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CENTRE TESTING INTERNATIONAL



Applicant

Address

A1806, GOLDEN CENTRAL BUSINESS BUILDING, NO. 3037

JINTIAN ROAD, FUTIAN DISTRICT, SHENZHEN, CHINA

Product Name

A/K Series

Conclusion

Tested SampleAccording to StandardResultSubmitted SampleGB/T26572-2011Pass

Pass means that the results shown on the report comply with the limits set by GB/T26572-2011.

Tested by

Frank Zhang Hill Zheng

Reviewed by

Date

Pori Xia

Hill Zheng

Technical Manager

esting International Group Co.,Ltd.

Mar. 1, 2019

No.S140382141

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China



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The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

Product Part No. STxU4xxxxx;STxS4xxxxx/x stands for different frequency and capacity.

Client Reference Information Axxx/Kxxx/x stands for different form factor and capacity.

Sample Received Date Dec. 27, 2018

Testing Period Dec. 27, 2018 to Jan. 28, 2019

Test Requested 1.As specified by client, to screen Lead(Pb), Cadmium(Cd), Mercury(Hg),

Chromium(Cr) and Bromine(Br) in the submitted sample(s) by XRF.

2.As specified by client, when screening results exceed the XRF screening limit

in GB/T26572-2011, further use of chemical methods are required to

test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)

in the submitted samples.

Photo(s) of the Product(s)

A/K Series





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Test Method

A.Screening limits for regulated elements according to GB/T26572-2011(Unit: mg/kg)

Element	Test Method	Polymers	Metals	Composite material
Pb	GB/T26125-2011	BL≤(700-3σ) <x <(1300+3σ)≤OL</x 	BL≤(700-3σ) <x <(1300+3σ)≤OL</x 	BL≤(500-3σ) <x <(1500+3σ)≤OL</x
Cd	Screening – Lead, mercury, cadmium,	$BL \leq (70-3\sigma) < X < (130+3\sigma)$ $\leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma)$ $\leq OL$	LOD <x<(150+3σ)≤ol< td=""></x<(150+3σ)≤ol<>
Hg	total chromium and total bromine by X-ray	BL≤(700-3σ) <x <(1300+3σ)≤OL</x 	BL≤(700-3σ) <x <(1300+3σ)≤OL</x 	BL≤(500-3σ) <x <(1500+3σ)≤OL</x
Cr	fluorescence	BL≤(700-3σ)< X	BL≤(700-3σ)< X	BL≤(500-3σ)< X
Br	spectrometry	BL≤(300-3σ)< X	N/A	BL≤(250-3σ)< X

B.Chemical Test

Tested Item(s)	Test Method	Measured Equipment(s)	MDL	Limit
Lead (Pb)	GB/T26125-2011	ICP-OES	10 mg/kg	1000 mg/kg
Cadmium (Cd)	GB/T26125-2011	ICP-OES	10 mg/kg	100 mg/kg
Mercury (Hg)	GB/T26125-2011	ICP-OES	10 mg/kg	1000 mg/kg
Hexavalent Chromium	GB/T26125-2011	UV-Vis	/	1000 m a/ls a
(Cr(VI))	GB/T26125-2011	UV-Vis	10 mg/kg	1000 mg/kg
Polybrominated Biphenyls (PBBs)	GB/T26125-2011	GC-MS	100mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers(PBDEs)	GB/T26125-2011	GC-MS	100mg/kg	1000 mg/kg

Remark:

- BL = Under the screening limit
- OL = Above the screening limit
- X = The range of needing to do further testing
- 3σ =The reproducibility of analytical instruments
- N/A= Not applicable
- LOD= Detection limit



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Test Result(s)

Sample	Sample		XRF	Chemical		Sample Received/	
No.	Description	Tested Items	Screening	Test	Conclusion	Resubmitted Date	
110.	Description		Test	(mg/kg)		Resublificed Date	
		Pb	BL	/			
	White label with	Cd	BL	/			
001	black printing	Hg	BL	/	PASS	Dec. 27, 2018	
	black printing	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	Transparent/blue	Cd	BL	/			
002	tape with adhesive	Hg	BL	/	PASS	Dec. 27, 2018	
	paste	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/	PASS		
	Silver-gray metal	Cd	BL	/		Dec. 27, 2018	
003		Hg	BL	/			
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
		Cd	BL	/			
004	Silver-gray metal	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
		Cd	BL	/			
005	Silvery plating	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	IN	Negative			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
		Cd	BL	/			
006	Metal base	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	IN	Negative			
		Br(PBBs&PBDEs)	N/A	/			



