

**Test Report**

Report No.: 161028002SZN-001

Issue date: Nov. 23, 2016

Applicant: **Kenxen Electronic (SZ) Limited**Building A13, Zone D. Minzhu western Industrial Area, Shajing Town. Baoan District.  
Shenzhen, Guangdong Province. ChinaFactory: **Kenxen Electronic (SZ) Limited****Sample Description:****Test item description.....: Scanner**

Model/Type reference No.....: T4R/W4R IRIScan™ Book 5/IRIScan™ Book 5 WIFI

Date of Sample Received.....: Oct. 28, 2016 &amp; Nov. 15, 2016

Testing Period .....: Oct. 28, 2016 to Nov. 02, 2016 &amp; Nov. 15, 2016 to Nov. 18, 2016

**Tests conducted:**

As requested by the applicant, refer to following page(s) for details.

**Conclusion:**

<u>Tested samples</u>	<u>Standard</u>	<u>Result</u>
Screened components of submitted sample	Screening by XRF spectroscopy and chemical confirmation test for RoHS Directive (2011/65/EU)	Pass

Authorized by:

For Intertek Testing Services

Shenzhen Ltd.



Navy Wang

Engineer

**Screening Test by XRF Spectroscopy:**

Cadmium (Cd), Lead (Pb), Mercury (Hg), Chromium (Cr) and Bromine (Br) content were measured with reference to IEC 62321-3-1 Edition 1.0: 2013 by XRF spectroscopy and chemical confirmation test for RoHS restricted substances.

**(A) Results:**

Screened Components	XRF Results		Chemical Confirmation Result
(1)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(2)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(3)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(4)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(5)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(6)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(7)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(8)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(9)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(10)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(11)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(12)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(13)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(14)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(15)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(16)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(17)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(18)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(19)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(20)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(21)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(22)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(23)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(24)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(25)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(26)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(27)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
(28)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(29)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(30)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(31)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(32)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(33)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(34)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
(35)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(36)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(37)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(38)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(39)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(40)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(41)	Cd	ND	Cr <sup>6+</sup> :ND(<1mg/kg)
	Pb	>1500mg/kg #	
	Hg	ND	
	Cr	Inconclusive	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(42)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(43)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(44)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(45)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
46(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
46(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(47)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
(48)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Detected	
(49)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(50)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(51)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(52)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(53)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(54)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(55)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(56)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(57)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(58)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(59)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(60)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
(61)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(62)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
63(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
63(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
63(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(64)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(65)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(66)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	

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Screened Components	XRF Results		Chemical Confirmation Result
(67)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(68)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(69)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(70)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(71)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(72)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(73)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(74)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(75)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(76)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(77)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(78)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(79)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(80)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(81)	Cd	ND	NT
	Pb	>1500mg/kg #	
	Hg	ND	
	Cr	ND	
	Br	ND	
(82)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(83)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(84)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(85)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(86)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(87)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
88(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
88(b)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
88(c)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
88(d)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
88(e)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
88(f)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(89)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
90(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
90(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
90(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
90(d)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
91(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
91(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
91(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
92(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
92(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
92(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
93(a)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
93(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
93(c)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
93(d)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
(94)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
95(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
95(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(96)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(97)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(98)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(99)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(100)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(101)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(102)	Cd	ND	NT
	Pb	>1500mg/kg #	
	Hg	ND	
	Cr	ND	
	Br	ND	
(103)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
104(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
104(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
104(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
104(d)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
105(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
105(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
105(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
105(d)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
106(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
106(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
107(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
107(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(108)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
109(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
109(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
109(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
110(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Detected	

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Screened Components	XRF Results		Chemical Confirmation Result
110(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
110(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
110(d)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(111)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(112)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(113)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(114)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(115)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(116)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(117)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(118)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
119(a)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
119(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
119(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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(120)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(121)	Cd	ND	Cr <sup>6+</sup> :Negative(<0.10µg/cm <sup>2</sup> )
	Pb	ND	
	Hg	ND	
	Cr	Inconclusive	
	Br	NT	
(122)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(123)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(124)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(125)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(126)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	

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Screened Components	XRF Results		Chemical Confirmation Result
127(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
127(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
127(c)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
128(a)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
128(b)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(129)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	
(130)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

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Screened Components	XRF Results		Chemical Confirmation Result
(131)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(132)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(133)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(134)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(135)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(136)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(137)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	

