



**TEST REPORT**

NUMBER: SHAH00075973S1

APPLICANT: LITEON SEMICONDUCTOR CORP.  
28-1, WU SHIN STREET, TA WU LUNG,  
KEELUNG 204, TAIWAN, R.O.C

DATE: AUG 20, 2008

SHANGHAI SEEFULL ELECTRONIC CO.,LTD.  
6 ZHENGYE RD., DONGJING, SONGJIANG  
DISTRICT, SHANGHAI, CHINA.  
ATTN: CLORIS WEI

*THIS IS TO SUPERSEDE  
REPORT NO. SHAH00075973  
DATED AUG 15, 2008*

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 PASTE  
& DIE.

ITEM NO. : SMA PACKAGE FAMILY.

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TESTS CONDUCTED:

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

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REMARK: NO SAMPLE IS SUBMITTED FOR HOLOGEN AND Sb TESTING. THE HALOGEN  
TEST RESULTS STATED IN THIS REPORT ARE TRANSFERRED FROM OUR TEST  
REPORT(SHJ0050254 DATED APR 09, 2008). THE SB TEST RESULT STATED  
IN THIS REPORT ARE TRANSFERRED FROM OUR TEST REPORT  
(SHAH00055596 DATED MAY 07, 2008).

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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

**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED

1 (A) TEST RESULT SUMMARY:

TESTING ITEM	RESULT
	(1)
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	16000
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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TO BE CONTINUED



**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED

TESTING ITEM	RESULT
	(2)
CADMIUM (Cd) CONTENT (mg/kg)	ND
LEAD (Pb) CONTENT (mg/kg)	60
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
	(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, AND 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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TO BE CONTINUED

**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED

(C) TEST METHOD:

TESTING ITEM	TESTING METHOD	REPORTING LIMIT
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IEC 62321 111/95/CDV, BY ACID DIGESTION AND DETERMINED UNTIL THE TESTED SAMPLE WAS TOTALLY DISSOLVED 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)

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.

2 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  
(1)

RESULT IN (ppm)  
<5

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

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TO BE CONTINUED



**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED

ppm = PARTS PER MILLION = mg/kg

< = LESS THAN

3 (I) TEST RESULT SUMMARY :  
HALOGEN CONTENT :

<u>TESTING ITEM</u>	<u>RESULT (ppm)</u>
	<u>SUBMITTED SAMPLES (1)</u>
FLOURINE (F) CONTENT	ND
CHLORINE (Cl) CONTENT	110
BROMINE (Br) CONTENT	200
IODINE (I) CONTENT	ND

REMARKS : ppm = PARTS PER MILLION = mg/kg  
ND = NOT DETECTED

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

(II) TEST METHOD :

<u>TESTING ITEM</u>	<u>TESTING METHOD</u>	<u>REPORTING LIMIT</u>
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