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Commile	Commis		XRF	Chemical		Carrella Dansirra d/	
Sample	Sample	Tested Items	Screening	Test	Conclusion	Sample Received/ Resubmitted Date	
No.	Description		Test	(mg/kg)		Resubmitted Date	
		Pb	BL	/			
		Cd	BL	/			
007	Silvery plating	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
		Cd	BL	/			
008	Metal base	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/	PASS		
	Gray-black plastic	Cd	BL	/			
009		Hg	BL	/		Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	Coldon/oilyony	Cd	BL	/			
010	Golden/silvery	Hg	BL	/	PASS	Dec. 27, 2018	
	plating	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
		Cd	BL	/			
011	Metal base	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
	_	Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
		Cd	BL	/	PASS		
012	Silver-white plating	Hg	BL	/		Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			



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Comple	Comple		XRF	Chemical		Comple Dessived/	
Sample	Sample	Tested Items	Screening	Test	Conclusion	Sample Received/	
No.	Description		Test	(mg/kg)		Resubmitted Date	
		Pb	BL	/			
		Cd	BL	/			
013	Metal base	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
	D1 1 '.	Cd	BL	/			
014	Black resistance	Hg	BL	/	PASS	Dec. 27, 2018	
	(Tested as a whole)	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	LED	Cd	BL	/			
015	LED (Tested as a whole)	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	D	Cd	BL	/			
016	Brown capacitance	Hg	BL	/	PASS	Dec. 27, 2018	
	(Tested as a whole)	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	Deep brown	Cd	BL	/			
017	capacitance	Hg	BL	/	PASS	Dec. 27, 2018	
	(Tested as a whole)	Cr(Cr(VI))	BL	/			
	_	Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	Dlook we -: -+	Cd	BL	/			
018	Black resistance	Hg	BL	/	PASS	Dec. 27, 2018	
	(Tested as a whole)	Cr(Cr(VI))	IN	N.D.			
		Br(PBBs&PBDEs)	BL	/			



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Sample	Sample		XRF	Chemical		Sample Received/
No.	Description	Tested Items	Screening	Test	Conclusion	Resubmitted Date
110.	Description		Test	(mg/kg)		Resublificed Date
		Pb	BL	/		
	Deep brown	Cd	BL	/		
019	capacitance	Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	Deep brown	Cd	BL	/		
020	capacitance	Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
	021 Brown capacitance (Tested as a whole)	Pb	BL	/	PASS	
		Cd	BL	/		
021		Hg	BL	/		Dec. 27, 2018
		Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	Deep brown	Cd	BL	/		
022	capacitance	Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	D11-1-1-	Cd	BL	/		
023	Black body	Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
		Cd	BL	/		
024	Silvery metal pin	Hg	BL	/	PASS	Dec. 27, 2018
		Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	N/A	/		



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Sample No.	Sample Description	Tested Items	XRF Screening Test	Chemical Test (mg/kg)	Conclusion	Sample Received/ Resubmitted Date		
		Pb	BL	/				
		Cd	BL	/				
025	Brown capacitance	Hg	BL	/	PASS	Dec. 27, 2018		
	(Tested as a whole)	Cr(Cr(VI))	BL	/				
		Br(PBBs&PBDEs)	BL	/				
		Pb	BL	/				
	C	Cd	BL	/				
026	Gray capacitance	Hg	BL	/	PASS	Dec. 27, 2018		
	(Tested as a whole)	Cr(Cr(VI))	BL	/				
		Br(PBBs&PBDEs)	BL	/				
		Pb	BL	/				
		Cd	BL	/		Dec. 27, 2018		
027	Gray-black magnet	Hg	BL	/	PASS			
		Cr(Cr(VI))	BL	/				
		Br(PBBs&PBDEs)	N/A	/				
		Pb	BL	/				
	Cuprocus	Cd	BL	/				
028	Cupreous enamelled wire	Hg	BL	/	PASS	Dec. 27, 2018		
	enamened wife	Cr(Cr(VI))	BL	/				
		Br(PBBs&PBDEs)	BL	/				
		Pb	BL	/				
	Brown capacitance	Cd	BL	/				
029	(Tested as a whole)	Hg	BL	/	PASS	Dec. 27, 2018		
	(Tested as a whole)	Cr(Cr(VI))	BL	/				
		Br(PBBs&PBDEs)	BL	/				
		Pb	BL	/				
	Black body	Cd	BL	/				
030	(Tested as a whole)	Hg	BL	/	PASS	Dec. 27, 2018		
	(Tested as a whole)	Cr(Cr(VI))	BL	/				
		Br(PBBs&PBDEs)	BL	/				