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Screened Components	XRF Results		Chemical Confirmation Result
(138)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(139)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(140)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	NT	
(141)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(142)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	
(143)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	Detected	
	Br	ND	
(144)	Cd	ND	PBBs: ND(<5mg/kg) PBDEs: ND(<5mg/kg)
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	Inconclusive	

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Screened Components	XRF Results		Chemical Confirmation Result
(145)	Cd	ND	NT
	Pb	ND	
	Hg	ND	
	Cr	ND	
	Br	ND	

- Detected = Below the lower screening limit of table (B) and pass
- ND = Not detected.
- NT = Not tested.
- Positive = A positive test result indicated the concentration of Cr(VI) is greater than threshold of  $0.13\mu\text{g}/\text{cm}^2$  for boiling-water-extraction procedures by visual comparison / by UV-VIS Spectrophotometer analysis. The sample coating is considered to contain Cr(VI).
- Negative = A negative test result indicated the concentration of Cr(VI) is less than threshold of  $0.10\mu\text{g}/\text{cm}^2$  for boiling-water-extraction procedures by UV-VIS Spectrophotometer analysis. The coating is considered a non-Cr(VI) based coating.
- Inconclusive = A inconclusive test result indicated the concentration of Cr(VI) is between  $0.10\mu\text{g}/\text{cm}^2$  and  $0.13\mu\text{g}/\text{cm}^2$  boiling-water-extraction procedures by UV-VIS Spectrophotometer analysis. Unavoidable coating variations may influence the determination.
- # = As claimed by the declaration submitted from the applicant, the Lead content of the component comes from the constituent of glass or ceramic (other than dielectric ceramic in capacitors) in electrical and electronic components only, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound. According to EU RoHS Directive (2011/65/EU), Lead in glass or ceramic of the component can be exempted.

**(B) XRF Screening Limits in mg/kg for Regulated Elements in Various Matrices:**

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	$P \leq 70 < X < 130 \leq F$	$P \leq 70 < X < 130 \leq F$	$P \leq 70 < X < 150 \leq F$
Pb	$P \leq 700 < X < 1300 \leq F$	$P \leq 700 < X < 1300 \leq F$	$P \leq 500 < X < 1500 \leq F$
Hg	$P \leq 700 < X < 1300 \leq F$	$P \leq 700 < X < 1300 \leq F$	$P \leq 500 < X < 1500 \leq F$
Cr	$P \leq 700 < X$	$P \leq 700 < X$	$P \leq 500 < X$
Br	$P \leq 300 < X$	Not applicable	$P \leq 250 < X$

**Remark:**

- P = Pass.
- X = Inconclusive result.
- **F = Fail**
- mg/kg = milligram per kilogram = ppm

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**(C) Estimated Detection Limits in mg/kg for Regulated Elements in Various Matrices:**

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	50	70	70
Pb	100	200	200
Hg	100	200	200
Cr	100	200	200
Br	200	Not applicable	200

**(D) Chemical Confirmation Test Methods:**

Testing Item	Testing Method	Reporting Limit
Chromium (VI) (Cr <sup>6+</sup> ) Content	With reference to IEC 62321 edition 1.0:2008, by alkaline digestion and determined by UV-VIS spectrophotometer	1 mg/kg
Chromium (VI) (Cr <sup>6+</sup> ) Content	With reference to IEC 62321-7-1 Edition 1.0:2015, by boiling water extraction and determined by UV-VIS Spectrophotometer	0.10µg/cm <sup>2</sup>
Polybrominated Biphenyls (PBBs) & Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321-6 edition 1.0:2015, by solvent extraction and determined by GC/MS and further HPLC confirmation when necessary	5 mg/kg

**(E) Requirement:**

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr <sup>6+</sup> )	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)
The above limits were quoted from 2011/65/EU for homogeneous material.	

**Screened Components:**

- (1) Transparent plastic sheet with white coating (control panel).
- (2) Bright black plastic with silver color coating (case).
- (3) Ivory plastic with silver color vacuum plated coating (button).
- (4) Black adhesive plastic with inaccessible orange/yellow coatings.
- (5) Black adhesive foam.
- (6) Transparent plastic.
- (7) Black plastic (case).

