



Test Report

Report No. A2230160846101006

Page 1 of 9

Company Name JIANGSU MICRO COMMERCIAL COMPONENTS CO., LTD.

shown on Report

Address NO.68, XINGANQUAN ROAD, HANJIANG DISTRICT, YANGZHOU, CHINA

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name	semiconductors
Color	Black body
Material	semiconductors
Sample Received Date	May 5, 2023
Testing Period	May 5, 2023 to May 13, 2023

Test Conducted:

As requested by the applicant. For details refer to next page(s)

Approved by



Date

May 15, 2023

Chen kaimin
Lab Manager

No. R475319778

Centre Testing International Pinbiao(Shanghai) Co., Ltd.

No.1351, Wanfang Road, Minhang District, Shanghai, China

检验检测专用章
Inspection & Testing Services

Test Report

Report No. A2230160846101006

Page 2 of 9

Executive Summary:**TEST REQUEST****CONCLUSION**

1. Persistent, Bioaccumulative, and Toxic (PBT) Chemicals under US EPA Toxic Substances Control Act (TSCA) Section 6(h)

- Decabromodiphenyl Ether (DecaBDE)

PASS

- Phenol, Isopropylated Phosphate (PIP (3:1))

PASS

- 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP)

PASS

- Hexachlorobutadiene (HCBd)

PASS

- Pentachlorothiophenol (PCTP)

PASS

2. As specified by client, to test Arsenic(As), Beryllium(Be), Antimony(Sb),

Hexabromocyclododecane (HBCDD), Perfluorooctane Sulfonates(PFOS),

Perfluorooctanoic Acid(PFOA), Polycyclic Aromatic Hydrocarbons (PAHs) in the submitted sample(s).

See test result(s)

***** For further details, please refer to the following page(s) *****

Test Report

Report No. A2230160846101006

Page 3 of 9

1.1 Persistent, Bioaccumulative, and Toxic (PBT) Chemicals under US EPA Toxic Substances Control Act (TSCA) Section 6(h)

▼ Decabromodiphenyl Ether (DecaBDE)

Refer to method(s) US EPA 3550C:2007 & US EPA 8270E:2018*, and the item(s) was/were analyzed by GC-MS.

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>	<u>Report Limit</u>	<u>Limit</u>
	006	(mg/kg)	(mg/kg)
Decabromodiphenyl Ether (DecaBDE)	N.D.	5	N.D.

Remark:

- N.D. = Not Detected (<Report Limit)
- mg/kg = ppm = parts per million

▼ Phenol, Isopropylated Phosphate (PIP (3:1))

Refer to method(s) US EPA 3550C:2007 & US EPA 8270E:2018*, and the item(s) was/were analyzed by GC-MS.

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>	<u>Report Limit</u>	<u>Limit</u>
	006	(mg/kg)	(mg/kg)
Phenol, Isopropylated Phosphate (PIP (3:1))	N.D.	5	N.D.

Remark:

- N.D. = Not Detected (<Report Limit)
- mg/kg = ppm = parts per million

▼ 2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP)

Refer to method(s) US EPA 3550C:2007 & US EPA 8270E:2018*, and the item(s) was/were analyzed by GC-MS.

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>	<u>Report Limit</u>	<u>Limit</u>
	006	(mg/kg)	(mg/kg)
2,4,6-tris(tert-butyl) phenol (2,4,6-TTBP)	N.D.	5	3000

Test Report

Report No. A2230160846101006

Page 4 of 9

Remark:

- N.D. = Not Detected (<Report Limit)
- mg/kg = ppm = parts per million

▼ Hexachlorobutadiene (HCBD)

Refer to method(s)US EPA 3550C:2007&US EPA 8270E:2018*, and the item(s) was/were analyzed by GC-MS.

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>	<u>Report Limit (mg/kg)</u>	<u>Limit (mg/kg)</u>
	006		
Hexachlorobutadiene (HCBD)	N.D.	5	N.D.

