# Verification Report



## CENTRE TESTING INTERNATIONAL

| | |
|---|---|
| **Applicant** | COMPEX SYSTEMS PTE LTD |
| **Address** | NO:9 HARRISON ROAD, HARRISON INDUSTRIAL BUILDING, #05-01, SINGAPORE 369651 |
| **Product Name** | WIRELESS NETWORK MINI PCIE & PCI ADAPTER& WIRELESS ACCESS POINT |
| **Client Reference Information** | Please refer to page 3 |

**Conclusion**

| Tested Sample | According to directive | Result |
|---|---|---|
| Submitted Sample | RoHS Directive 2011/65/EU with amendment (EU) 2015/863 | Pass |

Pass means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment(EU) 2015/863.

Tested by Etham Reviewed by RanXiaoyan

Approved by Su Hongwei Date Jan. 5, 2017

Su Hongwei
Senior Laboratory Manager

No. R270339414

# Verification Report



## Report Content

# Verification Report



Sample Received Date Nov. 28, 2016
Testing Period Nov. 28, 2016 to Jan. 4, 2017

Client Reference Information
WP546,WP543,WPJ543,WPE72,WPJ72Z,WLM54AG,R52-350,WPJ344,WPJ344-A,WPJ558,WPJ558-A,WPJ342,WPJ342-A，WPE71-IS，WPE71-TS,WPJ559,WPJ557-A，WPJ557
WPJ531,WPJ531-A，WP531-VA,WPJ563，WPJ563-A，AP148,WPQ864,WPQ862,WPQ865，
WPQ865G ,WPQ869

WLM200NX,WLM200N2-26, WLM200N2,WLM200N5-23ESD, WLM200N5-23ESD-4.9，
WLM200N5-26ESD, WLM200N5-26ESD-4.9

WLE200NX,WLE200NX-I，WLE200N2,WLE200N2SM，
WLE200N2-23,WLE200N5-23ESD,WLE350NX,WLE351NX,WLE250NX,WLE251NX,WLE350N5-25,WLE250N5-25,WLE350N2-25,WLE250N2-25,WLE900V5-27ESD,WLE600V5-27ESD,WLE900VX,WLE900VX-I，WLE900VX-I-SWI，WLE900VX-4.9，WLE900VX-I-4.9
WLE600VX，WLE600VX-I，WLE600VX-4.9，WLE600VX-I-4.9

WLE1200V2,WLE1200V5,WLE1200V5-18,WLE1200V5-20，WLE1200V5-23,WLE1216V5-23，
WLE650V5-18，WLE650V5-18A，WLE650V5-18I
WLE650V5-23，WLE650V5-25，WLE350N5-20J, WLE1216V5-20

WLE200-3G6，WLE250-900M，WLU200NX，WLU35，WLU201NX

POE 3AF 6A02 MODULE，PSE MODULE-5980-6A02，PSE-LTC4274A-6A01，PSE-LTC4274A-6A02，
POE-LT4276B-6C01，POE-LT4276B-6C02，POE-MAX5974A-6B01，POE-MAX5974A-6B02

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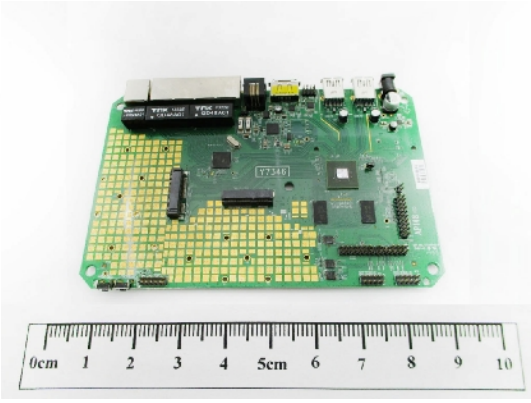
**Test Requested**

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 IEC 62321-3-1:2013 Ed.1.0, 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.
3.As specified by client, to mitxed test Phthalates (Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP), Diisobutyl phthalate(DIBP)) in the submitted samples by risk analysis, When the mixed test results are larger than the mixed test limits, the materials of the project are tested separately.

**Photo(s) of the Product(s)**

**WIRELESS NETWORK MINI PCIE & PCI ADAPTER& WIRELESS ACCESS POINT**

**Test Method**

**A. Screening limits for regulated elements according to IEC 62321-3-1:2013 Ed.1.0(Unit: mg/kg)**

| Element | Polymers | Metals | Composite material |
|---|---|---|---|
| Pb | BL≤(700-3σ) <X <(1300+3σ) ≤OL | BL≤(700-3σ) <X <(1300+3σ) ≤OL | BL≤(500-3σ)<X <(1500+3σ) ≤OL |
| Cd | BL≤(70-3σ)<X <(130+3σ) ≤OL | BL≤(70-3σ)<X <(130+3σ) ≤OL | LOD<X<(150+3σ) ≤OL |
| Hg | BL≤(700-3σ)<X <(1300+3σ) ≤OL | BL≤(700-3σ)<X <(1300+3σ) ≤OL | BL≤(500-3σ)<X <(1500+3σ) ≤OL |
| Cr | BL≤(700-3σ)< X | BL≤(700-3σ)< X | BL≤(500-3σ)< X |
| Br | BL≤(300-3σ)< X | N/A | BL≤(250-3σ)< X |

**B. Mixed test limits for Phthalates**

| Test Item(s) | Mixed test limits(Unit: mg/kg) |
|---|---|
| Dibutyl phthalate(DBP) | $X \geq (1000-U_{95})/N$ |
| Benzylbutyl phthalate(BBP) | $X \geq (1000-U_{95})/N$ |
| Di-2-ethylhexyl phthalate(DEHP) | $X \geq (1000-U_{95})/N$ |
| Diisobutyl phthalate(DIBP) | $X \geq (1000-U_{95})/N$ |

**C. Chemical Test**

| Tested Item(s) | Test Method | Measured Equipment(s) | MDL | Limit |
|---|---|---|---|---|
| Lead (Pb) | IEC 62321-5:2013 Ed.1.0 | ICP-OES | 10 mg/kg | 1000 mg/kg |
| | Refer to IEC 62321-5:2013 Ed.1.0 | ICP-OES | 10 mg/kg | |
| Cadmium (Cd) | IEC 62321-5:2013 Ed.1.0 | ICP-OES | 10 mg/kg | 100 mg/kg |
| | Refer to IEC 62321-5:2013 Ed.1.0 | ICP-OES | 10 mg/kg | |
| Mercury (Hg) | IEC 62321-4:2013 Ed.1.0 | ICP-OES | 10 mg/kg | 1000 mg/kg |
| | Refer to IEC 62321-4:2013 Ed.1.0 | ICP-OES | 10 mg/kg | |
| Hexavalent Chromium (Cr(VI)) | IEC 62321:2008 Ed.1 Annex C | UV-Vis | 10 mg/kg | 1000 mg/kg |
| | IEC 62321-7-1:2015 | UV-Vis | 0.10μg/cm$^2$ (LOQ) | |
| Polybrominated Biphenyls (PBBs) | IEC 62321-6:2015 | GC-MS | 100 mg/kg | 1000 mg/kg |
| Polybrominated Diphenyl Ethers (PBDEs) | IEC 62321-6:2015 | GC-MS | 100 mg/kg | 1000 mg/kg |
| Phthalates (DBP, BBP, DEHP, DIBP) | Refer to IEC 62321-8 CDV | GC-MS | 50 mg/kg | 1000 mg/kg for each |

**Remark:**

- BL = Under the XRF 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
- LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 μg/cm$^2$
- $U_{95}$ = The uncertainty of the test item is 95%
- N = Sample number of mixed test

# Verification Report



**Test Result(s)**

| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 1.1 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 1.2 | White label with black printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.3 | PCB | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 1.4 | Yellow electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.5 | White electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.6 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.7 | Grey electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 1.8 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.9 | Grey electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.10 | White electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.11 | Grey electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.12 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.13 | White electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.14 | Blue electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

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| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 1.15 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.16 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.17 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.18 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.19 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.20 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.21 | Silvery electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

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| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 1.22 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 1.23 | Silvery soldering tin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.1 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.2 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.3 | White label with black printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.4 | Metal with golden plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.5 | White plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

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| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 2.6 | Metal with golden plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.7 | PCB | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | IN | N.D. | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 2.8 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.9 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.10 | White electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.11 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.12 | Brown electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 2.13 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.14 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.15 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.16 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.17 | Brown electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.18 | White electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.19 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

