

TEST REPORT

Applicant : Shenzhen Jiawei Hengxin Technology Co., Ltd.

Address : Floor 4 & Floor 5, Building 6, No.49 Education North Road, Gaoqiao Community, Pingdi Street, Longgang District, Shenzhen

Report on the submitted sample said to be:

Sample name : car diagnostic scanner

Trade Mark : N/A

Model : KW470, KW420, KW530, KW550, KW560, KW570, KW580, KW410, KW380, KW390

Manufacturer : Shenzhen Jiawei Hengxin Technology Co., Ltd.

Address : Floor 4 & Floor 5, Building 6, No.49 Education North Road, Gaoqiao Community, Pingdi Street, Longgang District, Shenzhen

Testing laboratory : Shenzhen Huaxiang Testing Co., Ltd
Building B2, Junfeng Zhongcheng Intelligent Manufacturing Innovation Park,

Test address : Heping Community, Fuhai Street, Bao'an District, Shenzhen City, Guangdong Province

Sample received date : Dec. 09, 2024

Testing period : Dec. 09, 2024 - Dec. 17, 2024

Test Requested:	Conclusion :.
The test results comply with the limits of RoHS 2.0 Directive (EU) 2015/863 and (EU) 2017/2102 amending Annex II to Directive 2011/65/EU — Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs Content — Di-(2-ethylhexyl) phthalate (DEHP), Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) Content	Pass

***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Shenzhen Huaxiang Testing Co., Ltd



Drafted By:

(Kevin su)

Approved By:

LAB Manager: Amy jiang

Date:

Dec. 17, 2024



Test Part Description:.

Specimen No.	Description.
01	Test line
02	Cable
03	Bag
04	Wire clamp
05	Silicone buttons
06	Rubber
07	Check the connector
08	Charging port
09	PCB
10	Chip
11	Resistance
12	Capacitor
13	Inductance
14	Signal lights

TEST RESULT:
1. Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs and PBDEs—RoHS Directive (EU) 2015/863.

Test Items	Unit	Test Method	Result					MDL	Limit
			01	02	03	04	05		
Lead (Pb)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	N.D.	N.D.	2	1000
Mercury (Hg)	mg/kg	IEC 62321-4:2017, ICP-OES	N.D.	N.D.	N.D.	N.D.	N.D.	2	1000
Cadmium (Cd)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	N.D.	N.D.	2	100
Hexavalent Chromium (CrVI)	µg/cm ²	IEC 62321-7-1:2015, UV-VIS	N.D.	N.D.	N.D.	N.D.	N.D.	0.10	0.10
Monobromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Dibromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tribromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tetrabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Pentabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Hexabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Heptabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Octabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Nonabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Decabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Sum of PBBs	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Dibromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tribromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tetrabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Pentabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Hexabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Heptabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Octabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Nonabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Decabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Sum of PBDEs	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	-	1000

Test Items	Unit	Test Method	Result					MDL	Limit
			06	07	08	09	10		
Lead (Pb)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	N.D.	N.D.	2	1000
Mercury (Hg)	mg/kg	IEC 62321-4:2017, ICP-OES	N.D.	N.D.	N.D.	N.D.	N.D.	2	1000
Cadmium (Cd)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	N.D.	N.D.	2	100
Hexavalent Chromium (CrVI)	µg/cm ²	IEC 62321-7-1:2015, UV-VIS	N.D.	N.D.	N.D.	N.D.	N.D.	0.10	0.10
Monobromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Dibromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tribromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tetrabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Pentabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Hexabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Heptabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Octabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Nonabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Decabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Sum of PBBs	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Dibromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tribromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Tetrabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Pentabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Hexabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Heptabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Octabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Nonabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Decabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	N.D.	5	-
Sum of PBDEs	mg/kg	-	N.D.	N.D.	N.D.	N.D.	N.D.	-	1000

