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TEST REPORT

NUMBER: SHAH00075988

DATE: AUG 18, 2008

APPLICANT: LITEON SEMICONDUCTOR CORP.

28-1, WU SHIN STREET, TA WU LUNG,

KEELUNG 204, TAIWAN, R.O.C

SHANGHAI SEEFULL ELECTRONIC CO., LTD. 6 ZHENGYE RD., DONGJING, SONGJIANG

DISTRICT, SHANGHAI, CHINA.

ATTN: CLORIS WEI

SAMPLE DESCRIPTION:

ONE (1) SUBMITTED SAMPLE SAID TO BE:

ITEM NAME : SMD: GREEN MOLDING COMPOUND.

(1) MIXED ALL PARTS OF BODY.

(2) SILVER COLORED METAL PIN.

(3) BLACK PLASTIC BODY WITHOUT SOLDER WAFER

& DIE.

ITEM NO. : SMC PACKAGE FAMILY.

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TESTS CONDUCTED:

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

TEST RESULTS STATED IN THIS REPORT ARE TRANSFERRED FROM OUR
TEST REPORT (SHJ0050211 DATED APR 09, 2008). THE Sb TEST RESULT
STATED IN THIS REPORT ARE TRANSFERRED FROM OUR TEST REPORT

(SHAH00055631 DATED MAY 07, 2008).

TO BE CONTINUED

PREPARED AND CHECKED BY:
FOR INTERTEK TESTING SERVICES
LTD., SHANGHAI

AUTHORIZED BY:

FOR INTERTEK TESTING SERVICES

LTD., SHANGHAI

MYRA LV CHEMICAL DIVISION MANAGER STEPHEN TSANG GENERAL MANAGER



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TESTS CONDUCTED

#### 1 (A) TEST RESULT SUMMARY:

TESTING ITEM	RESULT
IESTING TIEM	(1)
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	8040
MERCURY (Hg) CONTENT (mg/kg)	ND
CHROMIUM (VI) (Cr <sup>6+</sup> ) CONTENT (mg/kg) (FOR NON-METAL)	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)	
MONOBROMO BIPHENYLS (MonoBB)	ND
DIBROMO BIPHENYLS (DiBB)	ND
TRIBROMO BIPHENYLS (TriBB)	ND
TETRABROMO BIPHENYLS (TetraBB)	ND
PENTABROMO BIPHENYLS (PentaBB)	ND
HEXABROMO BIPHENYLS (HexaBB)	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND
OCTABROMO BIPHENYLS (OctaBB)	ND
NONABROMO BIPHENYLS (NonaBB)	ND
DECABROMO BIPHENYL (DecaBB)	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)	
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND

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#### TESTS CONDUCTED

TESTING ITEM	RESULT
TESTING TIEM	(2)
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	52
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> )	ND

TESTING ITEM	RESULT	
IESTING TIEM	(3)	
LEAD (Pb) CONTENT (mg/kg)	ND	

#### **REMARK:**

mg/kg = MILLIGRAM PER KILOGRAM = ppm mg/kg WITH 50cm<sup>2</sup> = MILLIGRAM PER KILOGRAM WITH 50 SQUARE CENTIMETER ND = NOT DETECTED

THE TESTED SAMPLE (1) WAS NOT HOMOGENEOUS MATERIAL SAMPLING RANDOMLY.

#### (B) ROHS REQUIREMENT:

RESTRICTED SUBSTANCES	LIMITS
CADMIUM (Cd)	0.01% (100 ppm)
LEAD (Pb)	0.1% (1000 ppm)
MERCURY (Hg)	0.1% (1000 ppm)
CHROMIUM (VI) (Cr <sup>6+</sup> )	0.1% (1000 ppm)
POLYBROMINATED BIPHENYLS (PBBs)	0.1% (1000 ppm)
POLYBROMINATED DIPHENYL ETHERS (PBDEs)	0.1% (1000 ppm)

THE ABOVE LIMITS WERE QUOTED FROM 2002/95/EC AND AMENDMENT 2005/618/EC FOR HOMOGENEOUS MATERIAL.