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Commis	Commis		XRF	Chemical		Comple Dessived/
Sample	Sample	Tested Items	Screening	Test	Conclusion	Sample Received/
No.	Description		Test	(mg/kg)		Resubmitted Date
		Pb	BL	/		
	IC	Cd	BL	/		
031	IC (Tested as a whole)	Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	IC	Cd	BL	/		
032	IC (Tested as a whole)	Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/	PASS	
	Crystal oscillator (Tested as a whole)	Cd	BL	/		
033		Hg	BL	/		Dec. 27, 2018
		Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	Black diode	Cd	BL	/		
034		Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	IC	Cd	BL	/		
035		Hg	BL	/	PASS	Dec. 27, 2018
	(Tested as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		
		Pb	BL	/		
	IC	Cd	BL	/	PASS	Dec. 27, 2018
036	(Tested as a whole)	Hg	BL	/		
	(Testeu as a whole)	Cr(Cr(VI))	BL	/		
		Br(PBBs&PBDEs)	BL	/		



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Sample No.	Sample Description	Tested Items	XRF Screening	Chemical Test	Conclusion	Sample Received/ Resubmitted Date	
			Test	(mg/kg)			
		Pb	BL	/			
	Gray-black	Cd	BL	/			
037	capacitance	Hg	BL	/	PASS	Dec. 27, 2018	
	(Tested as a whole)	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	Gray-black magnet	Cd	BL	/			
038	with black printing	Hg	BL	/	PASS	Dec. 27, 2018	
	with black printing	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
	Cumma aura	Cd	BL	/			
039	Cupreous enamelled wire	Hg	BL	/	PASS	Dec. 27, 2018	
		Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			
		Pb	BL	/			
	PCB	Cd	BL	/			
040		Hg	BL	/	PASS Dec. 27, 2	Dec. 27, 2018	
	(Tested as a whole)	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	IN	N.D.			
		Pb	BL	/			
	G'1 . 1	Cd	BL	/			
041	Silvery metal	Hg	BL	/	PASS	Dec. 27, 2018	
	solder	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	N/A	/			
		Pb	BL	/			
	XXII. 1 1 1 1 1	Cd	BL	/			
042	White label with	Hg	BL	/	PASS	Dec. 27, 2018	
	black printing	Cr(Cr(VI))	BL	/			
		Br(PBBs&PBDEs)	BL	/			



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Remark:

- N.D. = Not Detected (<MDL)
- MDL = Method Detection Limit
- mg/kg = ppm = parts per million
- 1000 mg/kg = 0.1%
- /=Not tested
- IN= Uncertain, Further chemical test
- N/A= Not applicable
- BL = Under the screening limit
- Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm^2 sample surface area used.
- When conducting the test for PBBs&PBDEs, XRF was introduced to screen Br Exclusively; When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.
- According to the client's statement, reference information seethe following table:

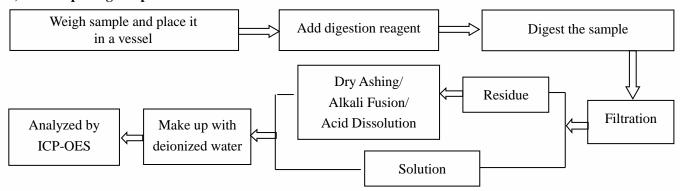
Sample No.	Reference Report No.	Sample No. in Reference Report
002	A2180258692101	002



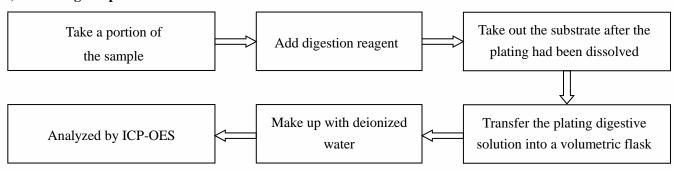
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Test Process

