



# TEST REPORT

**Applicant:** ShenZhen XinDaXing Electric Technology Co., Ltd.  
**Address:** 5th Floor, C2 Building, Hengfeng Industrial park, No.739, Zhoushi Road, Hezhou Community, Hangcheng Street, Baoan District, Shenzhen  
**Manufacturer:** ShenZhen XinDaXing Electric Technology Co., Ltd.  
**Address:** 5th Floor, C2 Building, Hengfeng Industrial park, No.739, Zhoushi Road, Hezhou Community, Hangcheng Street, Baoan District, Shenzhen  
**Product Name:** PCBA  
**Trade Mark:** N/A  
**Model Number:** 1UP0901087  
**Date of Receipt:** Nov. 14, 2024  
**Date of Test:** Nov. 14, 2024 - Nov. 18, 2024  
**Date of Report:** Nov. 28, 2024  
**Test Requested:** With reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU.  
**Test Standard:** Please refer to next page(s).  
**Test Results:** Please refer to next page(s).

## Conclusion:

As requested by applicant, the submitted sample was tested which is listed as specimen description in the following page. the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

**Prepared (Engineer):** Shely Mo

**Approved (Manager):** Xiaoshan Ni



*This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.*

address:

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Tel: 400-688-3552 Web: [www.dl-cert.com](http://www.dl-cert.com) Email: [service@dl-cert.com](mailto:service@dl-cert.com)



**Version**

Version No.	Date	Description
00	Nov. 28, 2024	Original

**Remark:**

- (1) There are the results on total Br while test items on restricted substances are PBBs and PBDEs. There are the results on total Cr while test items on restricted substances Cr(VI)
- (2) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg),UV-Vis (for Cr(VI) and GC-MS (for PBBs,PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013 (unit:mg/kg)

Element	Polymer Materials	Metal Materials	Composite Materials
Cd	$BL \leq 70-3\sigma < X < 130+3\sigma \leq OL$	$BL \leq 70-3\sigma < X < 130+3\sigma \leq OL$	$BL \leq 50-3\sigma < X < 150+3\sigma \leq OL$
Pb	$BL \leq 700-3\sigma < X < 1300+3\sigma \leq OL$	$BL \leq 700-3\sigma < X < 1300+3\sigma \leq OL$	$BL \leq 500-3\sigma < X < 1500+3\sigma \leq OL$
Hg	$BL \leq 700-3\sigma < X < 1300+3\sigma \leq OL$	$BL \leq 700-3\sigma < X < 1300+3\sigma \leq OL$	$BL \leq 500-3\sigma < X < 1500+3\sigma \leq OL$
Br	$BL \leq 300-3\sigma < X$	----	$BL \leq 250-3\sigma < X$
Cr	$BL \leq 700-3\sigma < X$	$BL \leq 700-3\sigma < X$	$BL \leq 500-3\sigma < X$

- (a) BL=Below Limit,OL=Over Limit, X=Inconclusive, LOD=Limit of Detection,----=Not regulated.
- (b)The XRF screening test for RoHS elements- the reading may be different to actual content in the sample be of non-uniformity composition
- (3) Chemical Method
  - ① With reference to IEC 62321-5:2013,determination of Cadmium,Lead by ICP-OES.
  - ② With reference to IEC 62321-4:2013+AMD1:2017 CSV, determination of Mercury by ICP-OES.
  - ③ With reference to IEC 62321-7-1:2015▼ & IEC 62321-7-2:2017, determination of Hexavalent Chromium by Colorimetric method using UV-Vis.
  - ④ With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.
  - ⑤ With reference to IEC 62321-8:2017, determination of Phthalates by GC-MS.