DATE SAMPLE RECEIVED : AUG.8, 2008

TESTING PERIOD : AUG.8, 2008 TO AUG.13, 2008

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TO BE CONTINUED

**TEST REPORT**

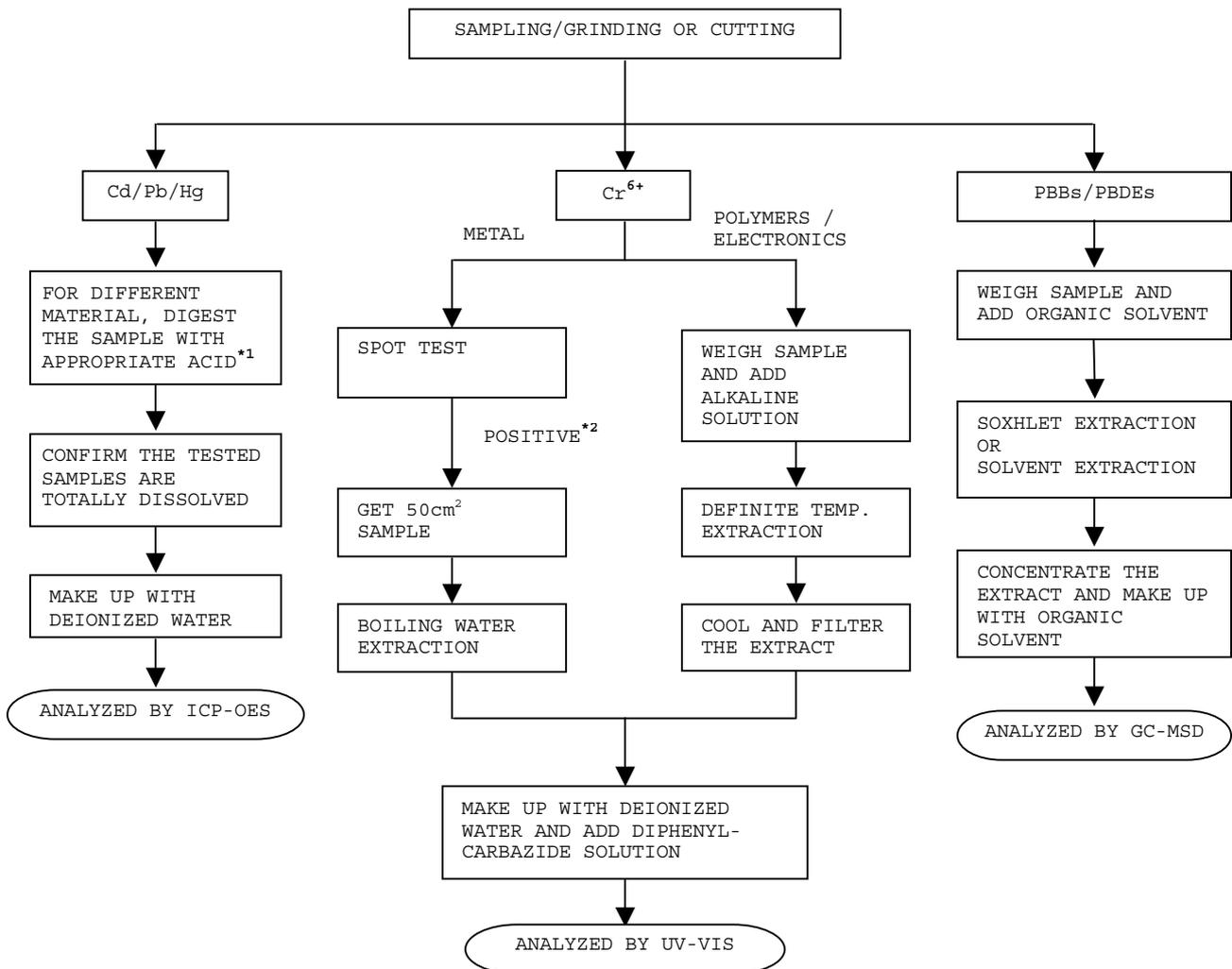
NUMBER: SHAH00075973S1

TESTS CONDUCTED

(D) MEASUREMENT FLOWCHART:

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

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



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TO BE CONTINUED



**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED

REMARKS:

\*1: LIST OF APPROPRIATE ACID:

<u>MATERIAL</u>	<u>ACID ADDED FOR DIGESTION</u>
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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TO BE CONTINUED