Remark:

- N.D. = Not Detected (<Report Limit)
- mg/kg = ppm = parts per million

▼ Pentachlorothiophenol (PCTP)

Refer to method(s)US EPA 3550C:2007&US EPA 8270E:2018*, and the item(s) was/were analyzed by GC-MS.

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>	<u>Report Limit (mg/kg)</u>	<u>Limit (mg/kg)</u>
	006		
Pentachlorothiophenol (PCTP)	N.D.	5	10000

Remark:

- N.D. = Not Detected (<Report Limit)
- mg/kg = ppm = parts per million

Sample/Part Description

No.	CTI Sample ID	Description
1	006	Black body (Tested as a whole)

Remark:

- The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology. The result(s) shown on this report may be different from the content of any homogeneous material.

Test Report

Report No. A2230160846101006

Page 5 of 9

2.1 Test Method

Tested Item(s)	Test Method	Measured Equipment(s)
Arsenic(As)	Refer to US EPA 3052:1996 & US EPA 6010D:2018*	ICP-OES
Beryllium(Be)	Refer to US EPA 3052:1996 & US EPA 6010D:2018*	ICP-OES
Antimony(Sb)	Refer to US EPA 3052:1996 & US EPA 6010D:2018*	ICP-OES
Hexabromocyclododecane (HBCDD)	IEC 62321-9:2021	GC-MS
Perfluorooctane Sulfonates(PFOS)	Refer to US EPA 3550C:2007 & US EPA 8321B:2007*	LC-MS-MS/LC-MS
Perfluorooctanoic Acid(PFOA)	Refer to US EPA 3550C:2007 & US EPA 8321B:2007*	LC-MS-MS/LC-MS
Polycyclic Aromatic Hydrocarbons (PAHs)	Refer to AfPS GS 2019:01 PAK	GC-MS

2.2 Test Result(s)

Tested Item(s)	Result	MDL
	006	
Arsenic (As)	N.D.	10 mg/kg

Tested Item(s)	Result	MDL
	006	
Beryllium (Be)	N.D.	10 mg/kg

Tested Item(s)	Result	MDL
	006	
Antimony (Sb)	N.D.	10 mg/kg

Tested Item(s)	Result	MDL
	006	
Hexabromocyclododecane (HBCDD)	N.D.	20 mg/kg

Tested Item(s)	Result	MDL
	006	
Perfluorooctane Sulfonates (PFOS)	N.D.	0.010 mg/kg

Test Report

Report No. A2230160846101006

Page 6 of 9

Tested Item(s)	Result	MDL
	006	
Perfluorooctanoic Acid (PFOA)	N.D.	0.010 mg/kg

Tested Item(s)	Result	MDL
	006	
Polycyclic Aromatic Hydrocarbons (PAHs)		
Benzo(a)pyrene	N.D.	0.2 mg/kg
Benzo(e)pyrene	N.D.	0.2 mg/kg
Benzo(a)anthracene	N.D.	0.2 mg/kg
Chrysene	N.D.	0.2 mg/kg
Benzo(b)fluoranthene	N.D.	0.2 mg/kg
Benzo(j)fluoranthene	N.D.	0.2 mg/kg
Benzo(k)fluoranthene	N.D.	0.2 mg/kg
Dibenzo(a,h)anthracene	N.D.	0.2 mg/kg
Naphthalene	N.D.	0.2 mg/kg
Acenaphthylene*	N.D.	0.2 mg/kg
Acenaphthene*	N.D.	0.2 mg/kg
Fluorene*	N.D.	0.2 mg/kg
Phenanthrene	N.D.	0.2 mg/kg
Anthracene	N.D.	0.2 mg/kg
Fluoranthene	N.D.	0.2 mg/kg
Pyrene	N.D.	0.2 mg/kg
Indenol(1,2,3-cd)pyrene	N.D.	0.2 mg/kg
Benzo(g,h,i)perylene	N.D.	0.2 mg/kg
Sum 18 PAHs	N.D.	/

Sample/Part Description

No.	CTI Sample ID	Description
1	006	Black body (Tested as a whole)

Test Report

Report No. A2230160846101006

Page 7 of 9

Remark: The sample(s) had been dissolved totally tested for Arsenic, Beryllium, Antimony.
The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology. The result(s) shown on this report may be different from the content of any homogeneous material.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL)

-mg/kg = ppm = parts per million

Note: “*” indicates the item(s)/method(s) is (are) not in CNAS accreditation scope.