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| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 2.20 | Silvery electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.21 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.22 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.23 | Silvery soldering tin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 2.24 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.25 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 2.26 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.1 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.2 | Metal with golden plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.3 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.4 | Metal with silvery/gold plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.5 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.6 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.7 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.8 | Metal with silvery/gold plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.9 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.10 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.11 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.12 | Metal with silvery/gold plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.13 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.14 | Metal with silvery/gold plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.15 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.16 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.17 | Metal with silvery/gold plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.18 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | IN | N.D.▼ | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.19 | Metal with silvery/gold plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.20 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.21 | White label with black printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.22 | White label with black printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.23 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.24 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.25 | Cupreous metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.26 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.27 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.28 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.29 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.30 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.31 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.32 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.33 | Metal with silvery plating | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.34 | Black plastic with white printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.35 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.36 | Black rubber | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.37 | Grey metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.38 | Light yellow electrolysis paper | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.39 | Grey metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.40.1 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.40.2 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.41 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.42 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.43 | Black rubber | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.44 | Grey metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.45 | Light yellow electrolysis paper | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.46 | Grey metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.47.1 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.47.2 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.48 | Black plastic with white printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.49.1 | Black resin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.49.2 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.50 | Green lacquered wire | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.51 | Blue lacquered wire | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.52 | Red lacquered wire | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.53 | Black plastic with white printing | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.54.1 | Black resin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.54.2 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.55 | Green lacquered wire | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.56 | Blue lacquered wire | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.57 | Red lacquered wire | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.58 | Black plastic | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.59 | Silvery metal | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.60 | PCB | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.61.1 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.61.2 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.62 | PCB | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | IN | N.D. | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.63 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.64 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.65 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.66 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.67 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.68 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.69 | Brown electronic component | Pb | BL | / | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | IN | N.D. | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.70 | Brown electronic component | Pb | BL | / | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | IN | N.D. | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.71 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.72 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.73 | Brown electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.74 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.75 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.76 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.77 | Black electronic component | Pb | OL | 30140# | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.78 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.79 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.80 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.81 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.82 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.83 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.84 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.85 | White electronic component | Pb | OL | N.D. | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.86 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.87 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.88 | Brown electronic component | Pb | BL | / | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | IN | N.D. | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.89 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.90 | White electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.91 | Silvery electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.92 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.93 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.94 | Black body | Pb | OL | N.D. | PASS | Nov. 28, 2016<br>Dec. 26, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | IN | N.D. | | |
| 3.95 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.96 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.97 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.98 | Light yellow electronic components | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.99 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.100 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.101 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.102 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.103 | Black electronic component | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.104 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.105 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |
| 3.106 | Black body | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | BL | / | | |
| 3.107 | Silvery metal pin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | XRF Screening Test | Chemical Test (mg/kg) | Conclusion | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|---|
| 3.108 | Silvery soldering tin | Pb | BL | / | PASS | Nov. 28, 2016 |
| | | Cd | BL | / | | |
| | | Hg | BL | / | | |
| | | Cr(Cr(VI)) | BL | / | | |
| | | Br(PBBs&PBDEs) | N/A | / | | |

**Mixed test results of Phthalates▲**

| Sample No. | Sample Description | Tested Item(s) | Test Result (mg/kg) | Conclusion▲ | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|
| 1.2+1.3 +1.4 | White label with black printing +PCB+Yellow electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 1.5+1.6 +1.7 | White electronic component +Black electronic component +Grey electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 1.8+1.1 4+1.15 | Black electronic component+Blue electronic component +Black electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 1.17+1. 19+1.20 | Light yellow electronic components +Black electronic component+Black electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 1.21+2. 5+2.7 | Silvery electronic component +White plastic +PCB | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 2.9+2.1 1+2.12 | Black electronic component+Black electronic component+Brown electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | Test Result (mg/kg) | Conclusion▲ | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|
| 2.15+2.18+2.19 | Black body +White electronic component +Black electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.1+3.34+3.36 | Black plastic +Black plastic with white printing +Black rubber | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.38+3.48+3.49.1 | Light yellow electrolysis paper +Black plastic with white printing +Black resin | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.50+3.51+3.52 | Green lacquered wire +Blue lacquered wire +Red lacquered wire | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.60+3.61.1+3.62 | PCB+Black electronic component+PCB | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.67+3.69+3.70 | Black body +Brown electronic component +Brown electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.71+3.73+3.77 | Black electronic component+Brown electronic component+Black electronic component | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.79+3.82+3.83 | Black body+Black electronic component+Black body | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |

# Verification Report



| Sample No. | Sample Description | Tested Item(s) | Test Result (mg/kg) | Conclusion▲ | Sample Received/ Resubmitted Date |
|---|---|---|---|---|---|
| 3.85+3.88+3.94 | White electronic component +Brown electronic component +Black body | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.97+3.99+3.101 | Black electronic component+Black electronic component+Black body | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |
| 3.104+3.106 | Black body+Black body | DBP | N.D. | PASS | Nov. 28, 2016 Dec. 26, 2016 |
| | | BBP | N.D. | PASS | |
| | | DEHP | N.D. | PASS | |
| | | DIBP | N.D. | PASS | |

-▲:As specified by client, the test of Phthalates (Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP), Diisobutyl phthalate(DIBP)) was conducted by mixing several samples together. The result(s) shown on this report may be different from the content of any homogeneous material.

**Remark:**

- N.D. = Not Detected (<MDL or LOQ)
- MDL = Method Detection Limit
- mg/kg = ppm = parts per million
- /=Not tested
- N/A= Not applicable
- IN= Uncertain, Further chemical test
- BL = Under the screening limit
- OL = Further chemical test will be conducted while the result is above the screening limit.
- ▼The sample is negative for Cr(VI) − The Cr(VI) concentration is below 0.10μg/cm$^2$. The coating is considered a non-Cr(VI) based coating.
- 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, lead mainly comes from the high melting temperat ure type solders.Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead) is exempted from the restriction, with reference to EU Directive 2011/65/EU annex III Exemption Applications 7(a).

According to the client's statement, The sample material reference information see table:

| Sample No. | Sample No. in Reference Report |
|---|---|
| 1.9 | 1.7 |
| 1.10 | 1.5 |
| 1.11 | 1.7 |
| 1.12 | 1.8 |
| 1.13 | 1.5 |
| 1.16 | 1.8 |
| 1.18 | 1.17 |
| 1.22 | 1.17 |
| 2.1 | 1.1 |
| 2.2 | 1.1 |
| 2.3 | 1.2 |
| 2.6 | 2.4 |
| 2.8 | 1.8 |
| 2.10 | 1.5 |
| 2.13 | 1.17 |
| 2.16 | 1.8 |
| 2.17 | 2.12 |
| 2.20 | 1.21 |
| 2.21 | 1.17 |
| 2.22 | 2.14 |
| 2.23 | 1.23 |
| 2.24 | 1.6 |
| 2.25 | 1.20 |
| 2.26 | 1.7 |
| 3.3 | 3.1 |
| 3.6 | 3.1 |
| 3.7 | 3.1 |
| 3.8 | 3.4 |
| 3.10 | 3.1 |
| 3.11 | 3.1 |
| 3.12 | 3.4 |
| 3.13 | 3.1 |
| 3.14 | 3.4 |
| 3.17 | 3.4 |
| 3.19 | 3.4 |
| 3.20 | 3.1 |

# Verification Report



| Sample No. | Sample No. in Reference Report |
|---|---|
| 3.21 | 1.2 |
| 3.22 | 1.2 |
| 3.24 | 3.1 |
| 3.26 | 3.1 |
| 3.28 | 3.16 |
| 3.29 | 3.1 |
| 3.30 | 3.1 |
| 3.31 | 3.16 |
| 3.32 | 3.16 |
| 3.33 | 3.16 |
| 3.41 | 3.1 |
| 3.43 | 3.36 |
| 3.44 | 3.37 |
| 3.45 | 3.38 |
| 3.46 | 3.39 |
| 3.47.1 | 3.40.1 |
| 3.47.2 | 3.40.2 |
| 3.53 | 3.48 |
| 3.54.1 | 3.49.1 |
| 3.54.2 | 3.49.2 |
| 3.55 | 3.50 |
| 3.56 | 3.51 |
| 3.57 | 3.52 |
| 3.58 | 3.1 |
| 3.61.2 | 1.17 |
| 3.63 | 1.17 |
| 3.64 | 1.8 |
| 3.66 | 1.17 |
| 3.68 | 2.14 |
| 3.72 | 1.8 |
| 3.74 | 1.8 |
| 3.75 | 1.8 |
| 3.76 | 1.8 |
| 3.78 | 1.17 |
| 3.80 | 2.14 |
| 3.81 | 1.17 |
| 3.84 | 2.14 |

# Verification Report



| Sample No. | Sample No. in Reference Report |
|---|---|
| 3.86 | 2.14 |
| 3.87 | 1.20 |
| 3.89 | 1.20 |
| 3.90 | 1.5 |
| 3.91 | 1.21 |
| 3.92 | 1.8 |
| 3.93 | 1.8 |
| 3.95 | 2.14 |
| 3.96 | 1.8 |
| 3.98 | 1.17 |
| 3.100 | 1.8 |
| 3.102 | 2.14 |
| 3.103 | 1.8 |
| 3.105 | 2.14 |
| 3.107 | 2.14 |
| 3.108 | 1.23 |

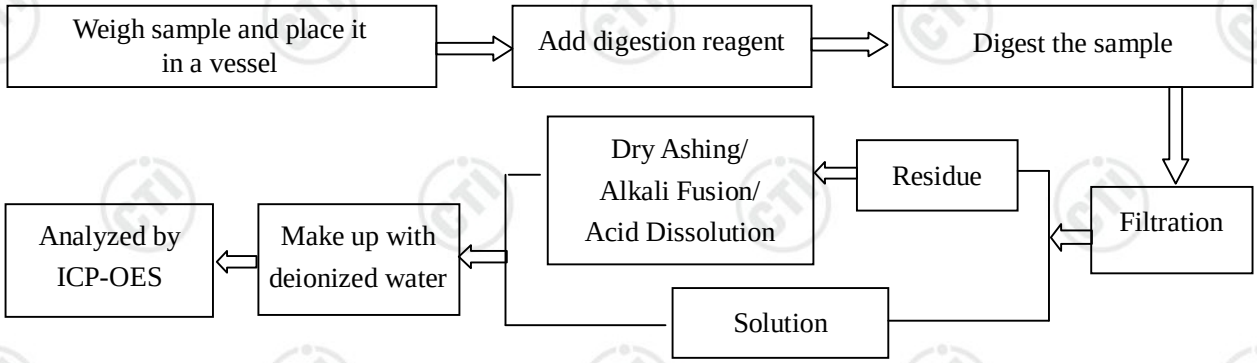
**Note:**

This testing report displaces the original report of No. ECL01I070650001, and the original one No. ECL01I070650001 was invalid since the date of this testing report released.

