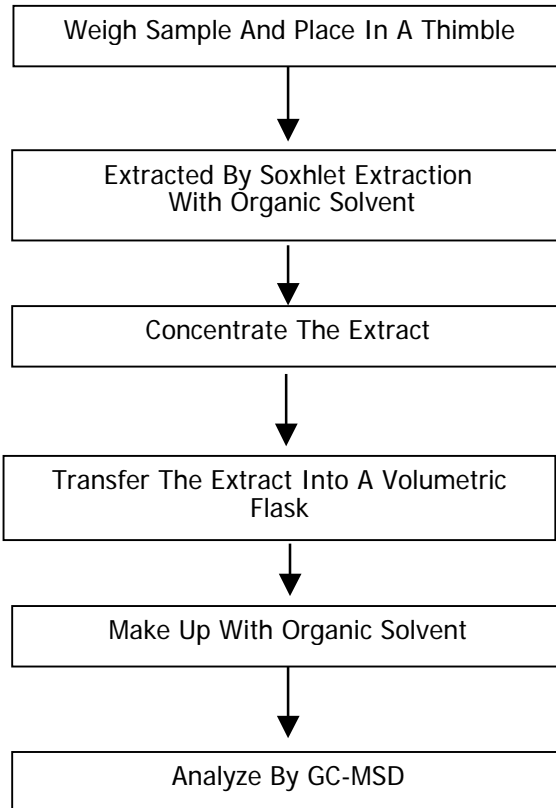
(B) Test Method :

| <u>Testing Item</u> | <u>Testing Method</u> | <u>Reporting Limit</u> |
|-------------------------------|--|------------------------|
| HBCD (Hexabromocyclododecane) | With Reference To US EPA 3540C, By Solvent Extraction And Determined By GC-MSD | 10 ppm |

Date Sample Received : Oct 25, 2011

Testing Period : Oct 25, 2011 To Oct 27, 2011

Tests Conducted (As Requested By The Applicant)
Measurement Flowchart:
Test For HBCD (Hexabromocyclododecane) Content



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

Number : WUXH00006446

Tests Conducted (As Requested By The Applicant)

Photo



TEST REPORT

Number : WUXH00005709

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 04, 2011

Sample Description As Declared:

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

Item Name : Tin Plating-SMD.
Vendor : Bandl (Kunshan) International Co.,.
Component Or Part No. : Pure Matte Tin.
Test Item : Cd,Pb,Hg,CrVI.

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



TEST REPORT

Number : WUXH00005709

Tests Conducted (As Requested By The Applicant)

1 RoHS Directives Test

(A) Test Result Summary:

| Testing Item | Result |
|--|--------|
| | (1) |
| Cadmium (Cd) Content (mg/kg)/Plating | ND |
| Lead (Pb) Content (mg/kg)/Plating | 29 |
| Mercury (Hg) Content (mg/kg)/Plating | ND |
| Chromium (VI)(Cr ⁶⁺) Result (By Boiling Water Extraction On Metal) (mg/kg With 50cm ²) | N |

Remark:

mg/kg = Milligram Per Kilogram = ppm

mg/kg With 50cm² = 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 ⁶⁺) | 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 ⁶⁺) 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 ² (In Testing Solution) |

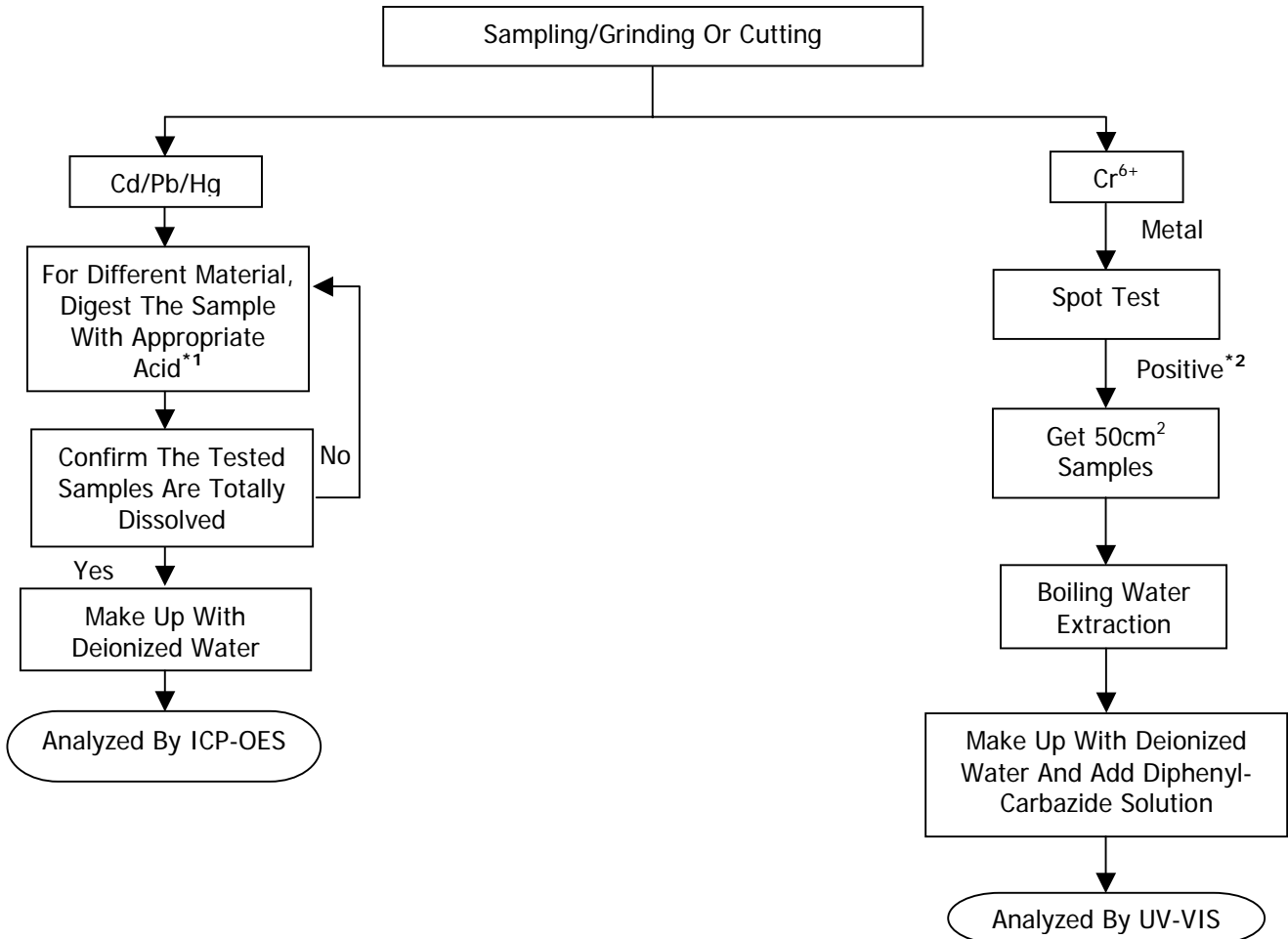
Date Sample Received: Aug 01, 2011

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:

| Material | Acid Added For Digestion |
|-------------|--|
| Polymers | HNO ₃ , HCL, HF, H ₂ O ₂ , H ₃ BO ₃ |
| Metals | HNO ₃ , HCL, HF |
| Electronics | HNO ₃ , HCL, H ₂ O ₂ , HBF ₄ |

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

Tests Conducted (As Requested By The Applicant)

Photo

