RoHS Test Report	No. 201205830R	Date: Jun. 07, 2012	Page 1 of 10						
APPLICANT	No.135, Huanchen	SMART-GROUP (Dongguan Shima Electronics Co., Ltd) No.135, Huancheng Road, Mawu Village, Qiaoli Management Community, Changping Town, Dongguan city, Guangdong Province, China.							
REPORT ON THE SUBMITTE	ED SAMPLE SAID TO E	E							
SAMPLE NAME	: Room Managemer	nt Controls							
TYPE /MODEL		DP-US, SB-6BS-US, SB-4BS BS-US, SB-6RM-Part-DN	-EU, SB-4BS-US,						
MANUFACTURER	: SMART-GROUP (	Dongguan Shima Electronics	Co., Ltd)						
TEST REPORT NUMBER	: 201205830R								
SAMPLE RECEIVED DATE	: May 29, 2012								
TESTING PERIOD	: May 29, 2012 to Ju	ın. 07, 2012							
******	********	******	*****						
TEST REQUESTED: TO CON		JLT FOR THE SUBMITTED S							
CONCLUSION:									
TESTED SAMPES	<u>STANDARD</u>		<u>RESULT</u>						
SUBMITTED SAMPLE	EUROPEAN D	IRECTIVE 2011/65/EU	PASS						
	RESTRICTION	I OF THE USE OF CERTAIN	HAZARDOUS						
	SUBSTANCES	\$							
	(RoHS Directiv	e)							

\*\*\*\*\*\*\*FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Signed for and on behalf of ANBOTEK COMPLIANCE LABORATORY LIMITED

Inspected by Terry Tian

Written by <u>Andy Shen</u> Approved <u>Jeff Zhu</u> Jeff Zhu / Manager

### Testing method:

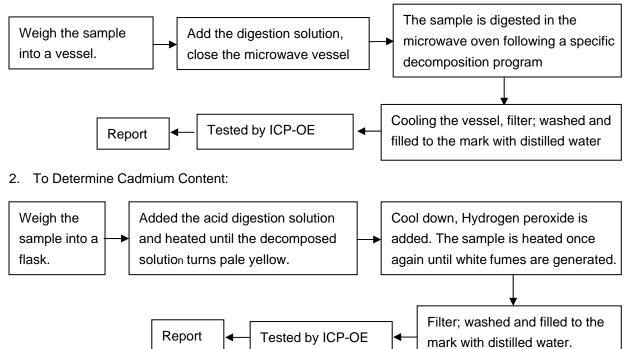
Testing Item	Measuring method	Instrument	Report Limit
Cadmium (Cd)	EN 1122B	ICP-AES	2 mg/kg
Lead (Pb)	EPA 3050B	ICP-AES	2 mg/kg
Mercury (Hg)	EPA 3052	ICP-AES	2 mg/kg
Chromium(VI) [Cr(VI)]	EPA 3060A	UV-VIS	2 mg/kg
Polybrominated Biphenyl (PBB)	83/264/EEC	GC/MS	5 mg/kg
Polybrominated Diphenylether (PBDE)	83/264/EEC	GC/MS	5 mg/kg

### **Method detection Limits:**

Test Item	Unit	Acceptable Limit
Cadmium (Cd)	ppm	100
Lead (Pb)	ppm	1000
Mercury (Hg)	ppm	1000
Chromium(VI) [Cr(VI)]	ppm	1000
Polybrominated Biphenyl (PBB)	ppm	1000
Polybrominated Diphenylether (PBDE)	ppm	1000

### Test flow:

1. To Determine lead Content:



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3. To Determine Mercury Content: The sample is digested in the Weigh the sample Add the digestion solution, microwave oven following a specific into a vessel. close the microwave vessel decomposition program Cooling the vessel, filter; washed and Tested by CV-AAS. Report filled to the mark with distilled water To Determine Hexavalent Chromium Content: Weigh the sample; Stir while heating the Gradually cool each Filter: washed and add the digestion samples continuously solution to room filled to the mark with solution. to 90-95°C temperature distilled water. Transfer a portion of the solution to absorption Add the diphenylcarbazide solution Report cell, measure the absorbance with UV-VIS. and adjust the pH to acidic. 5. To Determine Hexavalent Chromium Content in metals: spot-test: If the test result is positive for If the test result is negative, For a metal plate sample, Some testing steps are carried the sample, the sample is place 1-5 drops of test out to confirm that the result is considered to have a hexavalent solution on the sample chromium coating negative or positive. When ever the analyst is not certain about the spot-test result obtained, the boiling-water-extraction procedure shall be used to verify the result. 6. To Determine PBBs / PBDEs Content: Add 100mg +/- 10mg of the Add appropriate surrogate and, Add extraction to flask; extract sample into the extraction matrix spiking standards. for appropriate hours. thimbles. Collect extract, filled to the Tested by GC-MS. Report mark with solvent.

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Test Results

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>1</u>	<u>2</u>	<u>3-1</u>	<u>3-2</u>	<u>4-1</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	Negative	N.D.	Negative	N.D.
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.D.	N.A.	N.D.	N.A.	N.D.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.D.	N.A.	N.D.	N.A.	N.D.

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>4-2</u>	<u>5-1</u>	<u>5-2</u>	<u>6-1</u>	<u>6-2</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	Negative	N.D.	Negative	N.D.	Negative
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.A.	N.D.	N.A.	N.D.	N.A.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.A.	N.D.	N.A.	N.D.	N.A.

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>7-1</u>	<u>7-2</u>	<u>8-1</u>	<u>8-2</u>	<u>9-1</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	Negative	N.D.	Negative	N.D.
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.D.	N.A.	N.D.	N.A.	N.D.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.D.	N.A.	N.D.	N.A.	N.D.