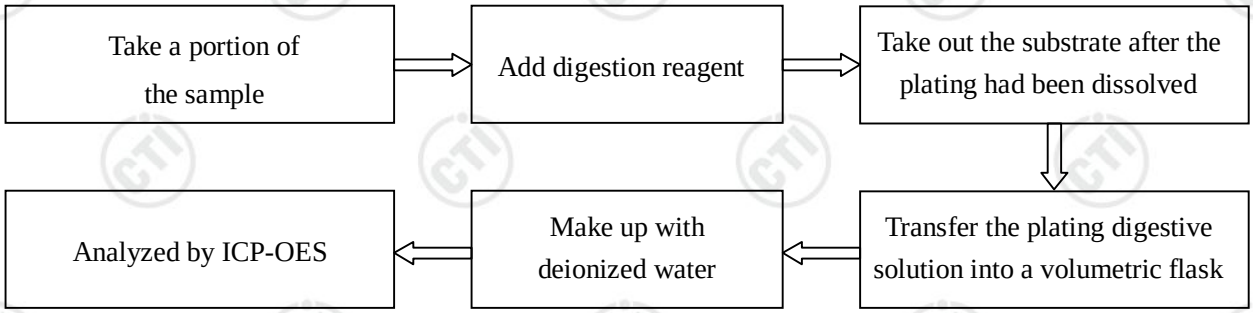
**Chemical Test Process**

**1. Lead (Pb), Cadmium (Cd)**

**1) IEC 62321-5:2013 Ed.1.0**

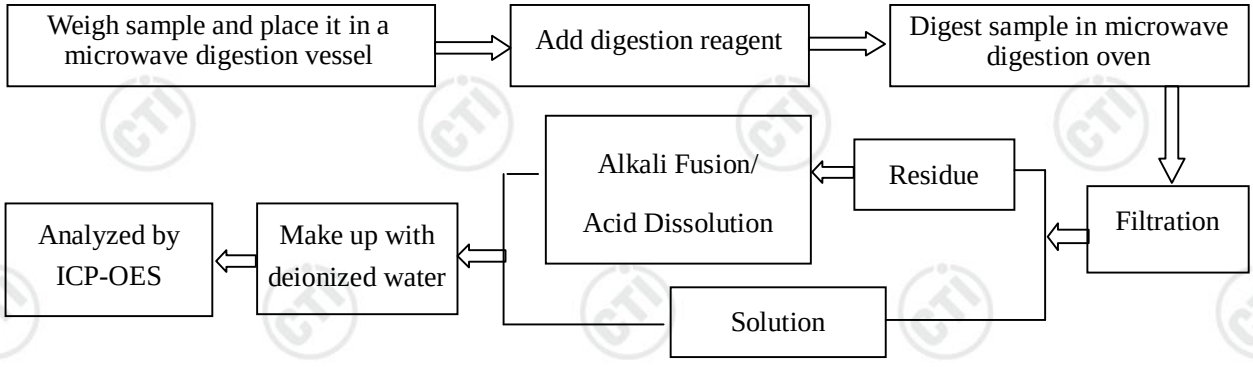



**2) Refer to IEC 62321-5:2013 Ed.1.0**

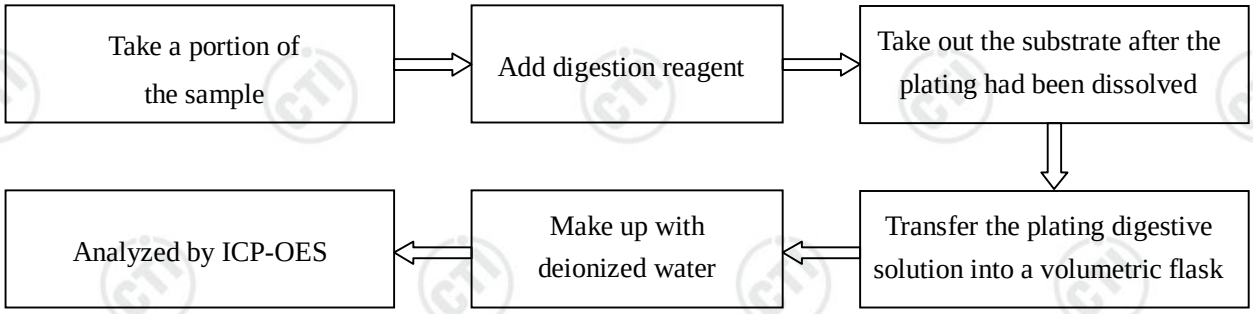



**2. Mercury (Hg)**

**1) IEC 62321-4:2013 Ed.1.0**

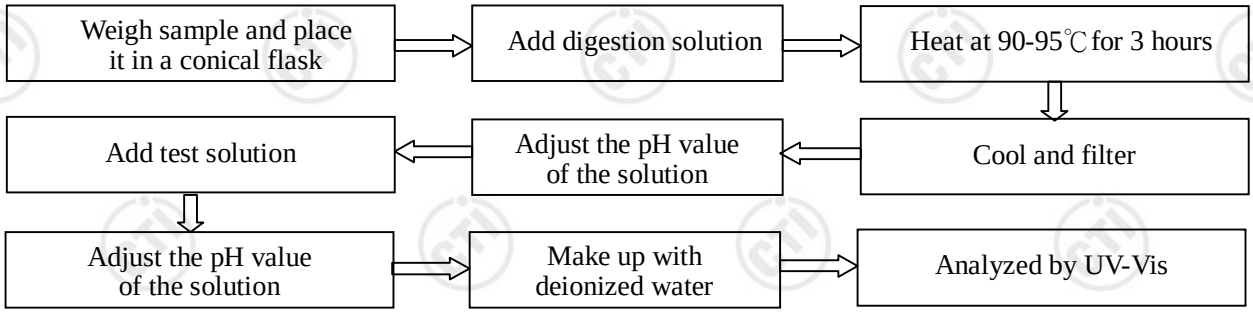


**2) Refer to IEC 62321-4:2013 Ed.1.0**

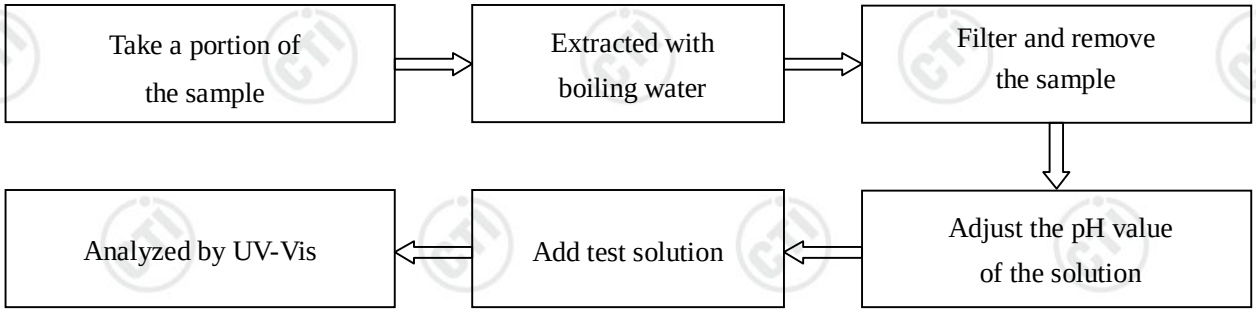



**3.Hexavalent Chromium (Cr(VI))**

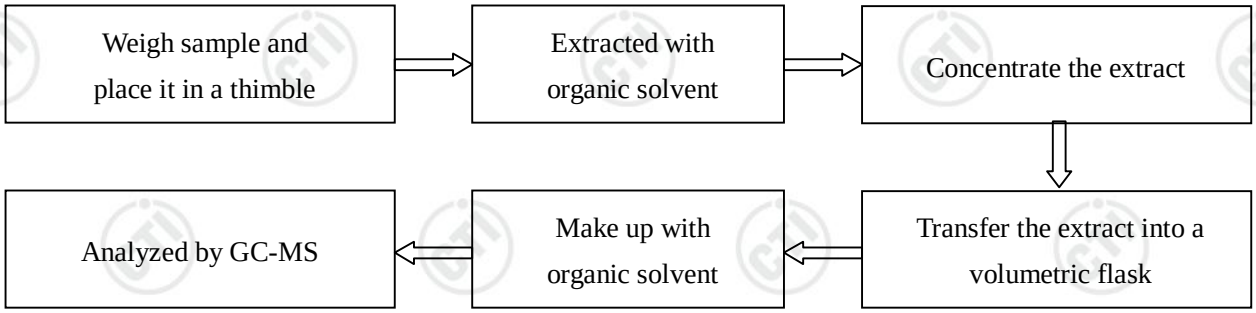
**1) Non-metal sample(s)**



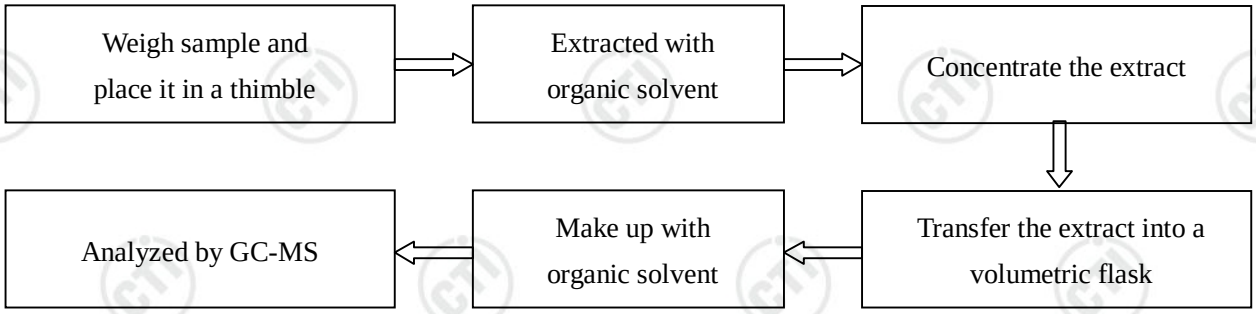

**2) Plating/Metal sample(s)**




**3. Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)**



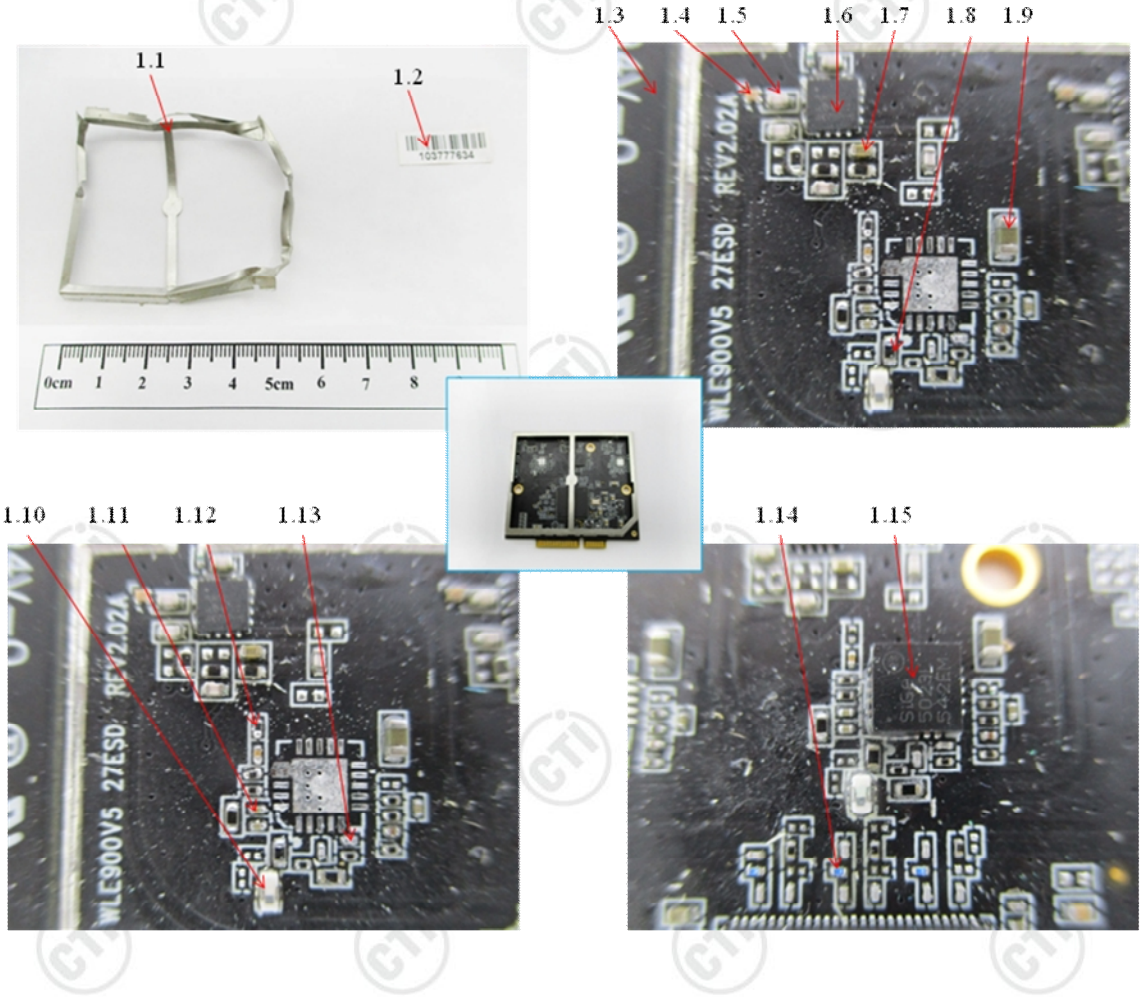
**4. Phthalates(DBP, BBP, DEHP, DIBP)**



# Verification Report

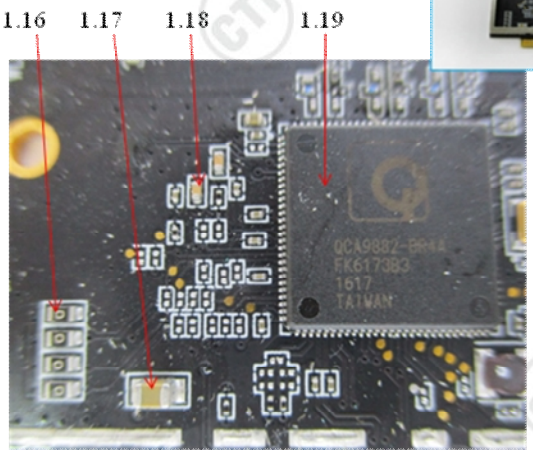


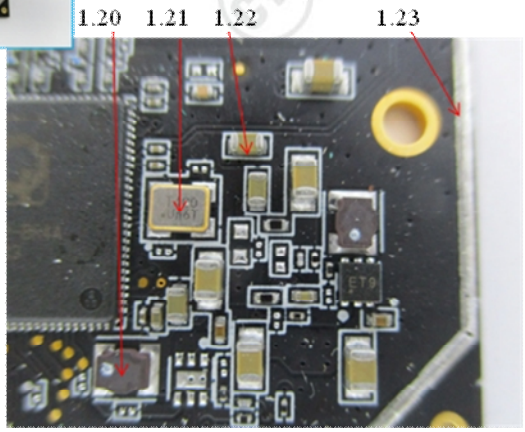
## Photo(s) of the tested component(s)