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**Screened Components (Cont'):**

- (8) Black plastic.
- (9) Black plastic sheet.
- (10) Black plastic.
- (11) Black treated metal (screw).
- (12) Black plastic.
- (13) Black plastic.
- (14) Black plastic (gear).
- (15) Black plastic (gear).
- (16) Black plastic (gear).
- (17) Black treated metal (screw).
- (18) White plastic (connector).
- (19) Silver color metal (terminal).
- (20) Black plastic with white printing (sleeving).
- (21) Grey plastic with black printing (external wire covering).
- (22) Red plastic (internal wire covering).
- (23) White plastic (internal wire covering).
- (24) Green plastic (internal wire covering).
- (25) Yellow plastic (internal wire covering).
- (26) Black plastic (internal wire covering).
- (27) Silver color metal wire.
- (28) Black plastic with white printing (internal wire covering).
- (29) Silver color metal wire.
- (30) Gold color metal (connector).
- (31) Black plastic (connector).
- (32) Gold color metal (pin of connector).
- (33) Grey plastic (external wire covering).
- (34) Dull silver color metal wire.
- (35) Transparent plastic (internal wire covering).
- (36) Bright silver color metal wire.
- (37) Solder.
- (38) Blue plastic (array wire).
- (39) White plastic with blue printing & silver color metal wire (array wire).
- (40) Semi-transparent black plastic.
- (41) White ceramic with black material & silver color metal & solder (SMD resistor).
- (42) Brown ceramic with silver color metal & solder (SMD capacitor).
- (43) Brown/grey ceramic with silver color metal & solder (SMD capacitor).
- (44) Brown FPC.
- (45) Copper color adhesive metal foil.
- (46) Connector.
  - (a) Black plastic.
  - (b) Silver color metal pin.

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**Screened Components (Cont'):**

- (47) Solder.
- (48) Black plastic.
- (49) Silver color metal.
- (50) White paper label with black coating (sticker).
- (51) Silver color metal (screw).
- (52) Brown ceramic with silver color metal & solder (SMD capacitor).
- (53) White ceramic with silver color metal & solder (SMD capacitor).
- (54) White ceramic with black material & silver color metal & solder (SMD resistor).
- (55) Dark silver color quartz with gold color material.
- (56) Conformal coating with green/black solder mask & copper color metal pad & fiberboard & solder (PCB).
- (57) Black plastic (gear).
- (58) Black soft plastic.
- (59) Black soft plastic.
- (60) Silver color metal.
- (61) White plastic.
- (62) Transparent plastic.
- (63) (a) White plastic.  
(b) Transparent plastic.  
(c) Silver color metal.
- (64) Semi-transparent double-side adhesive tape.
- (65) Black plastic.
- (66) White plastic.
- (67) White plastic sheet with black printing.
- (68) Black adhesive plastic tape.
- (69) Black/white adhesive plastic tape.
- (70) Semi-transparent plastic sheet.
- (71) Semi-transparent plastic sheet.
- (72) Silver color plastic sheet.
- (73) Semi-transparent grey adhesive plastic sheet.
- (74) Black glue.
- (75) Grey glass.
- (76) Transparent yellow adhesive plastic tape.
- (77) Brown FPC.
- (78) White plastic with silver color metal & solder (SMD LED).
- (79) Semi-transparent plastic sheet.
- (80) Black ceramic with silver color metal & solder.
- (81) Transparent glass with inaccessible orange/black material & silver color metal & solder (SMD diode).
- (82) Black plastic with beige printing & silver color metal & solder (SMD diode).
- (83) Black plastic with beige printing & silver color metal & solder (IC).
- (84) Black plastic with beige printing & silver color metal & solder (IC).

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**Screened Components (Cont'):**

- (85) Black plastic with beige printing & silver color metal & solder (SMD triode).
- (86) Black ceramic with silver color metal & solder.
- (87) Yellow ceramic with orange printing & silver color metal & solder (SMD capacitor).
- (88) Switch.
  - (a) White plastic (button).
  - (b) Silver color metal (cover).
  - (c) Bright silver color metal sheet.
  - (d) Black plastic (holder).
  - (e) Silver color metal (lead).
  - (f) Yellow adhesive plastic tape.
- (89) Beige plastic (button of switch).
- (90) Connector.
  - (a) Beige plastic.
  - (b) Dark grey plastic.
  - (c) Silver color metal.
  - (d) Silver color metal pin.
- (91) Connector.
  - (a) Beige plastic.
  - (b) Silver color metal.
  - (c) Silver color metal (lead).
- (92) Connector.
  - (a) Beige plastic.
  - (b) Silver color metal.
  - (c) Silver color metal (lead).
- (93) Connector.
  - (a) Silver color metal.
  - (b) Dark grey plastic.
  - (c) Silver color metal (lead).
  - (d) Gold color metal pin.
- (94) Silver color metal sheet.
- (95) Inductor.
  - (a) Dark grey magnet with black printing.
  - (b) Copper enamelled wire.
- (96) Black plastic with beige printing & silver color metal & solder (IC).
- (97) Black plastic with beige printing & silver color metal & solder (IC).
- (98) Black plastic with beige printing & silver color metal & solder (IC).
- (99) Black plastic with beige printing & silver color metal & solder (IC).
- (100) Black plastic with beige printing & silver color metal & solder (IC).
- (101) Grey/beige ceramic with beige printing & silver color metal & solder.
- (102) Grey ceramic with white printing & silver color metal & solder.
- (103) Silver color metal.