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Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>9-2</u>	<u>10-1</u>	<u>10-2</u>	<u>10-3</u>	<u>10-4</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	Negative	Negative	Negative	Negative	N.D.
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.A.	N.A.	N.A.	N.A.	N.D.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.A.	N.A.	N.A.	N.A.	N.D.

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>10-5</u>	<u>10-6</u>	<u>10-7</u>	<u>10-8</u>	<u>11-1</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.D.	N.D.	N.D.	N.D.	N.D.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.D.	N.D.	N.D.	N.D.	N.D.

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>11-2</u>	<u>12</u>	<u>13</u>	<u>14-1</u>	<u>14-2</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	Negative	Negative	Negative	Negative	Negative
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.A.	N.A.	N.A.	N.A.	N.A.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.A.	N.A.	N.A.	N.A.	N.A.

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Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>14-3</u>	<u>14-4</u>	<u>14-5</u>	<u>14-6</u>	<u>14-7</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	Negative	N.D.	Negative	N.D.	N.D.
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.A.	N.D.	N.A.	N.D.	N.D.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.A.	N.D.	N.A.	N.D.	N.D.

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>14-8</u>	<u>15-1</u>	<u>15-2</u>	<u>15-3</u>	<u>16</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	Negative	N.D.	Negative	Negative
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.D.	N.A.	N.D.	N.A.	N.A.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.D.	N.A.	N.D.	N.A.	N.A.

Item	Unit	MDL	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>
			<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>
Lead Content (Pb)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium (Cd)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury Content(Hg)	ppm	2	N.D.	N.D.	N.D.	N.D.	N.D.
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	Negative	Negative	Negative	N.D.
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.D.	N.A.	N.A.	N.A.	N.D.
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.D.	N.A.	N.A.	N.A.	N.D.

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Item	Unit	MDL	<u>No.</u>	<u>No.</u>			
			<u>22</u>	<u>23</u>			
Lead Content (Pb)	ppm	2	N.D.	N.D.			
Cadmium (Cd)	ppm	2	N.D.	N.D.			
Mercury Content(Hg)	ppm	2	N.D.	N.D.			
Hexavalent Chromium Content [Cr(VI)]	ppm	2	N.D.	N.D.			
Flame Retardants							
Polybrominated biphenyis (PBBs)	ppm	5	N.D.	N.D.			
Polybrominated Diphenylethers(PBDEs)	ppm	5	N.D.	N.D.			

NOTE: (1) ppm=mg/kg.

(2) N.D.= NOT DETECTED (<MDL)

(3) N.A.= NOT APPLICABLE

(4) Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

DISCLAIM: Anbotek take no responsibility for any mistakes caused by inaccurate and /or invalid information submitted by the applicant.

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### Sample Appearance Description

Item No.	Part Name	Description
1	PCB	Green PCB (mixed)
2	TIN	Silvery metal
3	CHIP IC	
3-1	BODY	Black body w/ gray printing
3-2	PIN	Silvery metal pin
4	CHIP RESISTOR	
4-1	BODY	Black body w/ white printing
4-2	PIN	Silvery metal pin
5	CHIP CAPACITOR	
5-1	BODY	Brown body
5-2	PIN	Silvery metal pin
6	CHIP DIODE	
6-1	BODY	Black body
6-2	PIN	Silvery metal pin
7	CHIP DIODE	
7-1	BODY	White body
7-2	PIN	Silvery metal pin
8	HIGH-PRESSURE CERAMICS CAPACITOR	
8-1	BODY	Blue body w/ black printing
8-2	PIN	Silvery metal pin
9	Y CAPACITOR	
9-1	BODY	Blue body
9-2	PIN	Silvery metal pin
10	ELECTROLYTICAL CAPACITOR	
10-1	FOIL	Gray metal
10-2	PIN	Silvery metal pin
10-3	ALUMINIUM	Silvery metal shell
10-4	LIQUID	Flaxen liquid
10-5	PAPER	Green paper
10-6	RUBBER	Black rubber
10-7	HEAT SHRINKABLE TUBINGS	Black plastic tube
10-8	SHELL	Brown plastic
11	RESISTOR	
11-1	BODY	Gray body w/ colourful printing

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Item No.	Part Name	Description
11-2	PIN	Silvery metal pin
12	CHIP GLASS DIODE	Black/orange body w/ silvery metal edge
13	CHIP GLASS DIODE	Black/blue body w/ silvery metal edge
14	TRANSFORMER	
14-1	METAL WIRE	Silvery color metal
14-2	LITZ WIRE	Copper-colored metal wire w/ transparent surface
14-3	TIN BAR	Silvery metal
14-4	INSULATION PAINT	Transparent liquid
14-5	INSULATION WIRE	Mixed yellowish brown plastic jacket & golden colored metal wire
14-6	ADHESIVE TAPE	Yellow pvc adhesive tape
14-7	BRACKET	Black granule
14-8	MN-ZN CORE	Dk-grey core
15	WIRE WINDING COIL	
15-1	WIRE	Copper color metal wire
15-2	RING	Yellow body
15-3	PIN	Silvery metal pin
16	AUDION	Black body w/ silvery metal edge
17	DRIVEPIPE	Black plastic
18	BRACE SCREW	Copper color metal w/ silvery metal edge
19	CONNECTOR	Black body w/ silvery metal edge
20	FUSE	Black body w/ silvery metal edge
21	SLICE	Transparent plastic slice
22	COVER	White plastic
23	SCREW	Silvery metal screw

\*\*\*\*\* End of Report \*\*\*\*\*

RoHS Test Report

### APPENDIX A

### Photograph of Sample

