



Report No.: HUAKE180122039-1RR

RoHS

TEST REPORT

Prepared for :

WIRELESS-TAG TECHNOLOGY CO., LIMITED

4/F., BAK Sci & Tech Building, No. 9 Keyan Road, Science & Technology Park
Central, Nanshan District, Shenzhen, China

Product: WT52832(BT module)

Trade Name: N/A

Model Name: WT52832-S2-BK, WT52832-S2

Date of Test: Jan. 18, 2018 - Jan. 25, 2018

Date of Report: Jan. 25, 2018

Report Number: HUAKE180122039-1RR

Prepared By :

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TEST RESULT CERTIFICATION

Applicant : WIRELESS-TAG TECHNOLOGY CO., LIMITED
Address : 4/F., BAK Sci & Tech Building, No. 9 Keyan Road, Science & Technology Park Central, Nanshan District, Shenzhen, China
Manufacturer : WIRELESS-TAG TECHNOLOGY CO., LIMITED
Address : 4/F., BAK Sci & Tech Building, No. 9 Keyan Road, Science & Technology Park Central, Nanshan District, Shenzhen, China
Product name : WT52832(BT module)
Product model : WT52832-S2-BK, WT52832-S2
Trade Name : N/A
Date of Sample Received : Jan. 18, 2018
Testing Period : Jan. 18, 2018 - Jan. 25, 2018

Test Requested:

- (1) Heavy Metals and Flame Retardants Content – European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)
- (2) Phthalates content – European Council Directive 2011/65/EU and Change-Directive (EU) 2015/863 on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Conclusion

PASS

PASS

Prepared by:

Project Engineer

Checked By:

Project Supervisor

Approved by:

Technical Director





Test Method:

Heavy Metals and Flame Retardants Content – European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Testing item	Pretreatment method	Measuring instrument	MDL
Lead(Pb)	EN 62321-5:2014	ICP-OES	2 mg/kg
Cadmium(Cd)	EN 62321-5:2014	ICP-OES	2 mg/kg
Mercury(Hg)	EN 62321-4:2014	ICP-OES	2 mg/kg
Chromium(Cr VI)	EN 62321:2012	UV-Vis	2 mg/kg
PBBs/ PBDEs	EN 62321:2012	PY-GC-MS	5 mg/kg

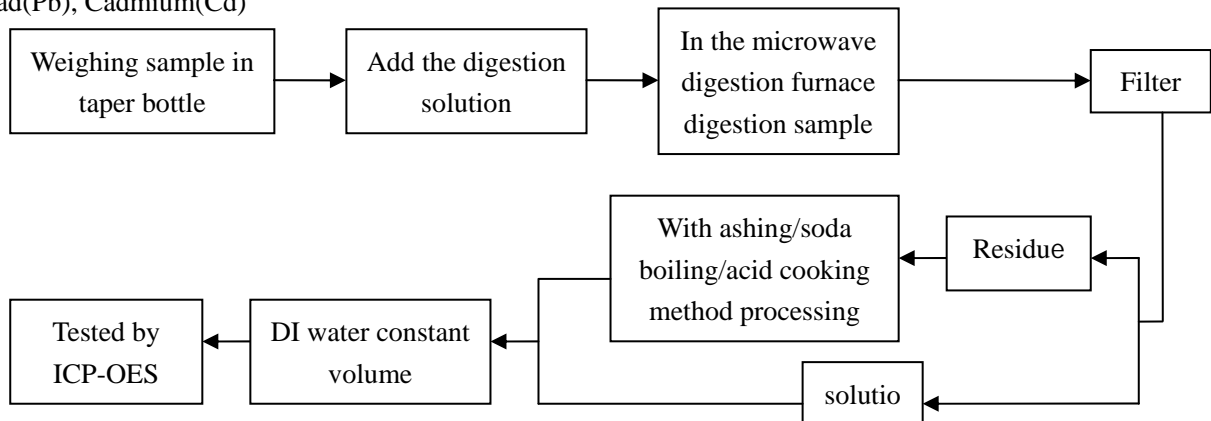
Testing item	Pretreatment method	Measuring instrument	MDL
HBCDD	EPA3540:1996	GC-MS	10 mg/kg

Phthalates content – European Council Directive 2011/65/EU and Change-Directive (EU) 2015/863 on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Test Method: Sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer.