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**Screened Components (Cont'):**

- (104) Connector.
  - (a) Beige plastic.
  - (b) Dark grey plastic.
  - (c) Silver color metal.
  - (d) Silver color metal pin.
- (105) Connector.
  - (a) Silver color metal.
  - (b) Dark grey plastic.
  - (c) Silver color metal (lead).
  - (d) Silver color metal pin..
- (106) LED.
  - (a) Semi-transparent black/blue plastic.
  - (b) Silver color metal (lead).
- (107) LED.
  - (a) Transparent plastic.
  - (b) Silver color metal (lead).
- (108) Black plastic.
- (109) Inductor.
  - (a) Dark grey magnet with black printing.
  - (b) Black glue.
  - (c) Copper enamelled wire.
- (110) Inductor.
  - (a) Dark grey magnet with black printing.
  - (b) Dark grey magnet.
  - (c) Copper enamelled wire.
  - (d) Silver color metal (lead).
- (111) Dark grey magnet with copper enamelled wire (inductor).
- (112) Yellow ceramic with orange printing & silver color metal & solder (SMD capacitor).
- (113) Brown ceramic with silver color metal & solder (SMD capacitor).
- (114) Brown ceramic with silver color metal & solder (SMD capacitor).
- (115) White ceramic with black printing & silver color metal & solder (SMD resistor).
- (116) Black plastic with beige printing & silver color metal & solder (IC).
- (117) Black plastic with beige printing & silver color metal & solder (IC).
- (118) Silver/gold color metal & quartz & grey ceramic (SMD crystal).
- (119) Connector.
  - (a) Gold color metal.
  - (b) Gold color metal pin.
  - (c) Beige plastic.
- (120) Dark grey magnet with black printing copper enamelled wire (inductor).
- (121) Dark grey magnet with copper enamelled wire (inductor).
- (122) Black plastic (connector).

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**Screened Components (Cont'):**

- (123) Gold color metal pin (connector).
- (124) White paper label with black printing (sticker).
- (125) Conformal coating with blue solder mask & copper color metal pad & fiberboard & solder (PCB).
- (126) Conformal coating with green solder mask & copper color metal pad & fiberboard & solder (PCB).
- (127) Connector.
  - (a) Beige plastic.
  - (b) Silver color metal.
  - (c) Silver color metal pin.
- (128) Connector.
  - (a) Black plastic.
  - (b) Gold color metal pin.
- (129) Conformal coating with black solder mask & copper color metal pad & fiberboard & solder (PCB).
- (130) Blue plastic with black printing.
- (131) Blue adhesive plastic tape.
- (132) Beige adhesive paper.
- (133) Green adhesive paper.
- (134) Silver color metal sheet.
- (135) Silver color metal sheet.
- (136) White plastic (connector).
- (137) Silver color metal (terminal).
- (138) Black plastic (wire covering).
- (139) Red plastic with black printing (wire covering).
- (140) Silver color metal wire.
- (141) Black plastic with beige printing & silver color metal & solder (IC).
- (142) Brown ceramic with silver color metal & solder (SMD capacitor).
- (143) White ceramic with black printing & silver color metal & solder (SMD resistor).
- (144) Conformal coating with green solder mask & copper color metal pad & fiberboard & solder (PCB).
- (145) Black plastic with beige printing & silver color metal & solder (IC).