(4) (a) mg/kg=0.0001%,MDL=MDL=Method Detection Limit,(c)ND=Not Detected(<MDL),  
 ---=Not Regulated

(b) Unit and MDL in wet chemical test

Test Item	Pb	Cd	Hg	DBP	BBP	DEHP	DIBP
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MDL	10	10	10	100	100	100	100

The MDL for single compound of PBBs and PBDEs is 100 mg/kg  
 MDL of Cr(VI) for polymer and composite sample is 10 mg/kg  
 MDL of Cr(VI) for metal sample is 0.10ug/cm<sup>2</sup>

(c) ▼=Metal sample

- a. The sample is negative for Cr<sup>6+</sup> if Cr<sup>6+</sup> is N.D. (below the limit 0.10ug/cm<sup>2</sup>). The coating is considered a non Cr<sup>6+</sup> based coating.
- b. The sample positive for Cr<sup>6+</sup> if the Cr<sup>6+</sup> concentration is greater than 0.13ug/cm<sup>2</sup>. The sample coating is considered to contain Cr<sup>6+</sup>.
- c.The result between 0.10ug/cm<sup>2</sup> and 0.13ug/cm<sup>2</sup> is considered to be inconclusive unavoidable coating variations may influence the determination.

**Tested Sample/Part Description:**

Specimen No.	Component Description(s)	Style
A01	White plastic	-
A02	Silver metal pin	-
A03	Colored sticker	-
A04	Black plastic	-
A05	Silver metal	-
A06	IC	-
A07	Silver metal	-
A08	Black plastic	-
A09	Silver metal pin	-
A10	IC	-
A11	Orange plastic	-
A12	Silver metal (Android)	-
A13	IC	-
A14	Capacitive silver metal	-
A15	Black ceramic inductor	-
A16	Capacitive silver metal	-
A17	Green PCB	-
A18	Silver solder	-
A19	Silver metal	-
A20	Clear glass	-
A21	Yellow wiring	-



**Test Results:**

The results of XRF screening and chemical test (Unit: mg/kg)

Part No.	Element	X-ray Screening	Results of chemical test	Conclusion on RoHS EU	Sample Resubmitted
A01	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A02	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A03	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A04	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		



Part No.	Element	X-ray Screening	Results of chemical test	Conclusion on RoHS EU	Sample Resubmitted
A05	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A06	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A07	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A08	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		

address:

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Tel: 400-688-3552 Web:www.dl-cert.com Email: [service@dl-cert.com](mailto:service@dl-cert.com)



Part No.	Element	X-ray Screening	Results of chemical test	Conclusion on RoHS EU	Sample Resubmitted
A09	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A10	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A11	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A12	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		

address:

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Tel: 400-688-3552 Web:www.dl-cert.com Email: [service@dl-cert.com](mailto:service@dl-cert.com)



Part No.	Element	X-ray Screening	Results of chemical test	Conclusion on RoHS EU	Sample Resubmitted
A13	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A14	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A15	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A16	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		

address:

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

Tel: 400-688-3552 Web:www.dl-cert.com Email: [service@dl-cert.com](mailto:service@dl-cert.com)



Part No.	Element	X-ray Screening	Results of chemical test	Conclusion on RoHS EU	Sample Resubmitted
A17	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		
A18	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A19	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		
A20	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	---	---		
	PBDEs	---	---		
	DIBP	---	---		
	DBP	---	---		
	BBP	---	---		
	DEHP	---	---		

address:

101-201, Comprehensive Building, Tongzhou Electronics Longgang Factory Area, No.1 Baolong Fifth Road, Baolong Community, Baolong Street, Longgang District, Shenzhen, China