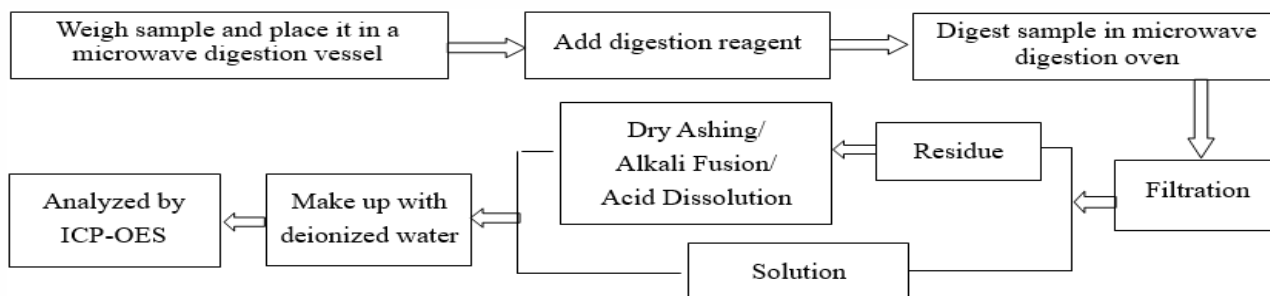
Test Report

Report No. A2230160846101006

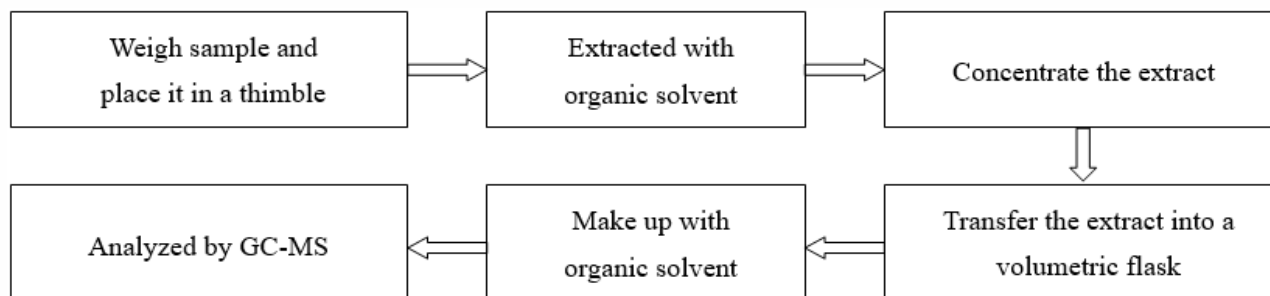
Page 8 of 9

2.3 Test Process

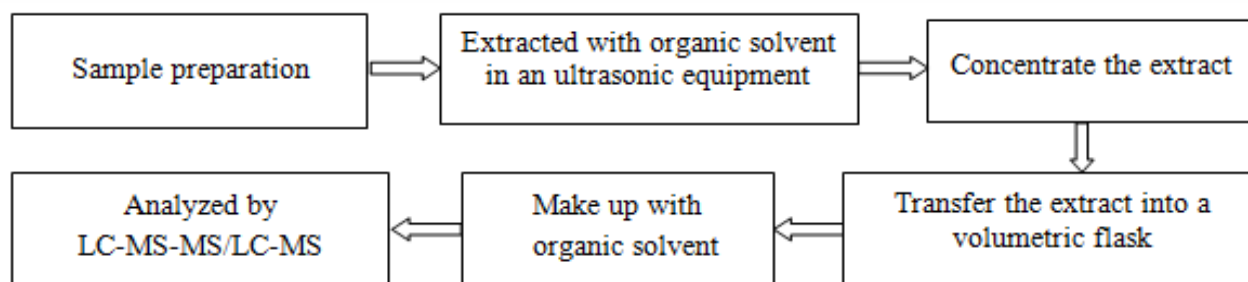
2.3.1. Arsenic(As), Beryllium(Be), Antimony(Sb)