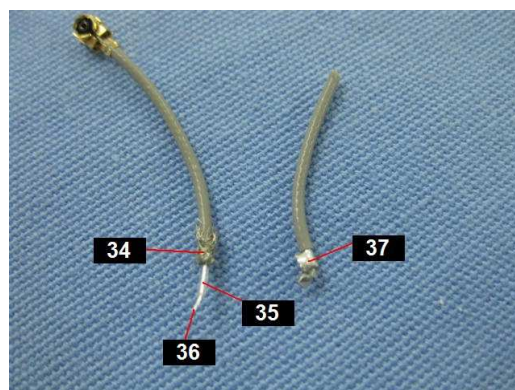
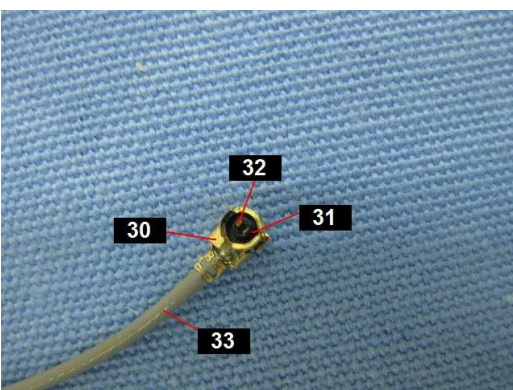
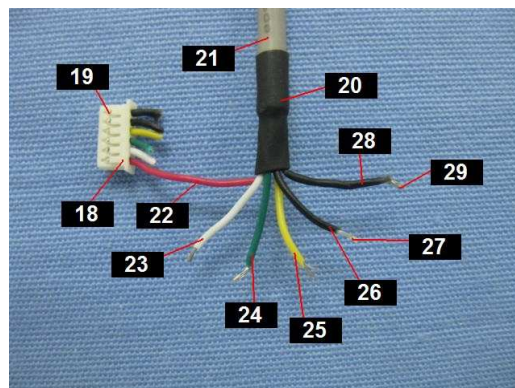
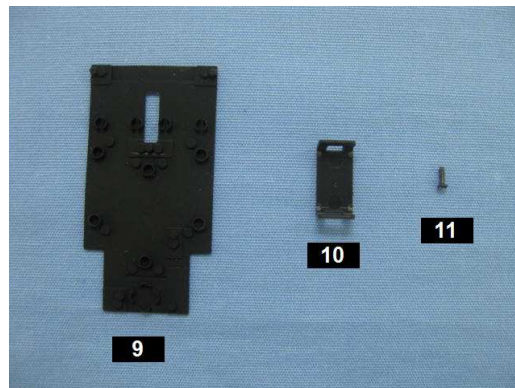
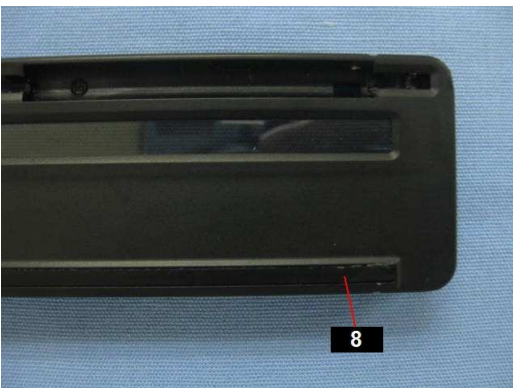
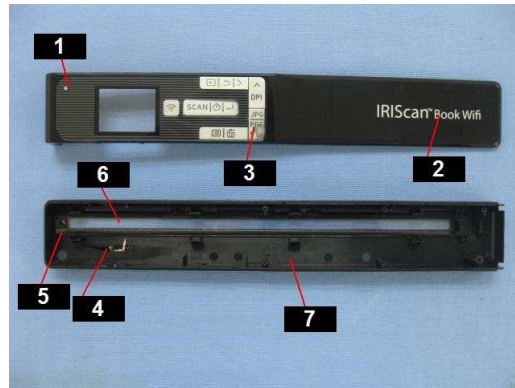
**Disclaimers:**

This XRF Screening and Chemical Confirmation Test Report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF Screening and Chemical Confirmation Test Report is sufficient for its/his/her purposes.

The results shown in this XRF Screening and Chemical Confirmation Test Report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis is required to obtain quantitative data.