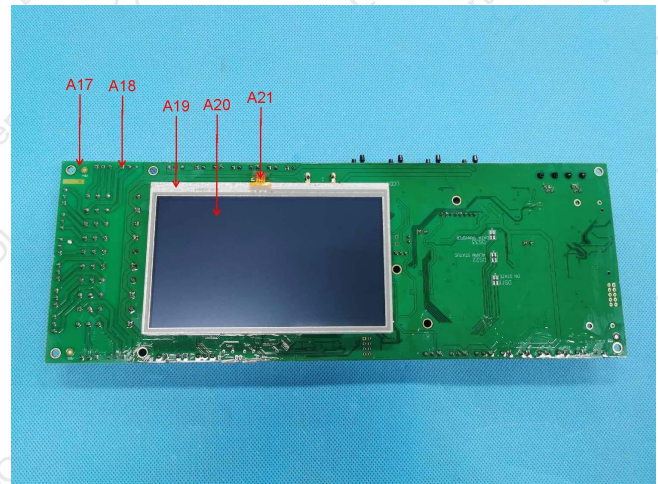
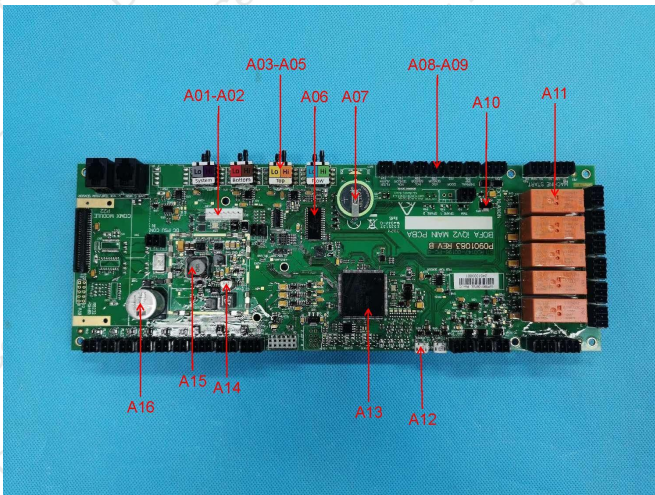
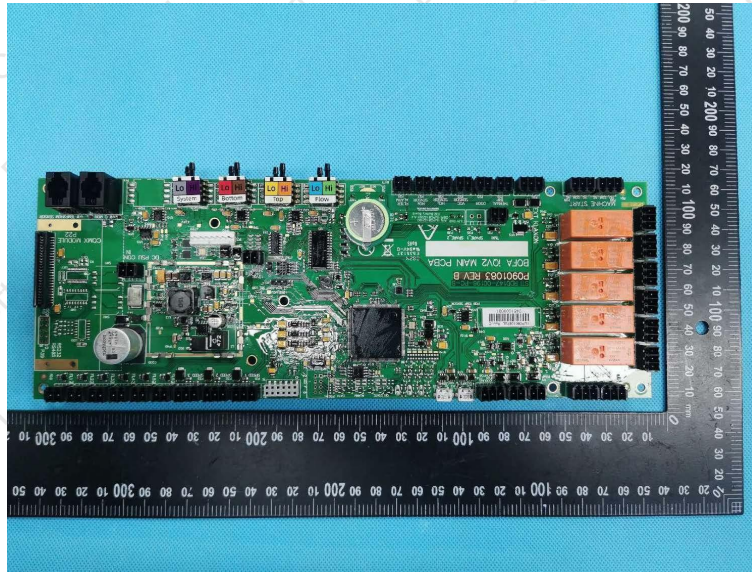
Tel: 400-688-3552 Web:www.dl-cert.com Email: [service@dl-cert.com](mailto:service@dl-cert.com)



Part No.	Element	X-ray Screening	Results of chemical test	Conclusion on RoHS EU	Sample Resubmitted
A21	Pb	BL	---	Pass	/
	Cd	BL	---		
	Hg	BL	---		
	Cr(Cr <sup>6+</sup> )	BL	---		
	PBBs	BL	---		
	PBDEs	BL	---		
	DIBP	---	N.D.		
	DBP	---	N.D.		
	BBP	---	N.D.		
	DEHP	---	N.D.		



Sample photo:



\*\*\*\*\* END OF REPORT \*\*\*\*\*