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# (C) TEST METHOD:

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IEC 62321 111/95/CDV, BY ACID DIGESTION UNTIL THE TESTED SAMPLE WAS TOTALLY DISSOLVED AND DETERMINED BY ICP-OES	2 mg/kg
LEAD (Pb) CONTENT	WITH REFERENCE TO IEC 62321 111/95/CDV, BY ACID DIGESTION UNTIL THE TESTED SAMPLE WAS TOTALLY DISSOLVED AND DETERMINED BY ICP-OES	2 mg/kg
MERCURY (Hg) CONTENT	WITH REFERENCE TO IEC 62321 111/95/CDV, BY ACID DIGESTION UNTIL THE TESTED SAMPLE WAS TOTALLY DISSOLVED AND DETERMINED BY ICP-OES	2 mg/kg
CHROMIUM (VI) (Cr <sup>6+</sup> ) CONTENT (FOR NON- METAL)	WITH REFERENCE TO IEC 62321 111/95/CDV, BY ALKALINE DIGESTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER	1 mg/kg
CHROMIUM (VI) (Cr <sup>6+</sup> ) CONTENT (FOR METAL)	WITH REFERENCE TO IEC 62321 111/95/CDV, BY BOILING WATER EXTRACTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER	0.02mg/kg with 50cm <sup>2</sup> (IN TESTING SOLUTION)
POLYBROMINATED BIPHENYLS (PBBs)& POLYBROMINATED DIPHENYL ETHERS (PBDEs)	WITH REFERENCE TO IEC 62321 111/95/CDV, BY SOLVENT EXTRACTION AND DETERMINED BY GC/MS AND FURTHER HPLC CONFIRMATION WHEN NECESSARY.	5 mg/kg

NOTE: TESTS WERE CONDUCTED WITH REFERENCE TO 111/95/CDV VERSION 2007-10-12 WHICH IS STILL A DRAFT METHOD AND SUBJECT TO FUTURE CHANGES PRIOR TO PUBLICATION.

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TESTS CONDUCTED

#### 2(| ) TEST RESULT SUMMARY :

HALOGEN CONTENT :

TESTING ITEM	RESULT (ppm)
IESTING TIEM	SUBMITTED SAMPLES(1)
FLOURINE (F) CONTENT	ND
CHLORINE (C1) CONTENT	105
BROMINE (Br) CONTENT	ND
IODINE (I) CONTENT	ND

REMARKS: ppm = PARTS PER MILLION = mq/kq

ND = NOT DETECTED

THE TESTED SAMPLE (1) WAS HSMOGENEOUS MATERIAL ANS SAMPLING

RANDOMLY.

#### (Ⅱ ) TEST METHOD :

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
HALOGEN (F,Cl, Br,I) CONTENT	WITH REFERENCE TO IEC 61189- 2:2006 BY COMBUSTION FLASK AND DETERMINED BY ION CHROMATOGRAPHY	50 ppm

REMARKS: REPORTING LIMIT = QUANTITATION LIMIT OF ANALYTE IN SAMPLE

# 3 TOTAL ANTIMONY (Sb) CONTENT

AS PER CLIENT'S REQUEST, ACID DIGESTION METHOD WAS USED AND TOTAL ANTIMONY CONTENT WAS DETERMINED BY INDUCTIVELY COUPLED ARGON PLASMA SPECTROMETRY.

TESTED SAMPLE RESULT IN ppm (1) <5

THE TESTED SAMPLE (1) WAS NOT HOMOGENEOUS MATERIAL, AND SAMPLING RANDOMLY.

ppm = PARTS PER MILLION = mg/kg

< = LESS THAN

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## TEST REPORT

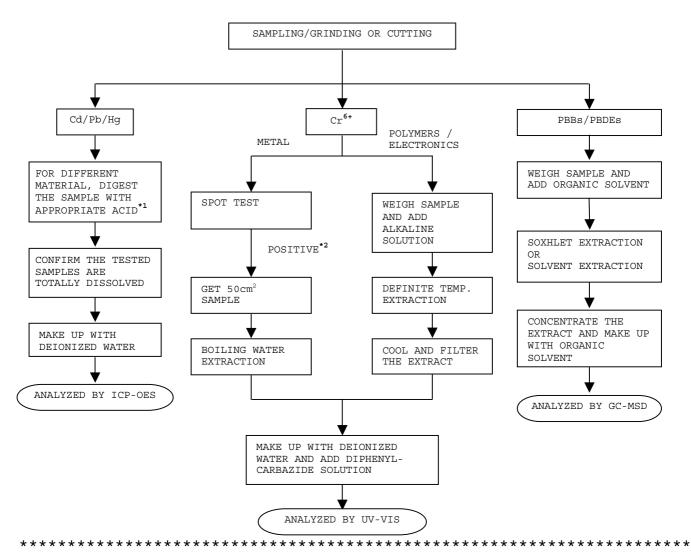
NUMBER: SHAH00075988

TESTS CONDUCTED

#### 4 (D) MEASUREMENT FLOWCHART:

TEST FOR Cd/Pb/Hg/CR (VI)/PBBS/PBDES CONTENTS

REFERENCE STANDARD: IEC 62321 (111/95/CDV)