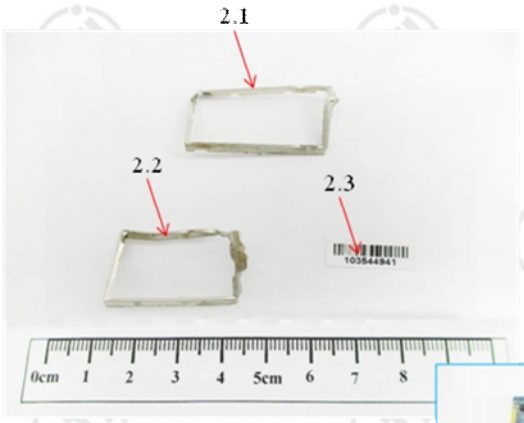


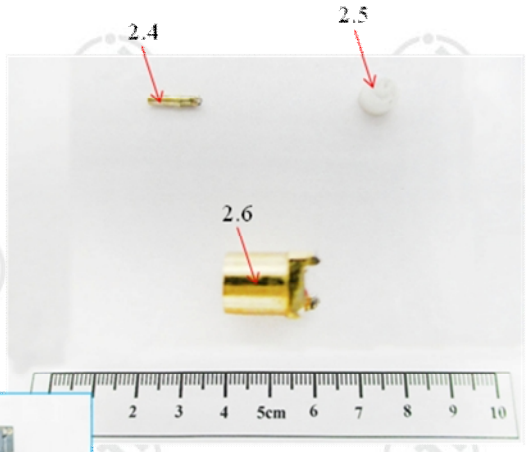
# Verification Report

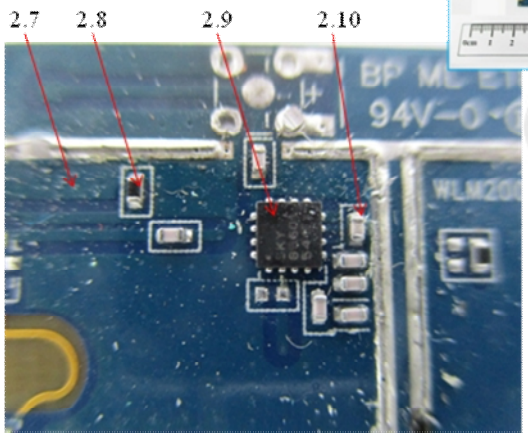


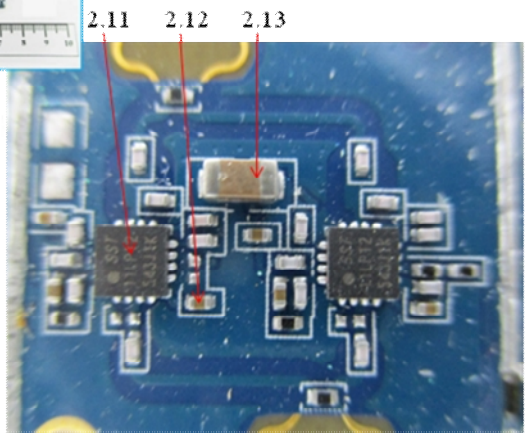


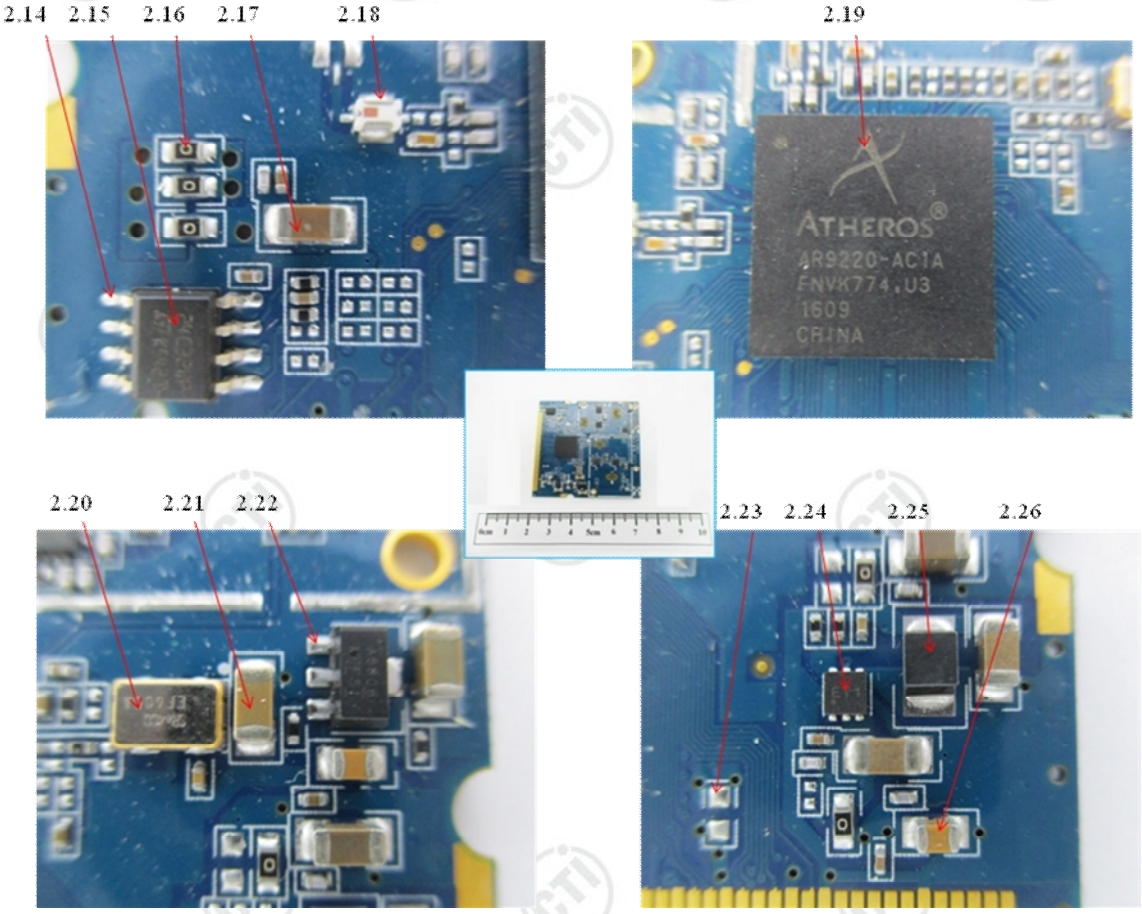

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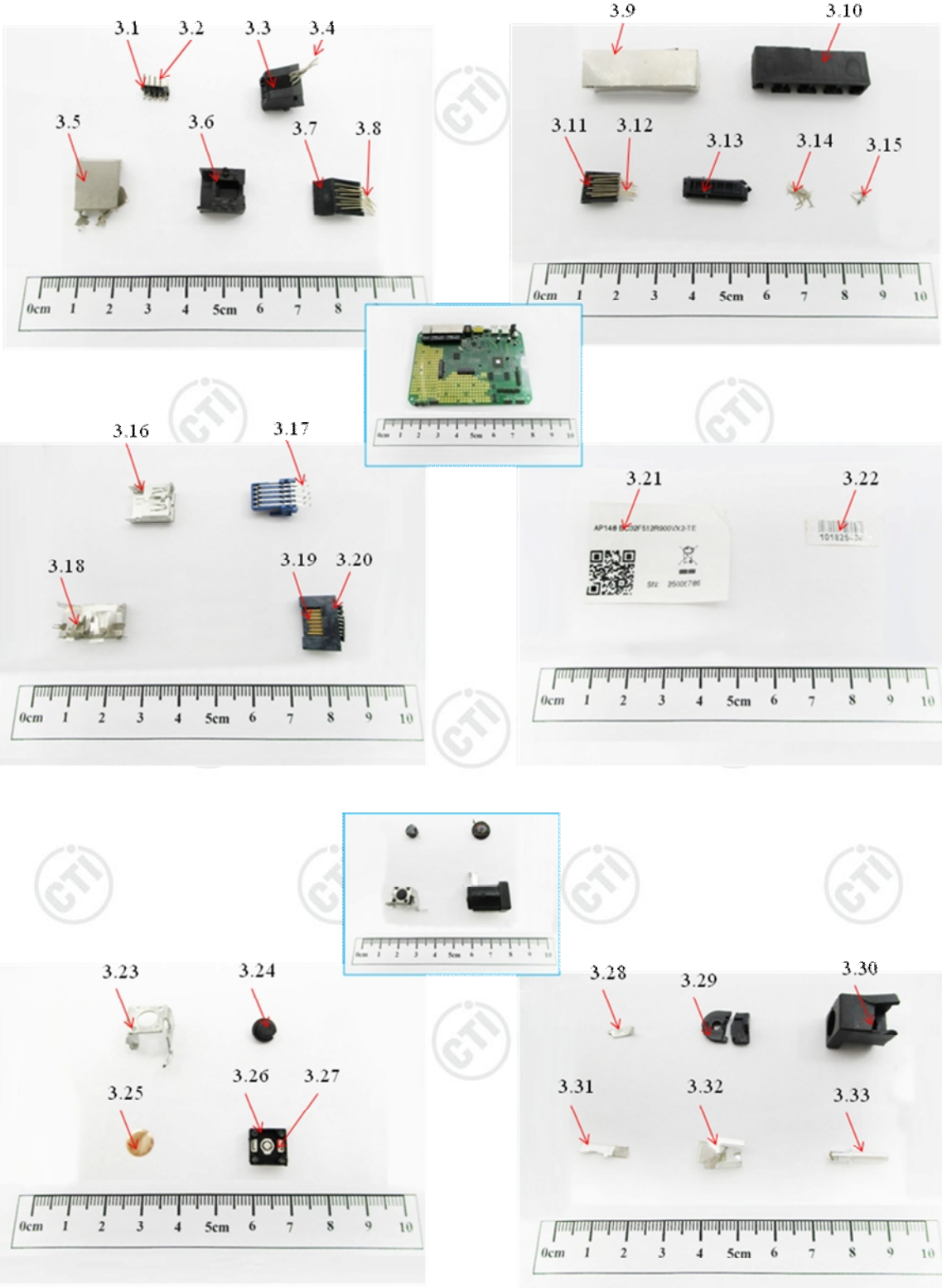
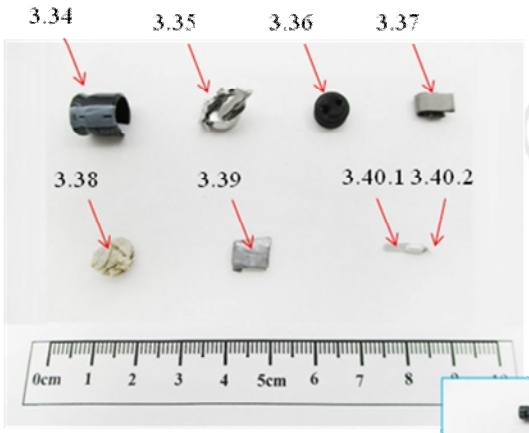
# Verification Report

