



TEST REPORT

Applicant: Dongguan YEHUO Technology Co, Ltd.

Address: Room 301, No.722, Dalingshan Section, Shida Road, Dalingshan Town, Dongguan City, Guangdong Province

Manufacturer: Dongguan YEHUO Technology Co, Ltd.

Address: Room 301, No.722, Dalingshan Section, Shida Road, Dalingshan Town, Dongguan City, Guangdong Province

Product Name: LubanCat

Trade Mark:  LubanCat®

Model Number: LubanCat 1

Series Model No.: LubanCat 1N, LubanCat 2, LubanCat 2N, LubanCat zero N, LubanCat zero W

Date of Receipt: Apr.21, 2023

Date of Test: Apr.21, 2023 - May.09, 2023

Date of Report: May.09, 2023

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 were tested, with 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): Cheney Wei

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.

**Version**

| Version No. | Date | Description |
|-------------|--------------|-------------|
| 00 | May.09, 2023 | 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/cm²

(c) ▼=Metal sample

- a. The sample is negative for Cr⁶⁺ if Cr⁶⁺ is N.D. (below the limit 0.10ug/cm²). The coating is considered a non Cr⁶⁺ based coating.
- b. The sample positive for Cr⁶⁺ if the Cr⁶⁺ concentration is greater than 0.13ug/cm². The sample coating is considered to contain Cr⁶⁺.
- c. The result between 0.10ug/cm² and 0.13ug/cm² is considered to be inconclusive unavoidable coating variations may influence the determination.

**Tested Sample/Part Description:**

| Specimen No. | Component Description(s) | Style |
|--------------|---------------------------------|-------|
| A01 | Silver metal (cable interface) | - |
| A02 | Black plastic (Cable connector) | - |
| A03 | Silver metal (USB port) | - |
| A04 | Black Plastic (USB port) | - |
| A05 | Blue Plastic (USB port) | - |
| A06 | Silver metal (USB port) | - |
| A07 | White Plastic (USB port) | - |
| A08 | White plastic | - |
| A09 | Black plastic | - |
| A10 | White plastic terminal | - |
| A11 | Silver Metal (TF Card) | - |
| A12 | Yellow plastic film | - |
| A13 | Silver metal | - |
| A14 | Black plastic | - |
| A15 | Yellow metal (HDMI port) | - |
| A16 | Silver metal (type head) | - |
| A17 | Blue plastic | - |
| A18 | Silver metal pin | - |
| A19 | Silver metal screw | - |
| A20 | Grey ceramic inductor | - |
| A21 | IC | - |
| A22 | IC | - |
| A23 | IC | - |
| A24 | Yellow metal | - |
| A25 | Silver metal | - |
| A26 | Silver metal (SIM Card) | - |
| A27 | Silver solder | - |
| A28 | Black PCB | - |

**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 ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A02 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A03 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | OL | N.D. | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A04 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A05 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A06 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A07 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |

address:

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| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| A08 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A09 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A10 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A11 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | OL | N.D. | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A12 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A13 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A14 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |



| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| A15 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A16 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | OL | N.D. | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A17 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | OL | N.D. | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A18 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A19 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A20 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A21 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |



| Part No. | Element | X-ray Screening | Results of chemical test | Conclusion on RoHS EU | Sample Resubmitted |
|----------|-----------------------|-----------------|--------------------------|-----------------------|--------------------|
| A22 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A23 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | BL | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |
| A24 | Pb | OL | *3.8x10 ⁴ | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A25 | Pb | OL | *2.8x10 ⁴ | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A26 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | OL | N.D. | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A27 | Pb | OL | N.D. | Pass | May.09, 2023 |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | --- | --- | | |
| | DBP,BBP,DEHP,DIBP | --- | --- | | |
| A28 | Pb | BL | --- | Pass | / |
| | Cd | BL | --- | | |
| | Hg | BL | --- | | |
| | Cr(Cr ⁶⁺) | BL | --- | | |
| | Br(PBBs&PBDEs) | OL | N.D. | | |
| | DBP,BBP,DEHP,DIBP | --- | N.D. | | |