- 1. Lead (Pb), Cadmium (Cd)
- 1) Non-plating samples

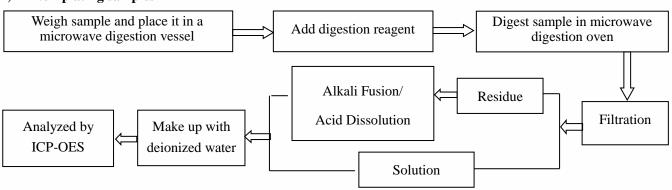


2) Plating samples

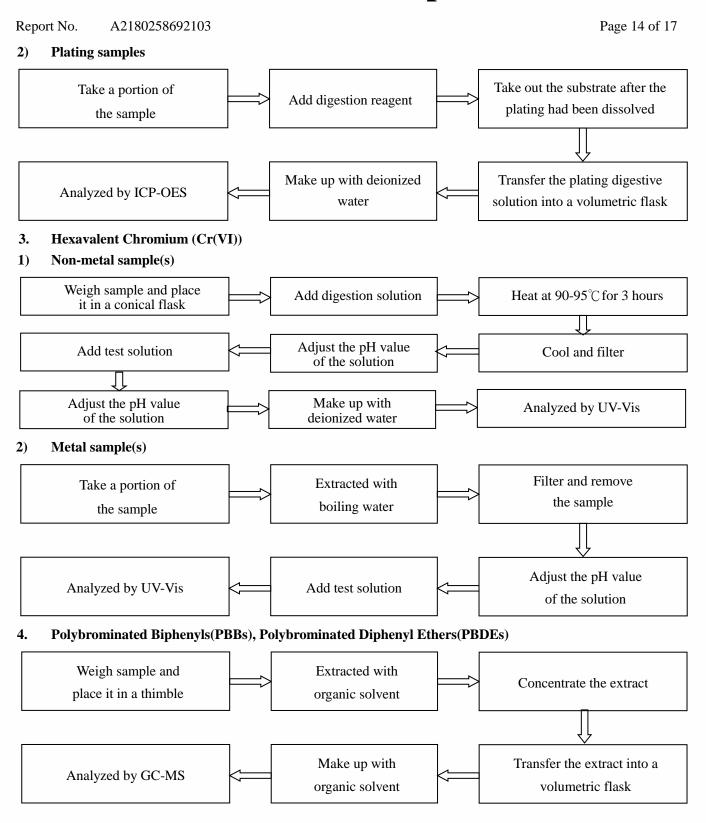


2. Mercury (Hg)

1) Non-plating samples







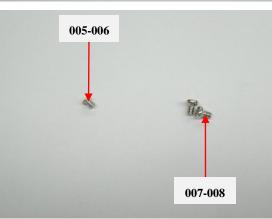


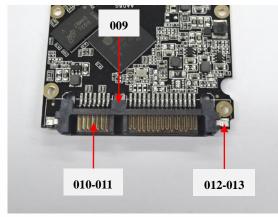
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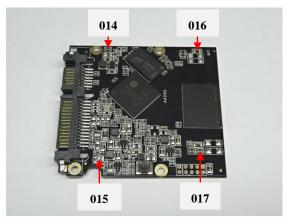
Photo(s) of the tested component(s)

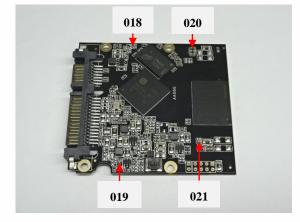








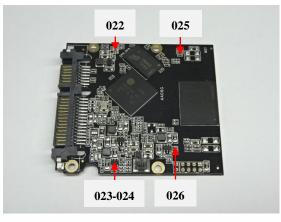


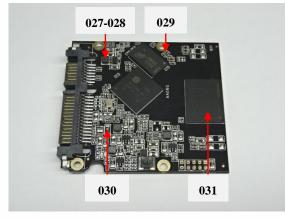


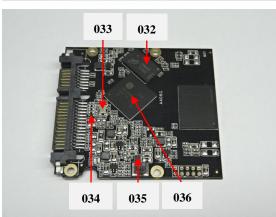


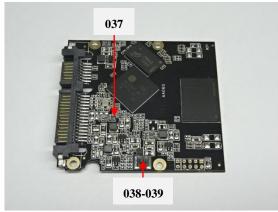
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Photo(s) of the tested component(s)















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*** End of Report ***

Statement:

- 1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
- 2. The sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which CTI hasn't verified;
- 3. The result(s) shown in this report refer(s) only to the sample(s) tested;
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