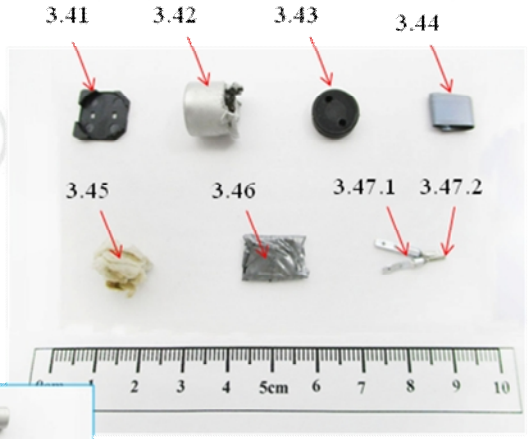


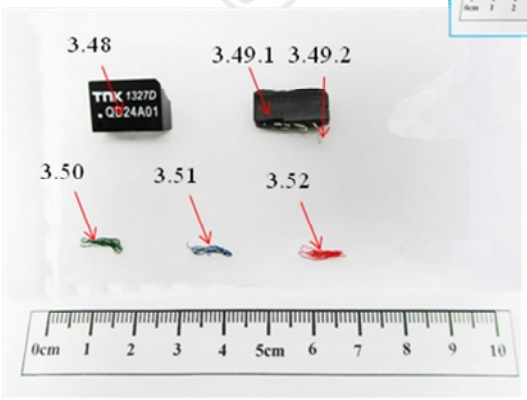


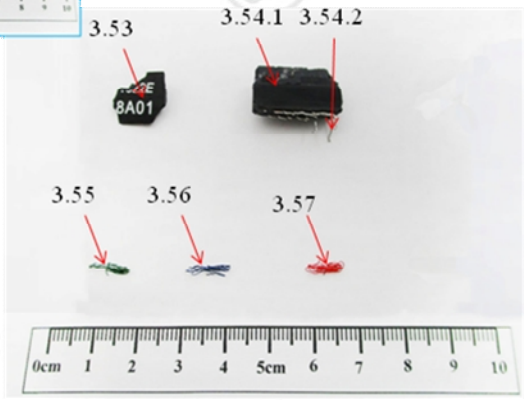
# Verification Report

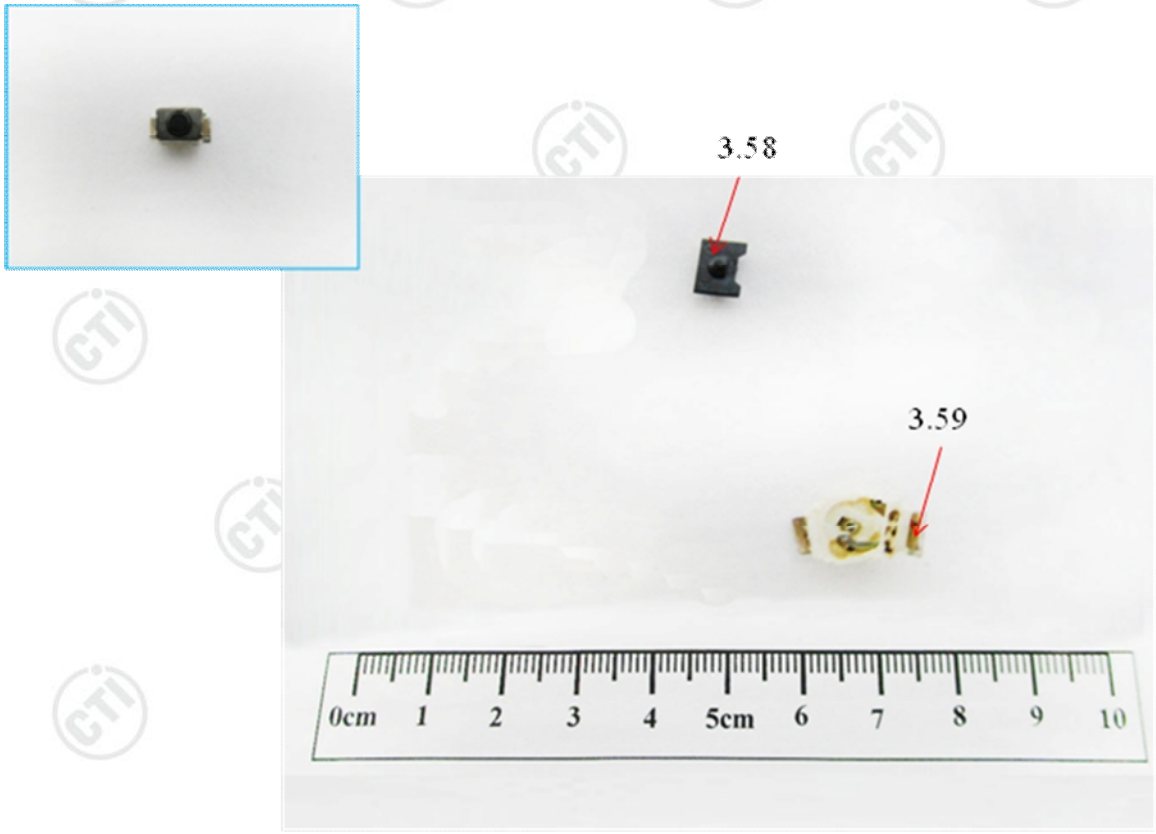