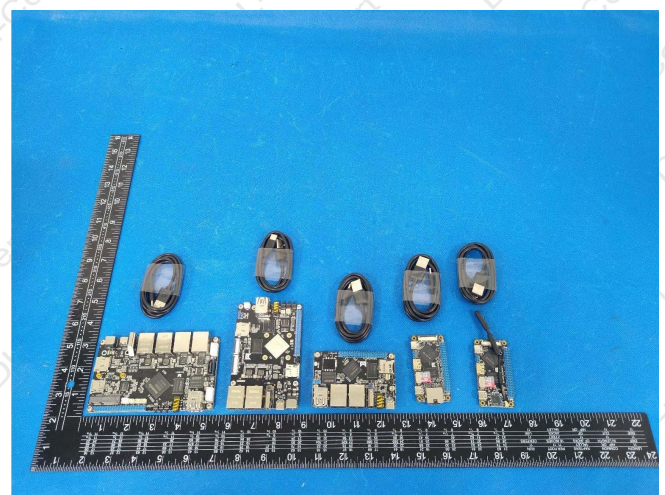
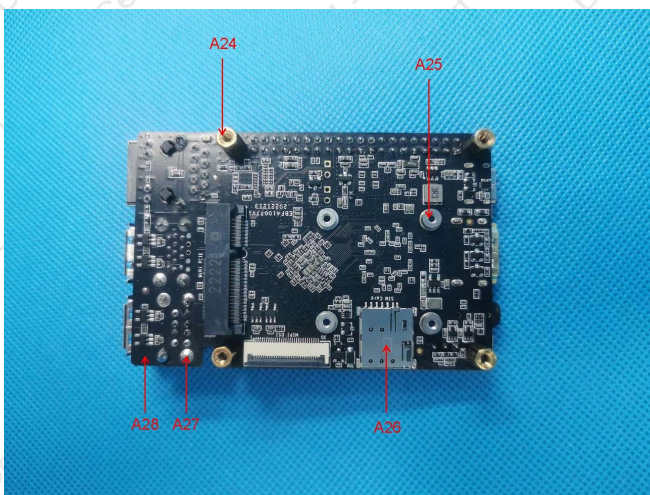
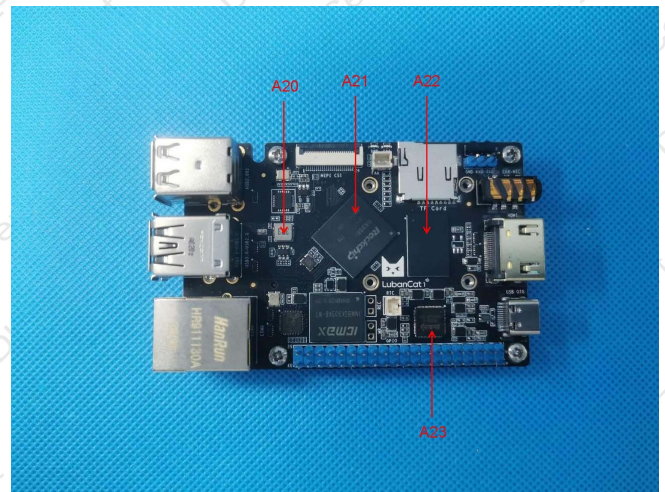
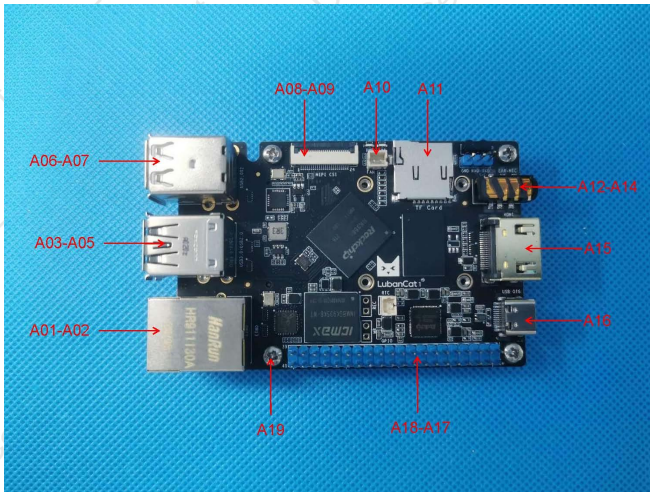
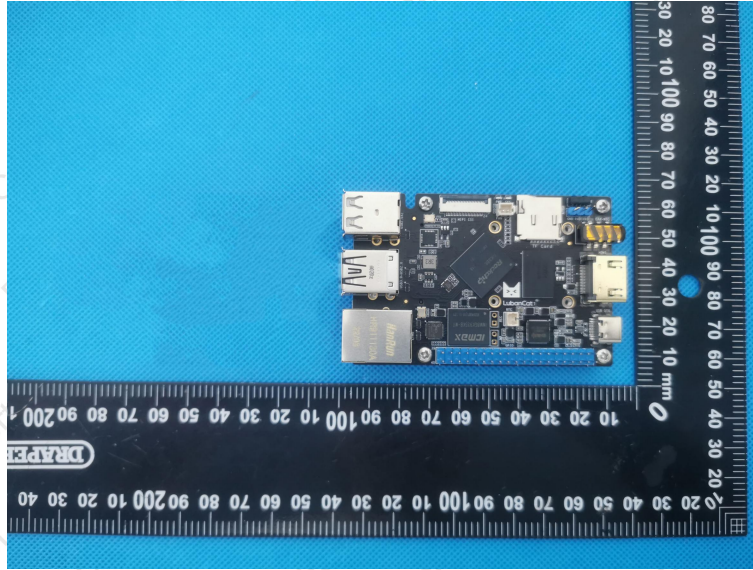
Remark:

(1) * = Copper alloy containing up to 4% lead by weight.

The item is exempted from the requirements of the item 6(c) in ANNEX III, (Directive 2011/65/EU).



EUT PHOTOGRAPHS



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