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TESTS CONDUCTED

**REMARKS:** 

\*1: LIST OF APPROPRIATE ACID:

MATERIAL	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: IF THE RESULT OF SPOT TEST IS POSITIVE, CHROMIUM VI WOULD BE DETERMINED AS DETECTED.

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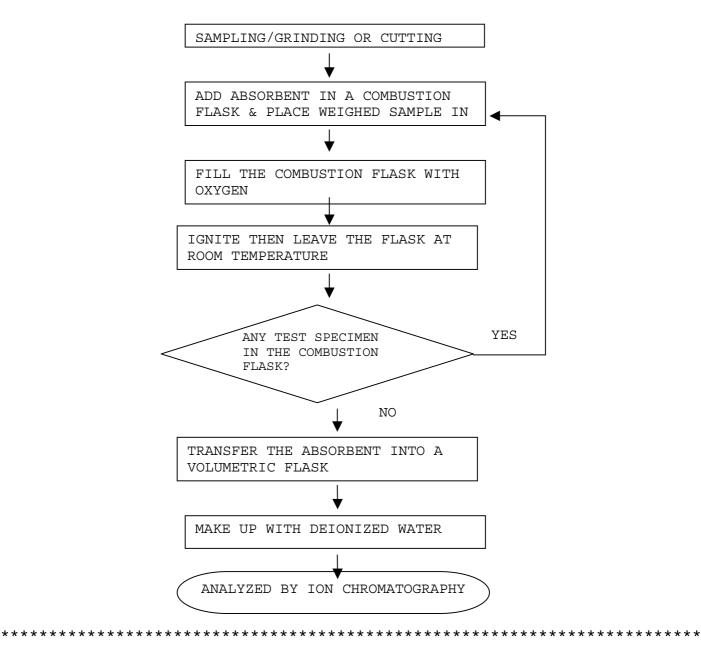
TEST REPORT NUMBER: SHAH00075988

TESTS CONDUCTED

# 5 (III) MEASUREMENT FLOWCHART:

TEST FOR HALOGEN CONTENT

REFERENCE METHOD: IEC 61189-2 TEST 2C12



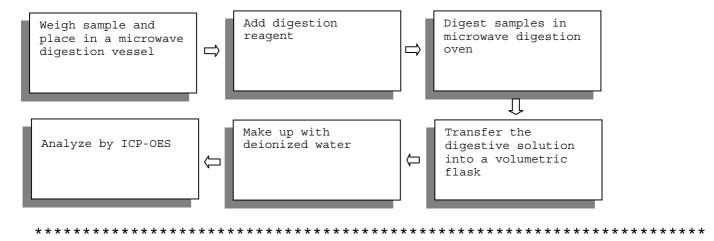


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TESTS CONDUCTED 6 TEST FOR Sb CONTENT





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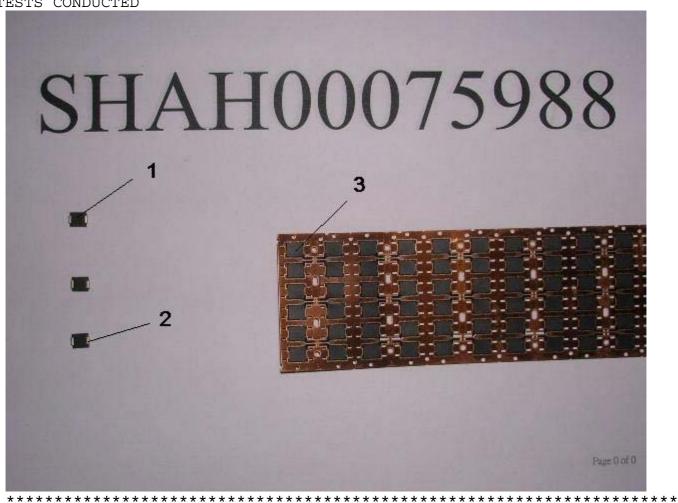
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## TEST REPORT

TESTS CONDUCTED



END OF REPORT