Test Items	Unit	Test Method	Result				MDL	Limit
			11	12	13	14		
Lead (Pb)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	N.D.	2	1000
Mercury (Hg)	mg/kg	IEC 62321-4:2017, ICP-OES	N.D.	N.D.	N.D.	N.D.	2	1000
Cadmium (Cd)	mg/kg	IEC 62321-5:2013, ICP-OES	N.D.	N.D.	N.D.	N.D.	2	100
Hexavalent Chromium (CrVI)	µg/cm ²	IEC 62321-7-1:2015, UV-VIS	N.D.	N.D.	N.D.	N.D.	0.10	0.10
Monobromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Dibromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Tribromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Tetrabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Pentabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Hexabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Heptabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Octabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Nonabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Decabromobiphenyl	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Sum of PBBs	mg/kg	-	N.D.	N.D.	N.D.	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Dibromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Tribromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Tetrabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Pentabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Hexabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Heptabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Octabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Nonabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Decabromodiphenyl ether	mg/kg	IEC 62321-6:2015, GC-MS	N.D.	N.D.	N.D.	N.D.	5	-
Sum of PBDEs	mg/kg	-	N.D.	N.D.	N.D.	N.D.	-	1000

Note:

1. mg/kg = milligram per kilogram = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. "-" = Not Regulated
5. Boiling-water-extraction:
 Negative = Absence of Cr(VI) coating / surface layer: the detected concentration in boiling-water-extraction solution is less than 0.10µg with 1cm² sample surface area.
 Positive = Presence of Cr(VI) coating / surface layer: the detected concentration in boiling-water-extraction solution is greater than 0.13µg with 1cm² sample surface area.
 Inconclusive = the detected concentration in boiling-water-extraction solution is greater than 0.10µg and less than 0.13µg with 1cm² sample surface area.
6. Positive = result be regarded as not comply with RoHS requirement
7. Negative = result be regarded as comply with RoHS requirement

2. Di-(2-ethylhexyl) phthalate(DEHP), Benzylbutyl phthalate(BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) Content—RoHS Directive (EU) 2015/863.

Test method: With reference to IEC 62321-8:2017*, analysis was performed by GC-MS.

Test Items	Unit	Result			MDL	Limit
		03	05	06		
Di-(2-ethylhexyl) phthalate (DEHP)	mg/kg	N.D.	N.D.	N.D.	50	1000
Benzylbutyl phthalate (BBP)	mg/kg	N.D.	N.D.	N.D.	50	1000
Dibutyl phthalate (DBP)	mg/kg	N.D.	N.D.	N.D.	50	1000
Diisobutyl phthalate(DIBP)	mg/kg	N.D.	N.D.	N.D.	50	1000