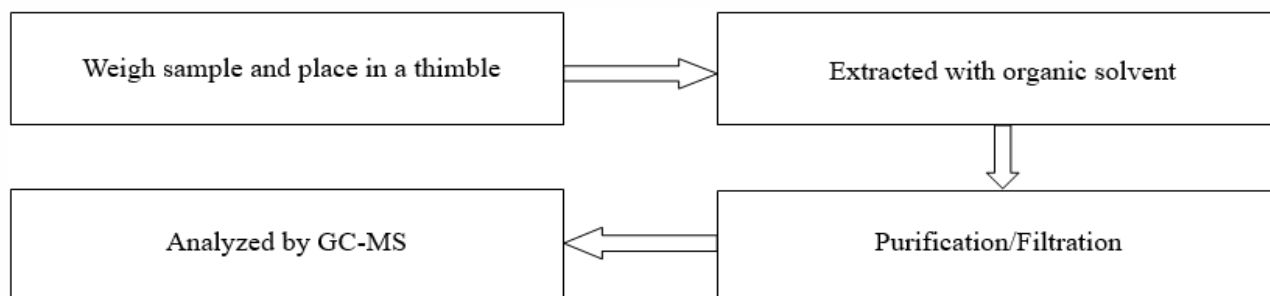
2.3.2. Hexabromocyclododecane (HBCDD)