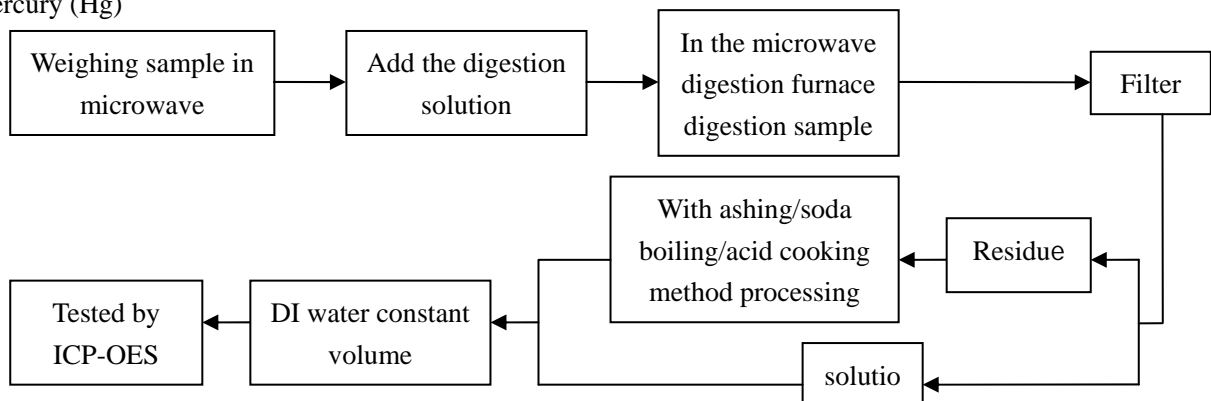
Testing item	Pretreatment method	Measuring instrument	MDL
DEHP/DBP/BBP/ DIBP	EN 14372:2004	GC-MS	0.003 mg/kg

Test Flow:

1. Lead(Pb), Cadmium(Cd)

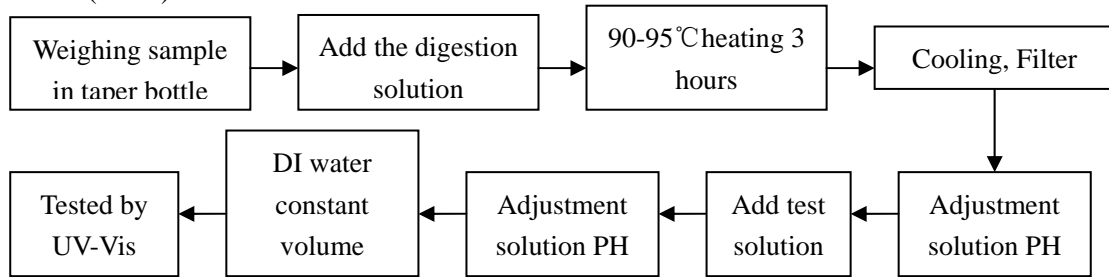


2. Mercury (Hg)

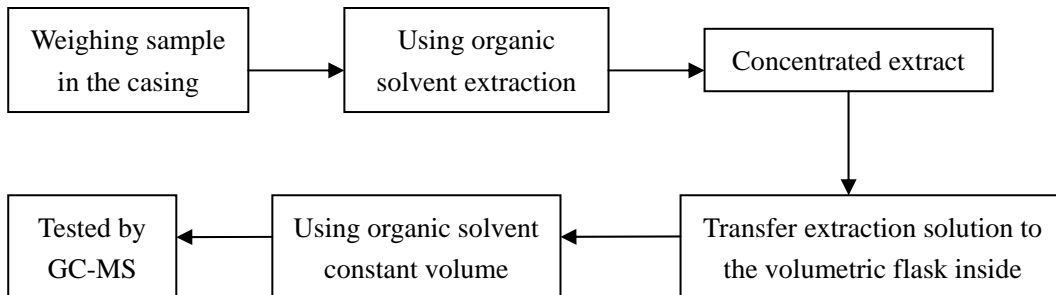




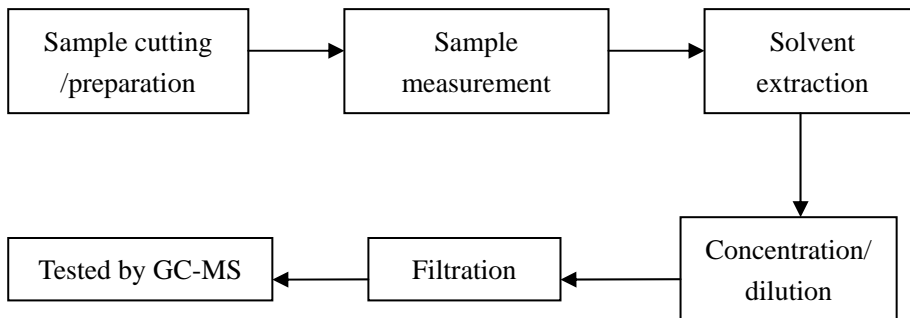
3. Chromium(Cr VI)



4. PBBs/ PBDEs



5. HBCDD/ DEHP/ BBP/ DBP/ DIBP





Test Results:

Testing Item	Unit	ROHS Limit	Result					
			1	2	3	4	5	6
Lead(Pb)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Cadmium(Cd)	mg/kg	100	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Mercury(Hg)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromium(Cr VI)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Sum of PBBs/ PBDEs	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Monobromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromobiphenyl	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Monobromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tribromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Tetrabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Pentabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Heptabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Octabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Nonabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Decabromodiphenyl ether	mg/kg	/	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Hexabromocyclododecane (HBCDD)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Bis-(2-ethylhexyl) Phthalate (DEHP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzylbutyl Phthalate (BBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Dibutyl Phthalate (DBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Di-isobutyl phthalate (DIBP)	mg/kg	1000	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Sample Description:

- 1 Capacitor
- 2 High frequency chip inductor
- 3 XTAL SMD
- 4 Chip inductor
- 5 Multi-protocol Bluetooth Low Energy
- 6 ANT and 2.4GHz proprietary system-on-chip



Notes:

1mg/kg=1ppm = 0.0001%

N.D. = Not Detected (<MDL)

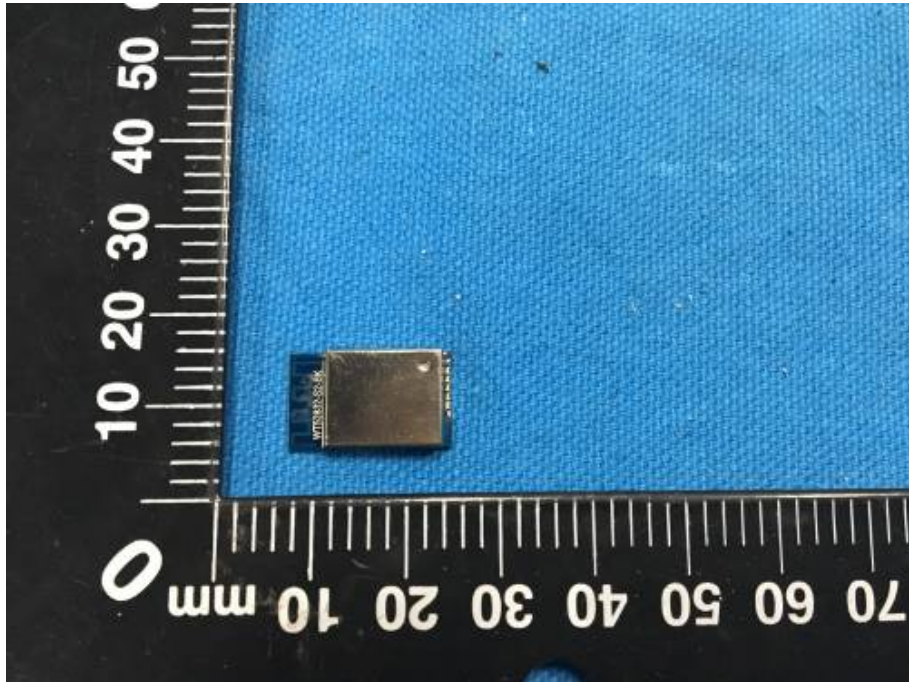
MDL = Method Detection Limit

/=Not Regulated

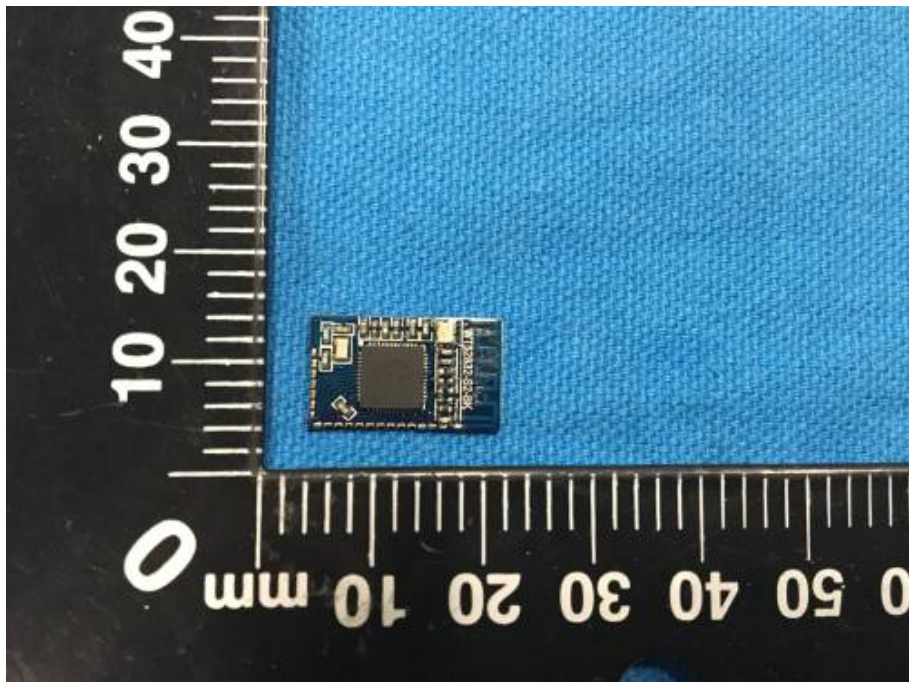
---=Not Applicable

Breakdown of product

Sample photo: 1



Sample photo: 2





Sample photo: 3