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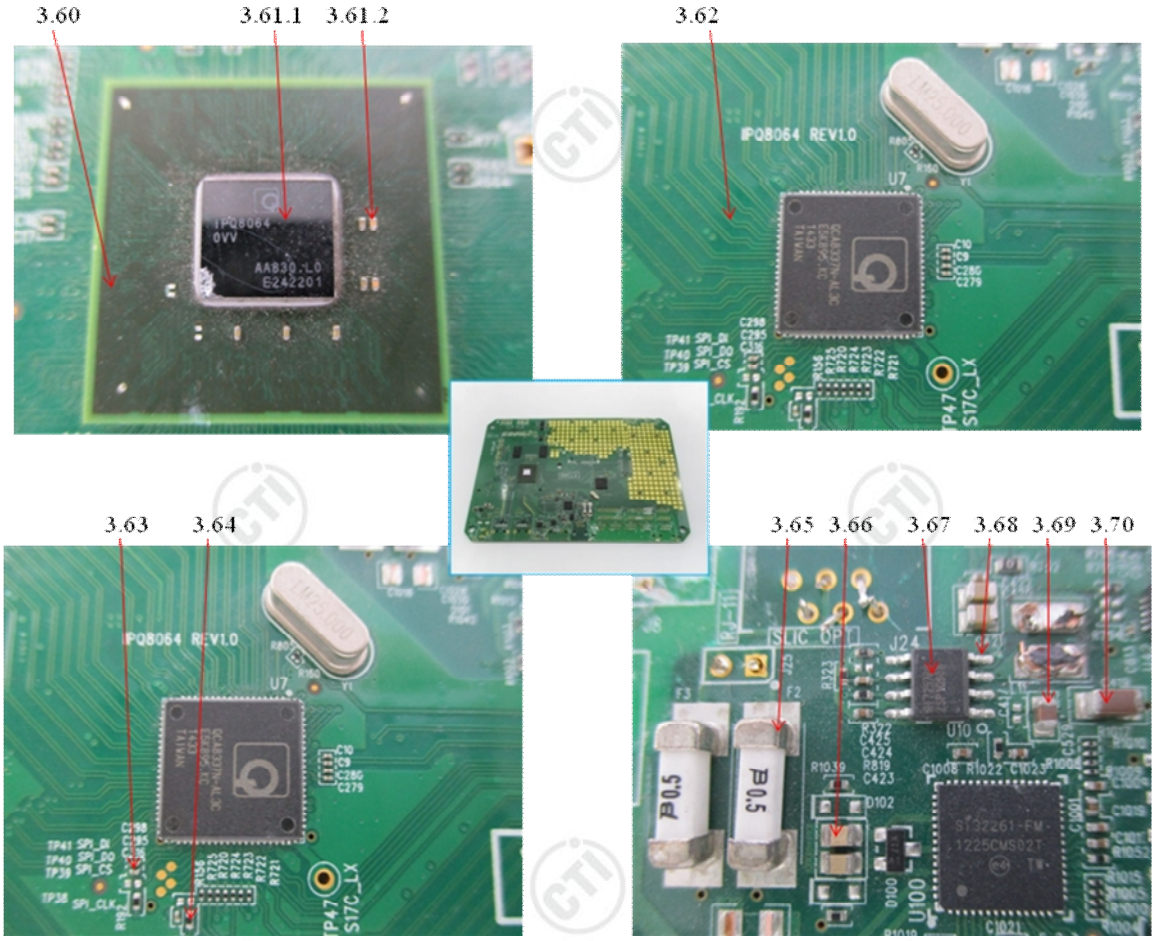
# Verification Report





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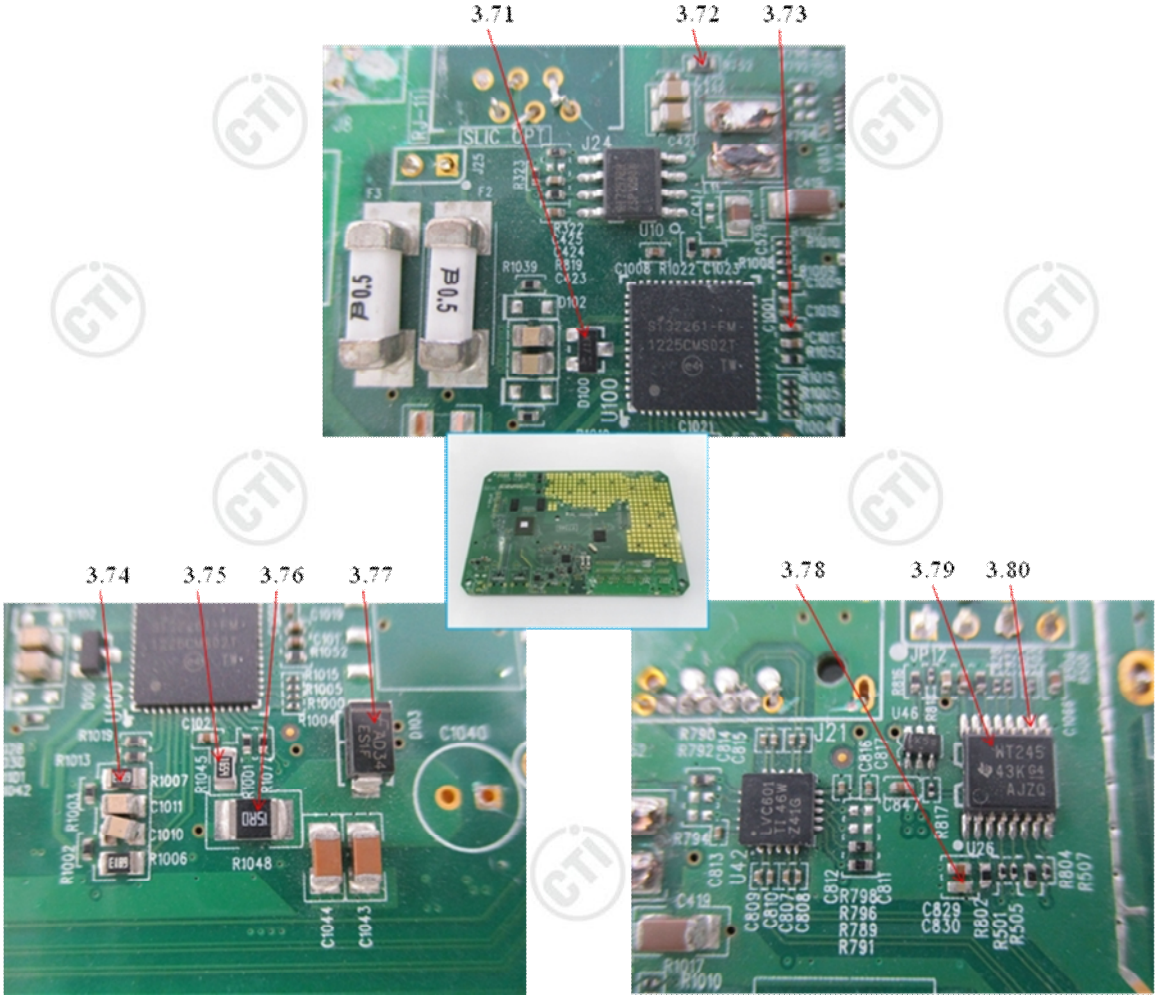
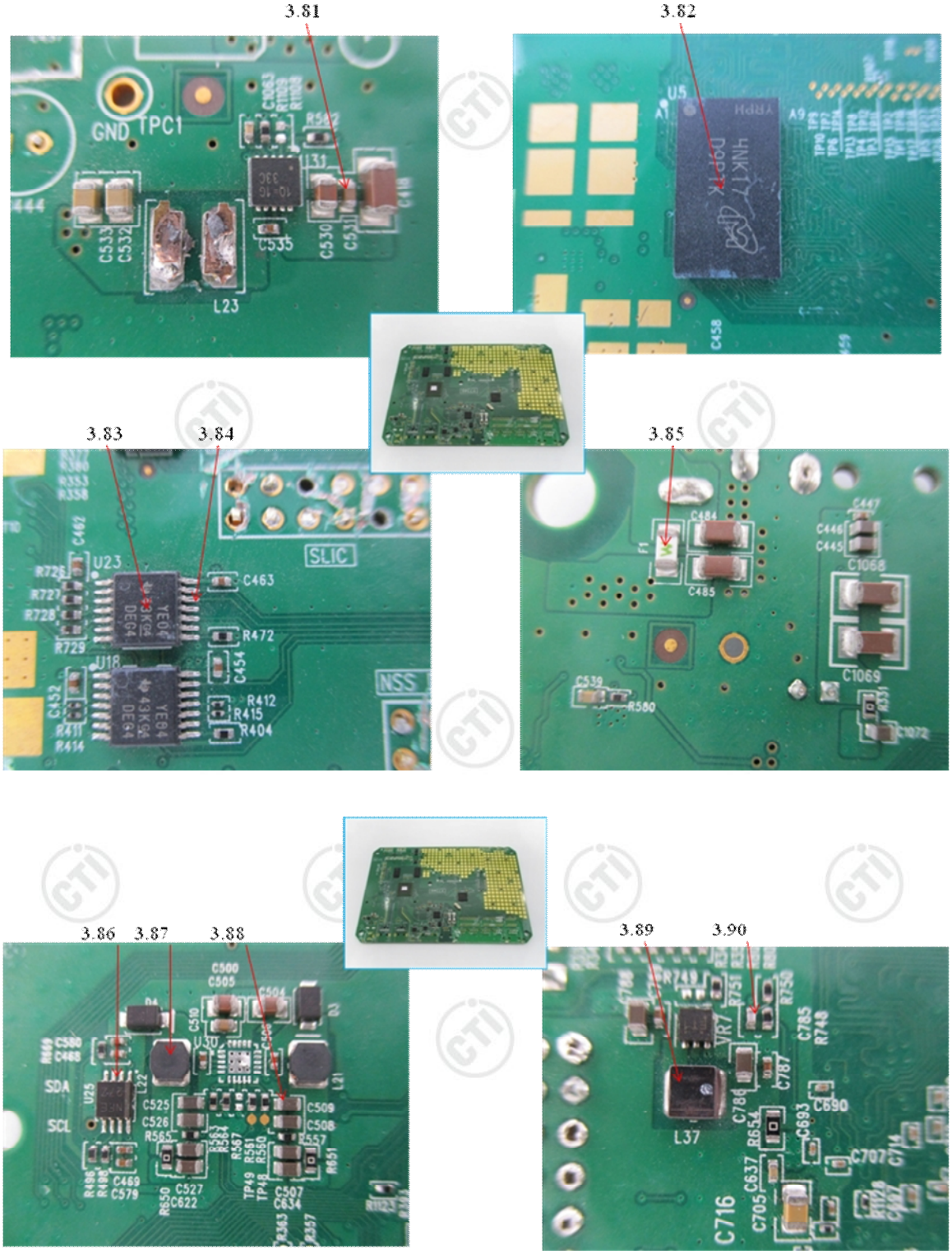


