

Test Report

No.: SHAEC24004921416

Date: Mar 25, 2024

Page 1 of 10

Client Name: SHANGHAI LEAEMC ELECTRONICS CO.,LTD.

Client Address: RM801, HONGYI BUILDING , NO.2158, WANYUAN ROAD, MINHANG DISTRICT, SHANGHAI.

Sample Name: Semiconductor Device

Model No.: SMC

Client Ref. Information: See attachment

The above sample(s) and information were provided by the client.

SGS Job No.: SHP24-007631

Sample Receiving Date: Mar 18, 2024

Testing Period: Mar 18, 2024 ~ Mar 25, 2024

Test Requested: Select test(s) as requested by the client.

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

Test Result(s): Please refer to next page(s).

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	See Results
Halogen	See Results

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Dora Hu
Approved Signatory

scan to see the report





Test Report

No.: SHAEC24004921416

Date: Mar 25, 2024

Page 2 of 10

Test Result(s):

Test Part Description

SN ID	Sample No.	SGS Sample ID	Description
SN1	A4	SHA24-0049214-0001.C004	Black body with silvery metal (Mix all*)

Test Report

No.: SHAEC24004921416

Date: Mar 25, 2024

Page 3 of 10

Test Item(s)	Limit	Unit(s)	MDL	A4
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	5	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	5	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	5	ND
Bis(2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND
Dibutyl phthalate (DBP)	1000	mg/kg	50	ND
Diisobutyl phthalate (DIBP)	1000	mg/kg	50	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.
- (4) According to the declaration from the client, Lead (Pb) in No.A4 is exempted by EU RoHS directive 2011/65/EU based on [ANNEX III 7(a)]: Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).

More information about exemption can be found via the following link:

<https://rohs.sgsonline.com.cn/PDFLinks/en/RSTS-TP-037%20RoHS%20Exemption%20%28EN%29.pdf>

- (5) According to the declaration from the client, Lead (Pb) in No.A4 is exempted by EU RoHS directive 2011/65/EU based on [ANNEX III 7(c)-I]: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

More information about exemption can be found via the following link:

<https://rohs.sgsonline.com.cn/PDFLinks/en/RSTS-TP-037%20RoHS%20Exemption%20%28EN%29.pdf>

Halogen

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit(s)	MDL	A4
Fluorine(F)	mg/kg	20	ND
Chlorine(Cl)	mg/kg	50	84
Bromine(Br)	mg/kg	50	ND
Iodine(I)	mg/kg	50	ND

*The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value and only for reference.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.

Elements Testing Flow Chart

These samples were dissolved totally by pre-conditioning method according to below flow chart.



Hexavalent Chromium (Cr(VI)) Testing Flow Chart

Metallic material



UV-Vis



DATA

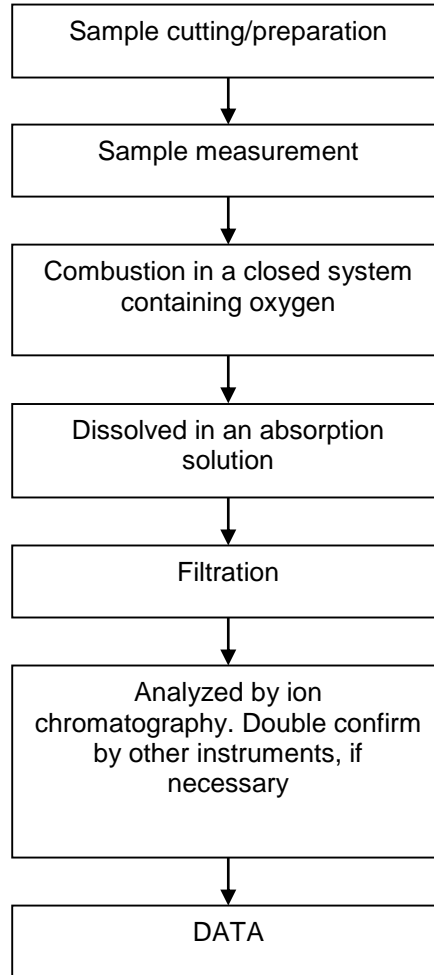
PBB/PBDE Testing Flow Chart



Phthalates Testing Flow Chart



Halogen Testing Flow Chart





Test Report

No.: SHAEC24004921416

Date: Mar 25, 2024

Page 9 of 10

Attachment:

SMA, SMAF, SMB, SMBF, SMC, DO-15, DO-41, DO-201, P600 ,
DO-214AA/AB/AC, DO-218AB/AC,
SOD123, SOD123FL, SOD323, SOD523, SOT23,
T0263, T0252, T0277.

Test Report

No.: SHAEC24004921416

Date: Mar 25, 2024

Page 10 of 10

Sample Photo:



SGS authenticate the photo on original report only
*** End of Report ***