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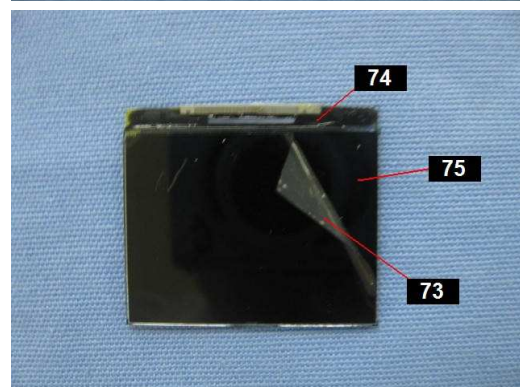
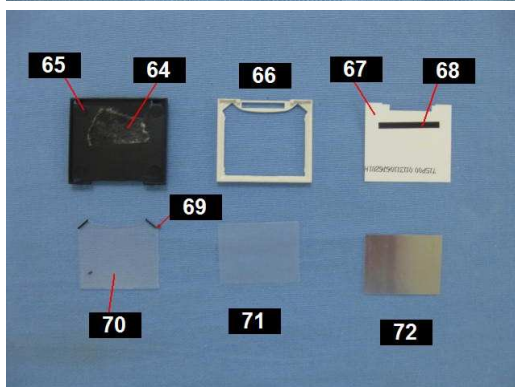
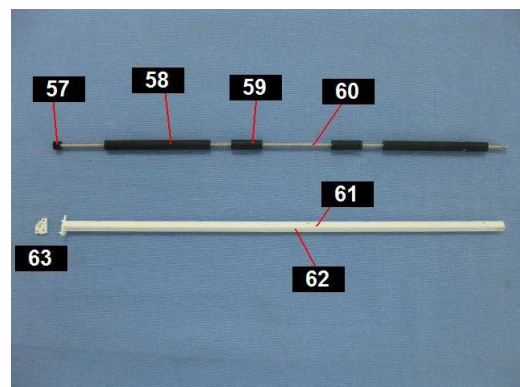
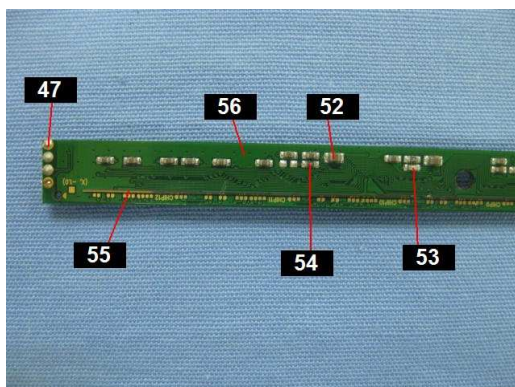
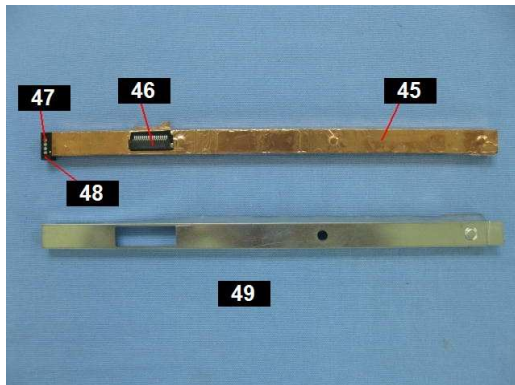
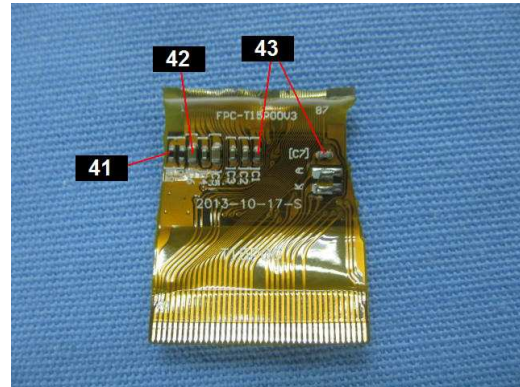
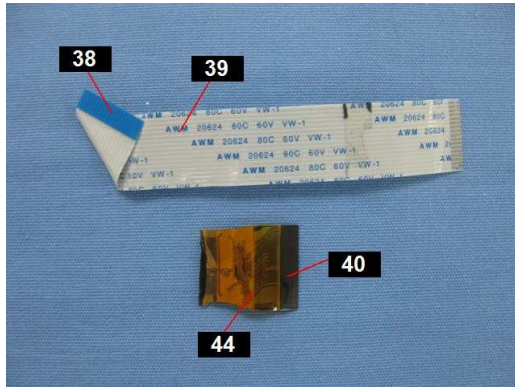
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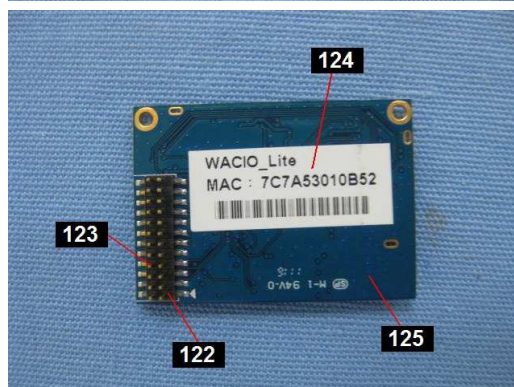