2.3.3. Perfluorooctane Sulfonates(PFOS), Perfluorooctanoic Acid(PFOA)



2.3.4. Polycyclic Aromatic Hydrocarbons (PAHs)

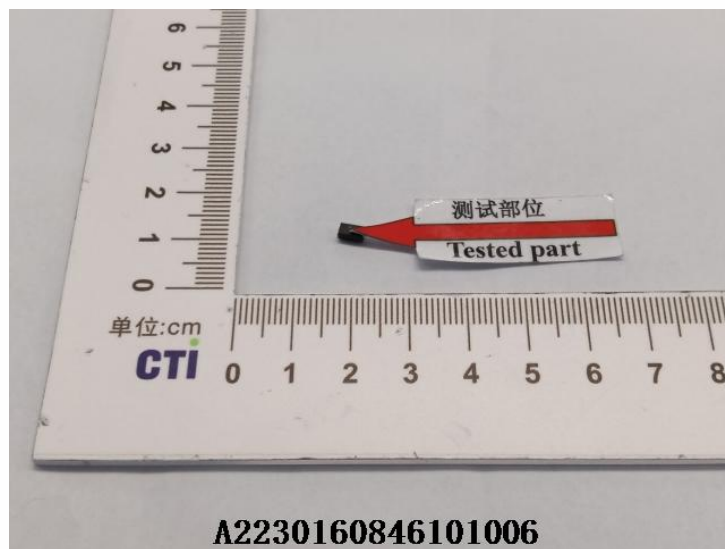


Test Report

Report No. A2230160846101006

Page 9 of 9

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of Report ***

Appendix

Client Reference Information

0201,0201-A,CSP0201,CSP1006-2,DFN-10,DFN1006-2,DFN1006-2L,DFN1006-3,DFN1006-3A,DFN1308-5,DFN1510-6,DFN1608-2,DFN1610-2,DFN1610-6,DFN1616-6,DFN1616-6L,DFN2020-3A,DFN2020-3L,DFN2020-6G,DFN2020-6J,DFN2020-6JA,DFN2020-6L,DFN2020-6LE,DFN2030-6,DFN2030-6L,DFN2626-10,DFN3030,DFN3030-4L,DFN3030-8,DFN3333,DFN3333-8,DFN3333-D,DFN4120-10,DFN5060,DFN5060-8D,DFN5060-8L,DFN8080A,SOD-123,SOD-323,SOD-323FL,SOD-523,SOD-723,SOD-923,SOP-8,SOT-143,SOT-223,SOT-23,SOT-23-3L,SOT23-5L,SOT23-6L,SOT-323,SOT-353,SOT-363,SOT-523,SOT-563,SOT-723,SOT-89,TSSOP-8,0402,0603,SOT-553,DFN1210-6,SOT-883,DFN3810-9,DFN2510-10,DFN3020-10,DFN0808-4,DFN1608-2L,DFN2020-6LA,DFN8080,A-405,AK,DO-15,DO-201AD,DO-201AE,DO-41,R-3,R-6,R-1,D2-PAK,DO-215AA,DO-218AB,DO-221AC,DPAK,LMBS-1,MBLS-1,MBS-1,SDB-1,SDBL-1,SMA,SMB,SMBF,SMC,SME,SMG,SMPA,SOD-123FL,SOD-123HE,SOD-123HE1,SOD-123HT,SOD-323FH,SOD-323HE,TBL,TBS,TO-277,TOLL-8L,SMAE,HSMC,HSMB,HSMA,TO-277B,TBSL,SOD-323HL,SOD-123TFL,TBN,D3K,DB-1,DBL-1,GBJ,GBL,GBP,GBPC,GBPC-H,GBPC-W,GBU,ITO-220AB,ITO-220AC,JA,JB,KBJ,MB-35,MB-35W,MP-50,MP-50W,MT-35A,PB,PB-10,PB-6,RS-4L,RS-6,TO-220,TO-220AB,TO-220AB(H),TO-220AC,TO-220F,TO-247,TO-247-2L,TO-247AB,TO-247AC,TO-247AD,TO-247P,TO-262,TO-262L,TSB-5,TO-92,TO-251,TO-251S,TO-247-4,MT-35B,GBPC-L,D1,D2,D3,F2,F3,F4,F6,FJ,L1,M5,T2,M4,M2,M3,T1,L2,F1,M1,F4N,T4,T6,D1N,M7,E1,E1A,E2A,P2,P1,T3,C2,T-18,LEADED
BUTTON,PRESSFIT,FBP-02L,MFN-9-1,SOD-882,SOT23-3L,SOT-343,FBP,WFBP,SO-8,QFN,1206,2510,TO-92S,TO-92L,TO-92MOD,MSOP-10,0201-B,TO-220AC,SOD-882E,D2PACK,0201-C,DFN1006-2A,DFN1006-2B,DFN1006-2C,DFN5060-SL,DFN2020-3,DFN2020-6U,DFN5060-8,MELF,RA,SRA,SMAL,SMA-FL,SMAG,SMBG,SMCG,RA BUTTON,SRA BUTTON,TO-277A,DFN2510-10L,TO-126,TO-220AB(H),ITO-220AC,ITO-220,TO-3P,TO-220,TO-1S,TO-39,TO-3,TO-66,RB-15,WOM,WOL,BR-6,BR-8D,KBP,KBPL,KBPC,KBPM,PB-3,GBJL,RS-1,RS-4M,RS-6M,RS-15M,RS-20M,RS-25M,MB-35(W),MP-50(W),MT,MB-1,KBPR,D4,TOLL,DFN1609-2L,BUTTON,KBU,KBJL,ITO-220AB,TO-220AC,D2PACK,DFN2510-10L,DFN2020-6JA,DFN2020-6LA,DFN2030-6L,DFN3030,DFN3333,GBPC-H,TBL,TO-247AD,TOLL,DFN1609-2L,BUTTON,KBU,KBJL,GBPC-W

Statement:

1. The Appendix Information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.
2. The Appendix Information is/are the supplement(s) for the Report A2230160846101006.