# Verification Report





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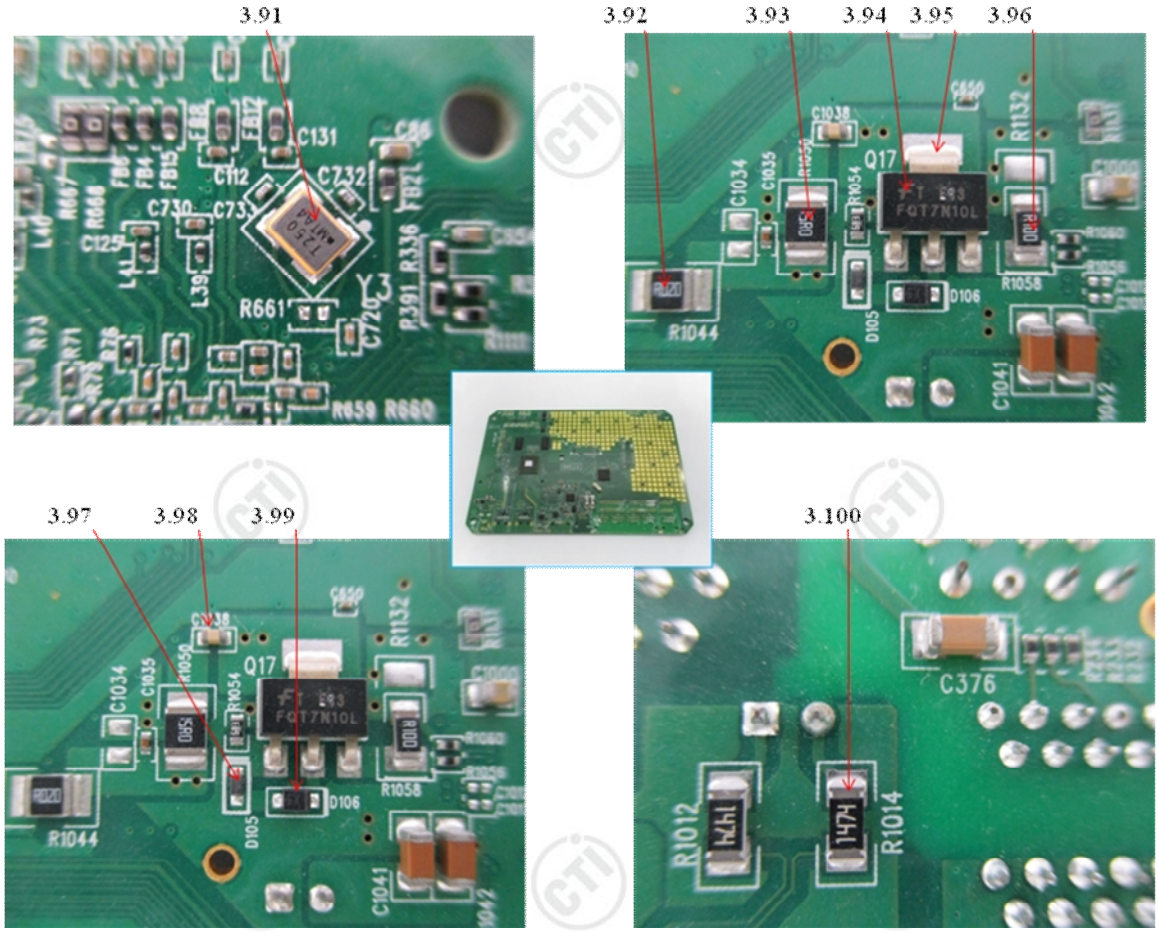