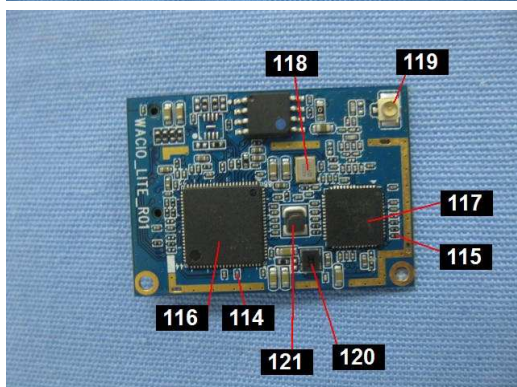
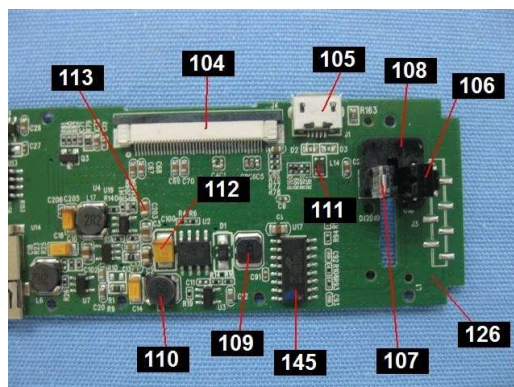
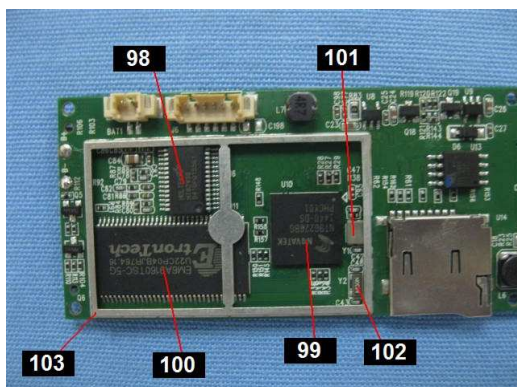
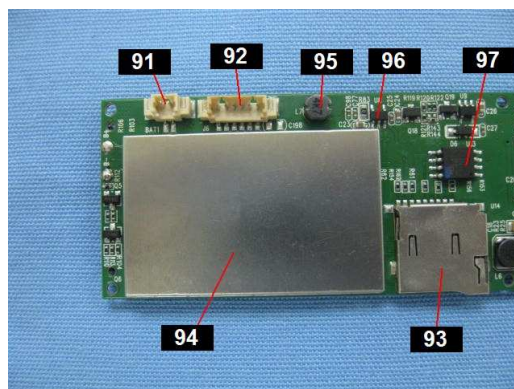
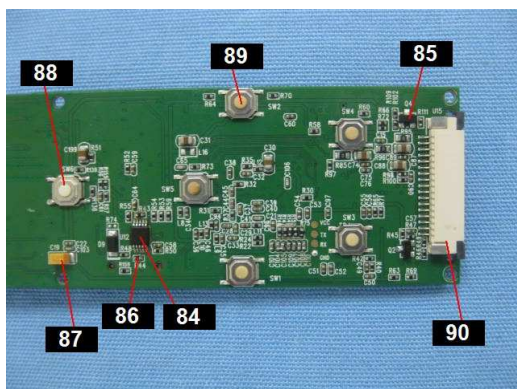
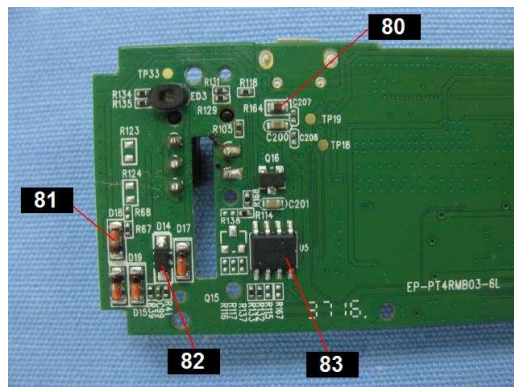
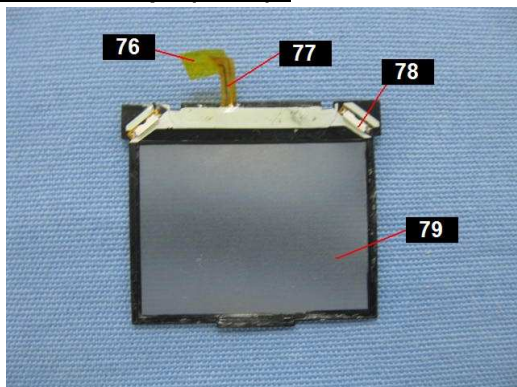
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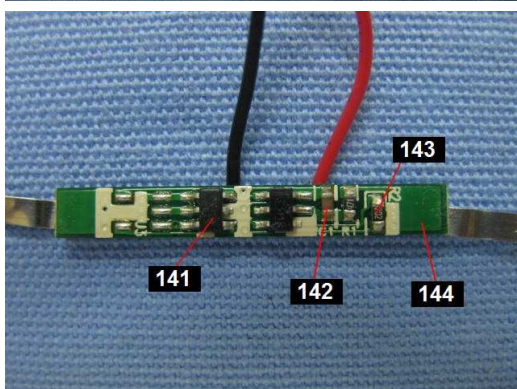
