RoHS Screening Analysis Report Number : TWNC00252537

Applicant: Cactus Technologies Ltd
Suite C, 15/F, Captial Trade Center
62 TsunYip Street, Kwun Tong,
Kowloon, Hong Kong

Date : Apr 26, 2012

Sample Description:
One (1) group of submitted samples said to be :

Sample Description	: SDChip KSxxxyR(I)T-806C - the symbol "xxx" can be 0~9 or blank to indicate the capacity of the SDChip - the symbol "y" can be M or G, M: megabyte, G: gigabyte - the symbol "(I)" is optional that represents extended temperature version (-45C to 90C)
Style / Item No.	: KSxxxyR(I)T-806C
Country of Origin	: TAIWAN
Date Sample Received	: Apr 12, 2012
Date Test Started	: Apr 13, 2012

Test Conducted:
As requested by the applicant, for details please refer to attached pages.

Conclusion:

Tested Samples	Standard	Result
Screening components of submitted samples	With reference to test method of IEC 62321 edition 1.0:2008 chapter 6, screening by XRF spectroscopy and chemical confirmation test for RoHS directive (2002/95/EC)	Pass

Remark:
As requested by the applicant, only components shown in this report were screened by XRF spectroscopy for 2002/95/EC. Other components were not screened in this report.

Authorized By:
On Behalf Of Intertek Testing Services
Taiwan Limited

K. Y. Liang
Director

Intertek Testing Services Taiwan Ltd.
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Test Conducted

Determination of total value of regulated substances in electro technical products, elements of cadmium (Cd), lead (Pb), mercury (Hg), chromium (Cr) and bromine (Br) content were measured by XRF spectroscopy for RoHS restricted substances. The analyzer is therefore unable to determine if it is PBB, PBDE, Cr(VI) or non restricted bromine and chromium substances in the sample.

(Ⅰ) Test Result Summary:

Screened Component	XRF Result			Chemical Confirmation Result (ppm)
	Element	Screened Result (ppm)	Conclusion	
(1)	Cd	ND	BL	Not Tested
	Pb	ND	BL	
	Hg	ND	BL	
	Cr	ND	BL	
	Br	NA	NA	
(2)(#)	Cd	--	--	Cd: ND Pb: 9 Hg: ND Cr^{6+}: ND PBBs: ND PBDEs: ND
	Pb	--	--	
	Hg	--	--	
	Cr	--	--	
	Br	--	--	

Remarks: ppm = Parts per million = mg/kg
ND = Not detected and pass, the screened sample is found to be under detection limit of table Ⅲ.
NA = Not applicable
BL = Below Limit. The screened component is found to be equal or below the lower screening threshold limit of table Ⅱ.
# = Samples were ground and randomly selected for test

Tested Components
(1) Silvery Metal Cover
(2) PCB Assembly

Responsibility of Chemist: Irene Chiou / Kevin Liu / Cathy Chen

Date Sample Received : Apr 12, 2012
Test Period : Apr 13, 2012 To Apr 18, 2012

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(Ⅱ) XRF screening limits in mg/kg for regulated elements in various materials.

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	BL ≤ 70 < X < 130 ≤ OL	BL ≤ 70 < X < 130 ≤ OL	BL ≤ 70 < X < 150 ≤ OL
Pb	BL ≤ 700 < X < 1300 ≤ OL	BL ≤ 700 < X < 1300 ≤ OL	BL ≤ 500 < X < 1500 ≤ OL
Hg	BL ≤ 700 < X < 1300 ≤ OL	BL ≤ 700 < X < 1300 ≤ OL	BL ≤ 500 < X < 1500 ≤ OL
Cr	BL ≤ 700 < X	BL ≤ 700 < X	BL ≤ 500 < X
Br	BL ≤ 300 < X	Not Applicable	BL ≤ 250 < X

Remark: mg/kg = Milligram per kilogram = ppm
BL = Below Limit
X = Inconclusive result
OL = Over Limit

(Ⅲ) Estimated detection limits in mg/kg for regulated elements in various matrices.

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	50	70	70
Pb	100	200	200
Hg	100	200	200
Cr	100	200	200
Br	200	Not Applicable	200

Disclaimers:

The numerical test data of this XRF screening report is for reference purposes only due to the data variation incurred from various factors as described in next paragraph. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The results shown in this XRF screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

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Test Conducted

(Ⅳ) Test Method

Test Item	Test Method	Reporting Limit
Cadmium (Cd) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Lead (Pb) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Mercury (Hg) content	With reference to IEC 62321 edition 1.0:2008 in clause 7, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Chromium VI (Cr^{6+}) content	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer.	1 ppm
Polybrominated Biphenyls (PBBs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MS and further HPLC-DAD confirmation when necessary.	5 ppm
Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MS and further HPLC-DAD confirmation when necessary.	5 ppm

Remark : Reporting Limit = Quantitation limit of analyte in sample

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(V) 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^{6+})	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.

End of Report

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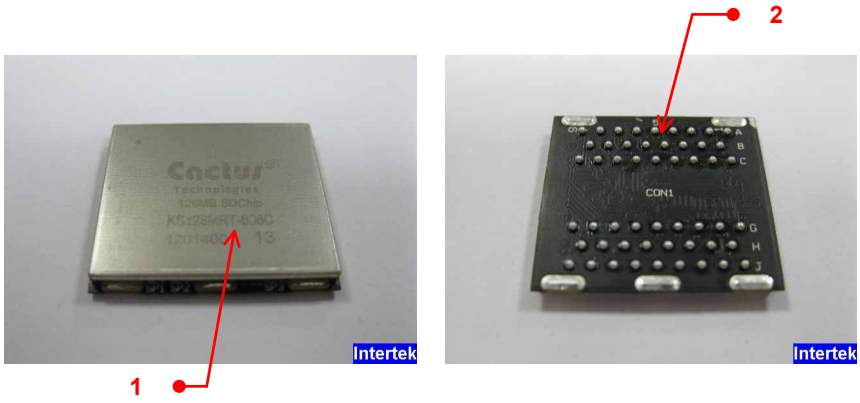
Test Conducted

Photo



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