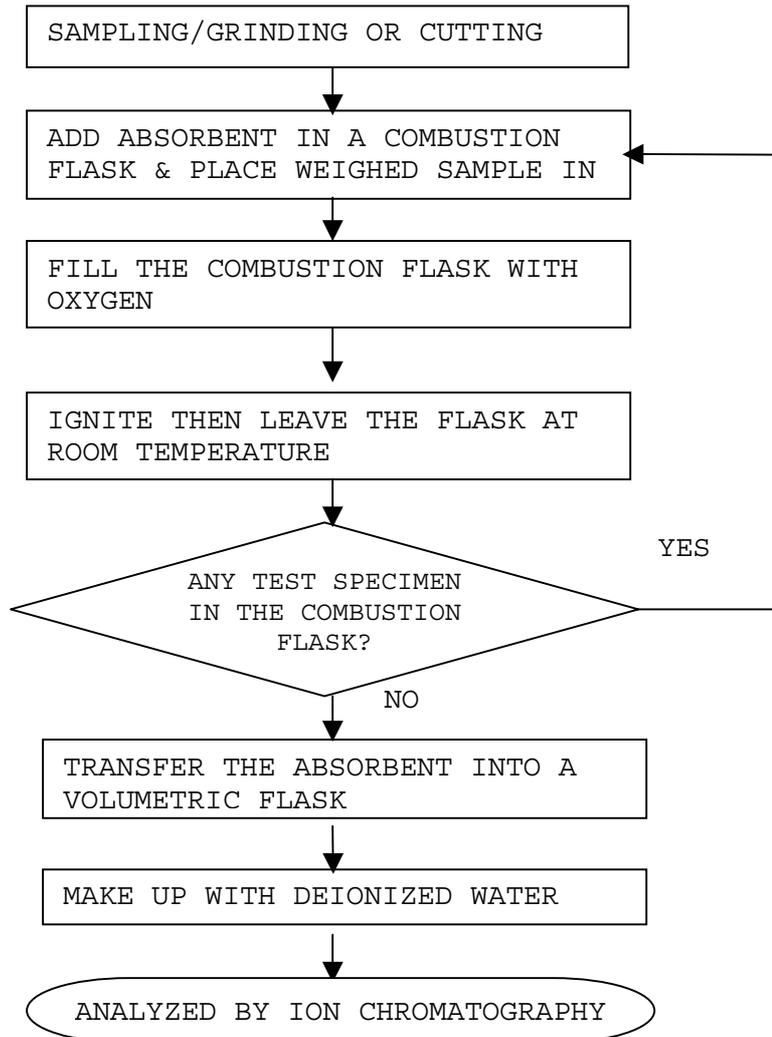
**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED

TEST FOR HALOGEN CONTENT

REFERENCE METHOD: IEC 61189-2 TEST 2C12



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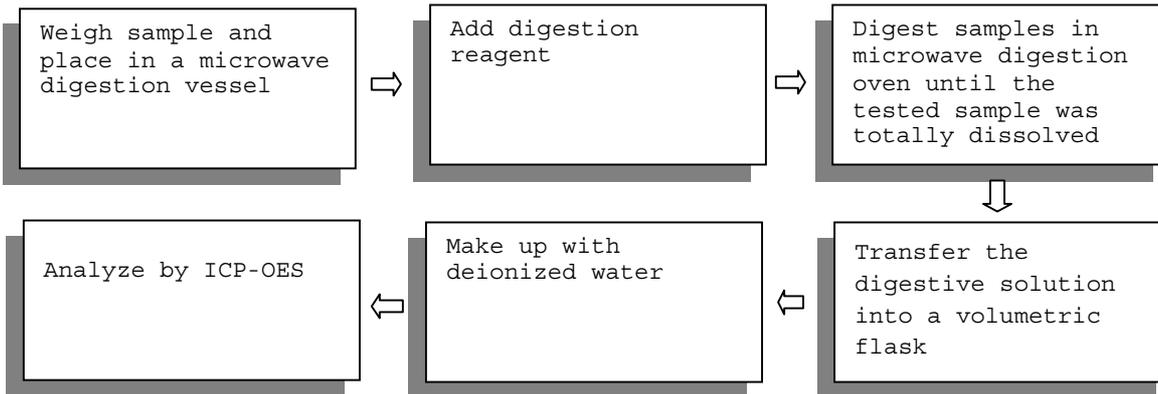
TO BE CONTINUED

**TEST REPORT**

NUMBER: SHAH00075973S1

TESTS CONDUCTED  
MEASUREMENT FLOWCHART

TEST FOR Sb CONTENTS (USEPA 3052)