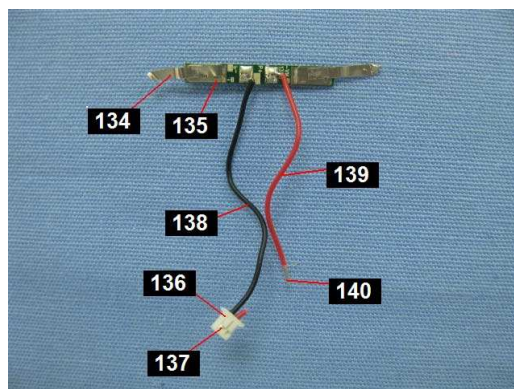
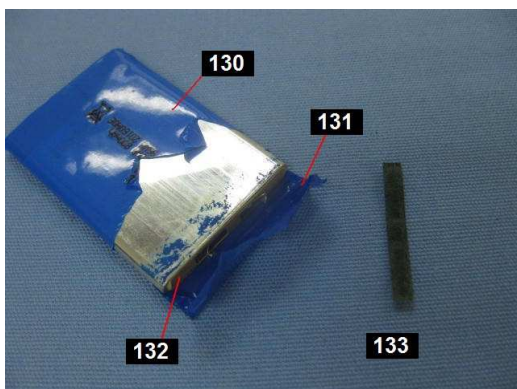
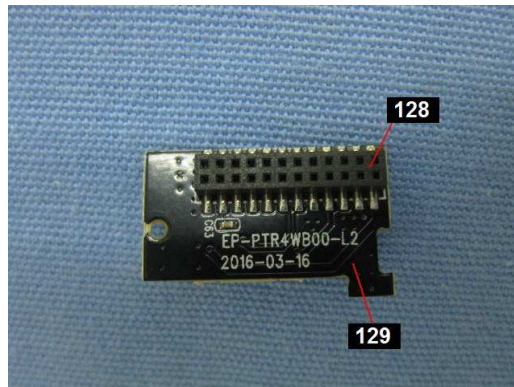
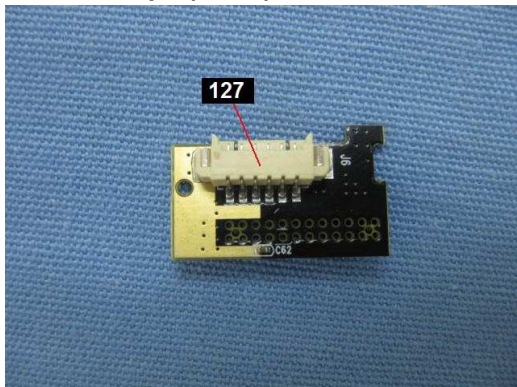
**Photos for Test Sample(Cont') :**



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**Photos for Test Sample(Cont') :**



\*\*\*\*\* End of Report \*\*\*\*\*

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