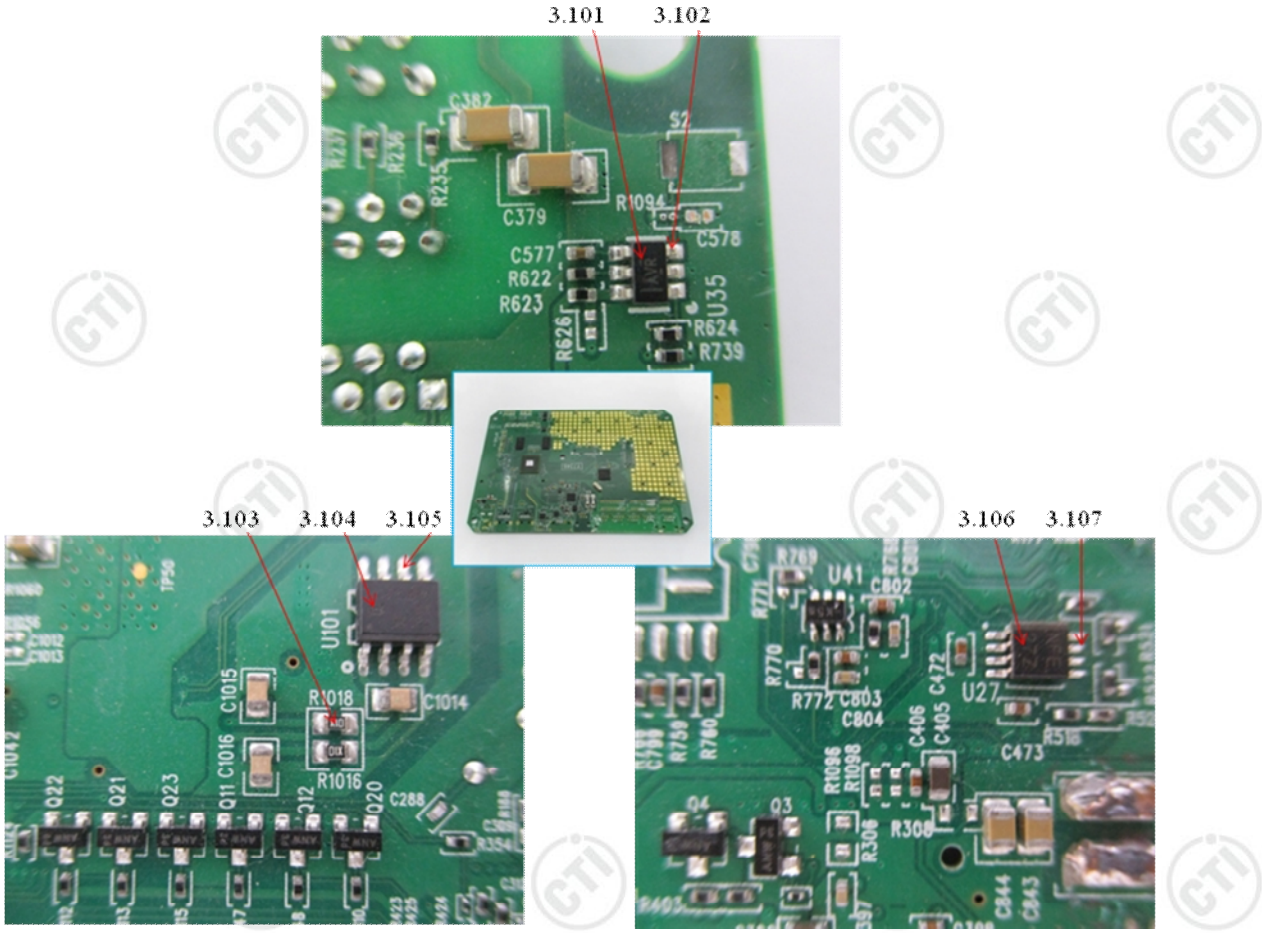
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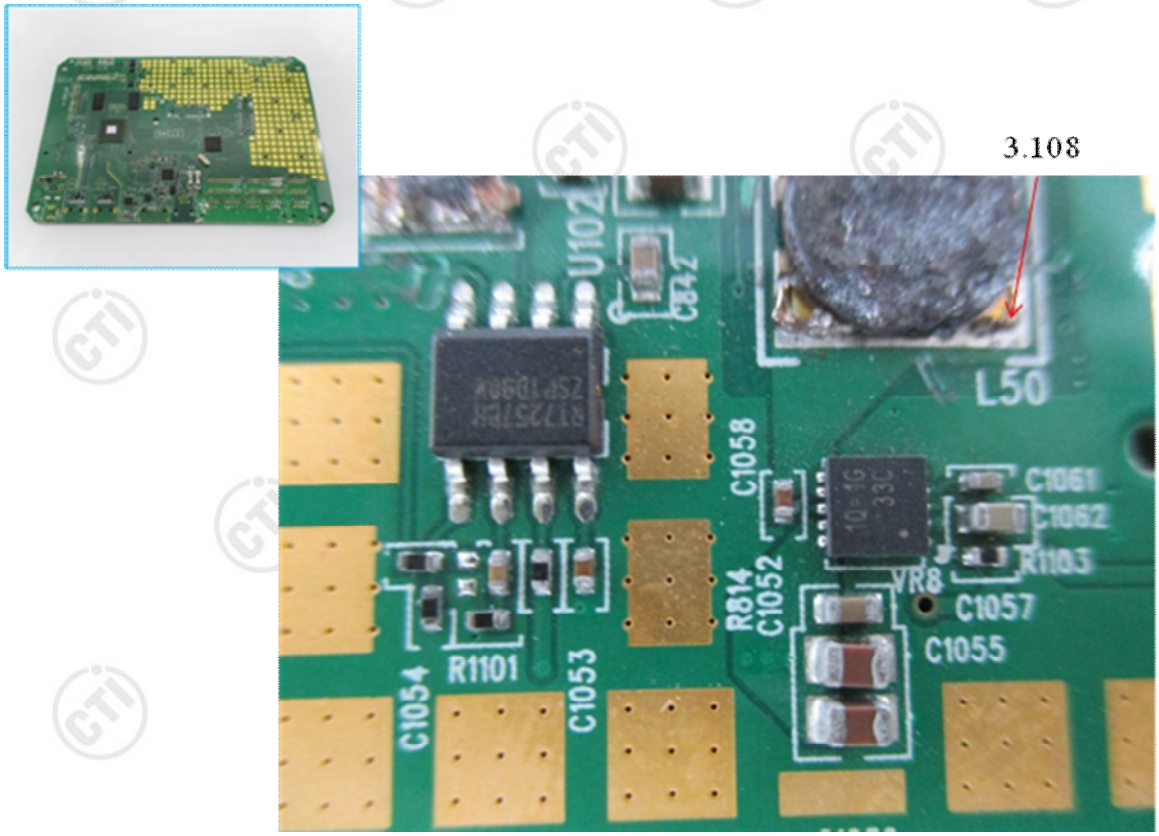
# Verification Report





## Exempted Items of RoHS Directive

In accordance with Directive 2011/65/EU as amended , there are 41 exemption items in Annex III of 2011/65/EU altogether.

| | Exemption | Scope and dates of applicability |
|---|---|---|
| 1 | Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): | |
| 1(a) | For general lighting purposes < 30 W: 5 mg | Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012. |
| 1(b) | For general lighting purposes ≥ 30 W and < 50 W: 5 mg | Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011. |
| 1(c) | For general lighting purposes ≥ 50 W and < 150 W: 5 mg | |
| 1(d) | For general lighting purposes ≥ 150 W: 15 mg | |
| 1(e) | For general lighting purposes with circular or square structural shape and tube diameter ≤17 mm | No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011. |
| 1(f) | For special purposes: 5 mg | |
| 1(g) | For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3,5 mg | Expires on 31 December 2017. |
| 2(a) | Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): | |
| 2(a)(1) | Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg | Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011. |
| 2(a)(2) | Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 5 mg | Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011. |
| 2(a)(3) | Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg | Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011. |
| 2(a)(4) | Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg | Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012. |
| 2(a)(5) | Tri-band phosphor with long lifetime (≥ 25 000 h): 8 mg | Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011. |
| 2(b) | Mercury in other fluorescent lamps not exceeding (per lamp): | |
| 2(b)(1) | Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg | Expires on 13 April 2012. |

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| 2(b)(2) | Non-linear halophosphate lamps (all diameters): 15 mg | Expires on 13 April 2016. |
| 2(b)(3) | Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9) | No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011. |
| 2(b)(4) | Lamps for other general lighting and special purposes (e.g. induction lamps). | No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011. |
| 3 | Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): | |
| 3(a) | Short length (≤500 mm) | No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011. |
| 3(b) | Medium length (> 500 mm and ≤ 1 500 mm) | No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011. |
| 3(c) | Long length (> 1500 mm) | No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011. |
| 4(a) | Mercury in other low pressure discharge lamps (per lamp). | No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011. |
| 4(b) | Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60: | |
| 4(b)-I | P ≤ 155 W | No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011. |
| 4(b)-II | 155 W < P≤405 W | No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011. |
| 4(b)-III | P > 405 W | No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011. |
| 4(c) | Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): | |
| 4(c)-I | P ≤ 155 W | No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011. |

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| 4(c)-II | 155 W < P ≤ 405 W | No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011. |
| 4(c)-III | P > 405 W | No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011. |
| 4(d) | Mercury in High Pressure Mercury (vapour) lamps (HPMV). | Expires on 13 April 2015. |
| 4(e) | Mercury in metal halide lamps (MH) | |
| 4(f) | Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex. | |
| 4(g) | Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows:<br>(a) 20 mg per electrode pair + 0,3 mg per tube length in cm ,but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20°C;<br>(b) 15 mg per electrode pair + 0,24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications. | Expires on 31 December 2018. |
| 5(a) | Lead in glass of cathode ray tubes. | |
| 5(b) | Lead in glass of fluorescent tubes not exceeding 0,2 % by weight. | |
| 6(a) | Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight. | |
| 6(b) | Lead as an alloying element in aluminium containing up to 0,4 % lead by weight. | |
| 6(c) | Copper alloy containing up to 4% lead by weight. | |
| 7(a) | Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead). | |
| 7(b) | Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications. | |

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| 7(c)-I | Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound. | |
| 7(c)-II | Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher. | |
| 7(c)-III | Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC. | Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013. |
| 7(c)-IV | Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors. | |
| 8(a) | Cadmium and its compounds in one shot pellet type thermal cut-offs. | Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012. |
| 8(b) | Cadmium and its compounds in electrical contacts. | |
| 9 | Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution. | |
| 9(b) | Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications. | |
| 11(a) | Lead used in C-press compliant pin connector systems. | May be used in spare parts for EEE placed on the market before 24 September 2010. |
| 11(b) | Lead used in other than C-press compliant pin connector systems. | Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013. |
| 12 | Lead as a coating material for the thermal conduction module C-ring. | May be used in spare parts for EEE placed on the market before 24 September 2010. |
| 13(a) | Lead in white glasses used for optical applications. | |
| 13(b) | Cadmium and lead in filter glasses and glasses used for reflectance standards. | |
| 14 | Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight. | Expires on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011. |

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| 15 | Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages. | |
| 16 | Lead in linear incandescent lamps with silicate coated tubes. | Expires on 1 September 2013. |
| 17 | Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications. | |
| 18(a) | Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ($(Sr,Ba)_2MgSi_2O_7$:Pb). | Expires on 1 January 2011. |
| 18(b) | Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP ($BaSi_2O_5$ :Pb). | |
| 19 | Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL). | Expires on 1 June 2011. |
| 20 | Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs). | Expires on 1 June 2011. |
| 21 | Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses. | |
| 23 | Lead in finishes of fine pitch components other than connectors with a pitch of 0, 65 mm and less. | May be used in spare parts for EEE placed on the market before 24 September 2010. |
| 24 | Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors. | |
| 25 | Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring. | |
| 26 | Lead oxide in the glass envelope of black light blue lamps. | Expires on 1 June 2011. |
| 27 | Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers. | Expired on 24 September 2010. |

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|---|---|---|
| 29 | Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC. | |
| 30 | Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more. | |
| 31 | Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting). | |
| 32 | Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes. | |
| 33 | Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers. | |
| 34 | Lead in cermet-based trimmer potentiometer elements. | |
| 36 | Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display. | Expired on 1 July 2010. |
| 37 | Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body. | |
| 38 | Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide. | |
| 39 | Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm 2 of light-emitting area) for use in solid state illumination or display systems. | Expires on 1 July 2014. |
| 40 | Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment. | Expires on 31 December 2013. |
| 41 | Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council. | Expires on 31 December 2018. |

# Verification Report



*** End of Report ***