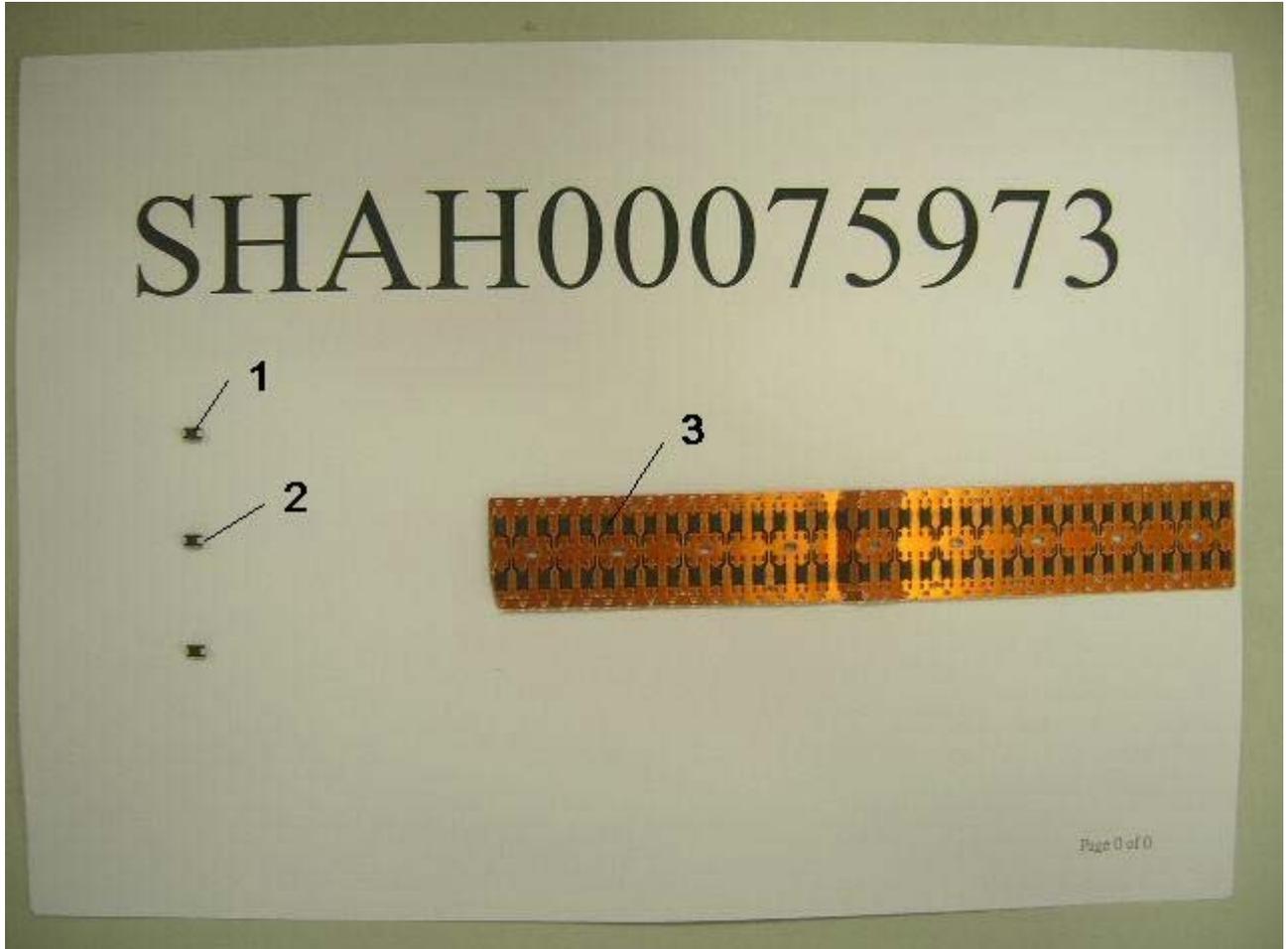
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TO BE CONTINUED

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TESTS CONDUCTED



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END OF REPORT



To: Liteon Semiconductor Corp.  
Shanghai Seefull Electronic Co., Ltd.

Attention: Cloris Wei Date: Aug 20, 2008

Re: Report Revision Notification

Intertek Testing Services Report Number SHAH00075996 Dated Aug.15, 2008,  
Please be informed that all the content recorded in the above captioned  
report will be void. This captioned report is now supersede by a revised  
Intertek Testing Services Report SHAH00075996S1.

Thank you for your attention.

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

MYRA LV  
CHEMICAL DIVISION MANAGER

AUTHORIZED BY:  
FOR INTERTEK TESTING SERVICES  
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STEPHEN TSANG  
GENERAL MANAGER