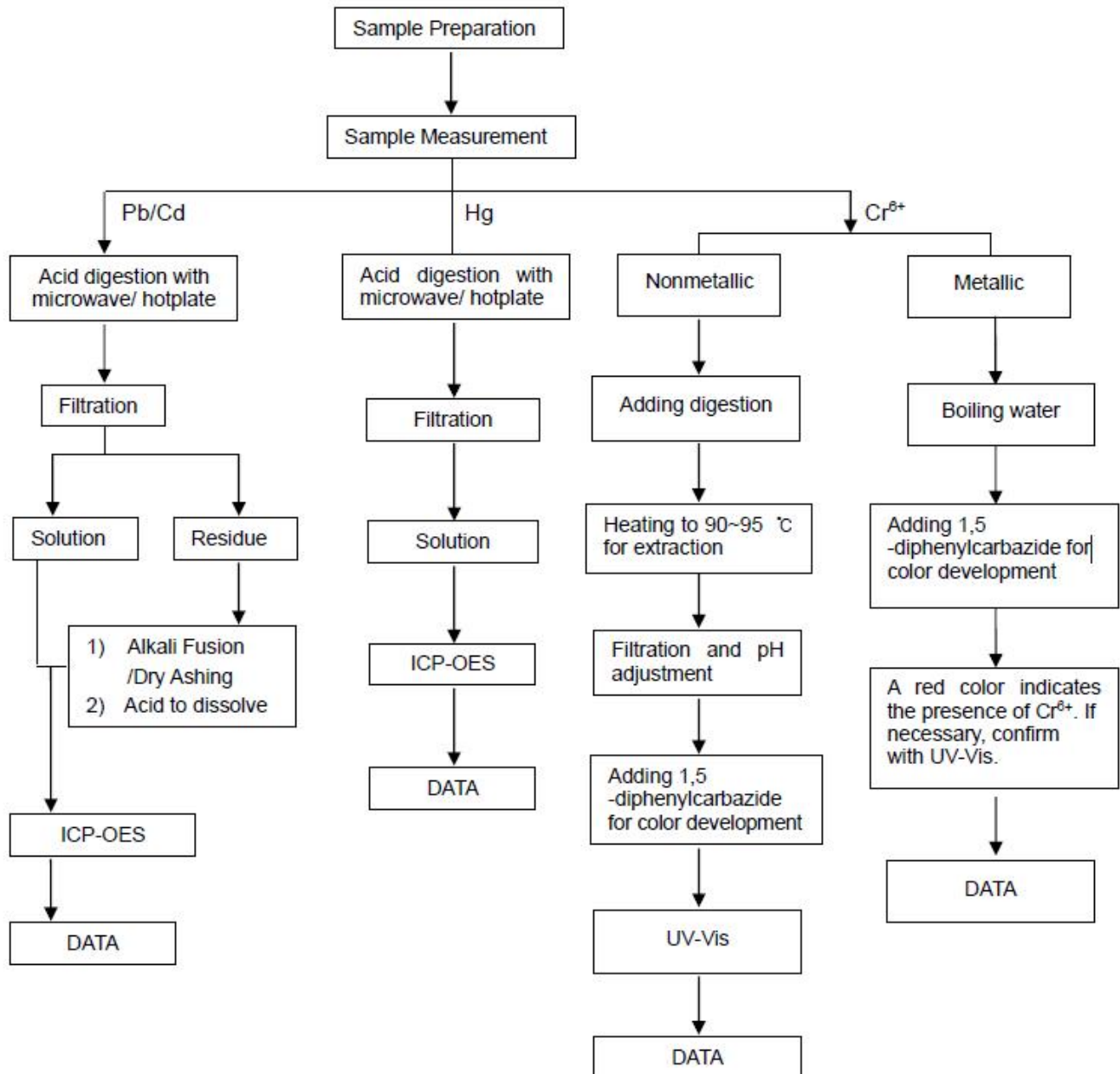
Note:

1. mg/kg = milligram per kilogram = ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method detection limit
4. “*”=The test method of Phthalates is not authorized by CNAS

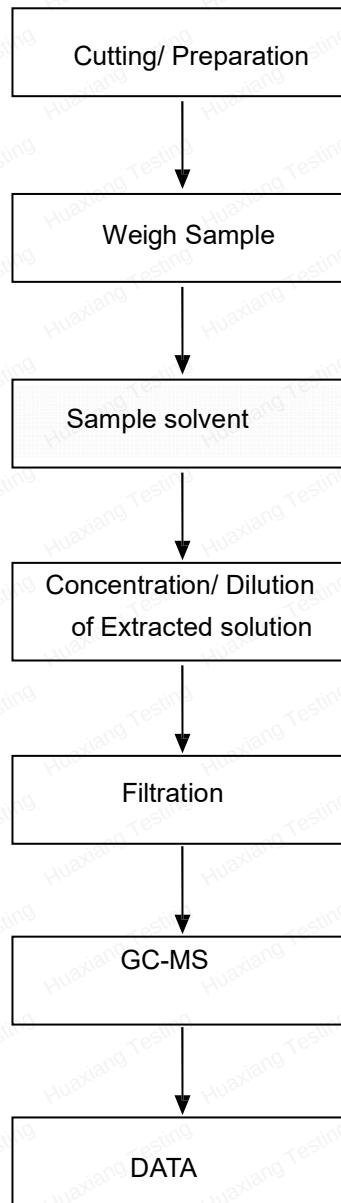
FLOW CHART FOR ROHS TESTING:

Pb/Cd/Hg/Cr6+ Testing Flow Chart

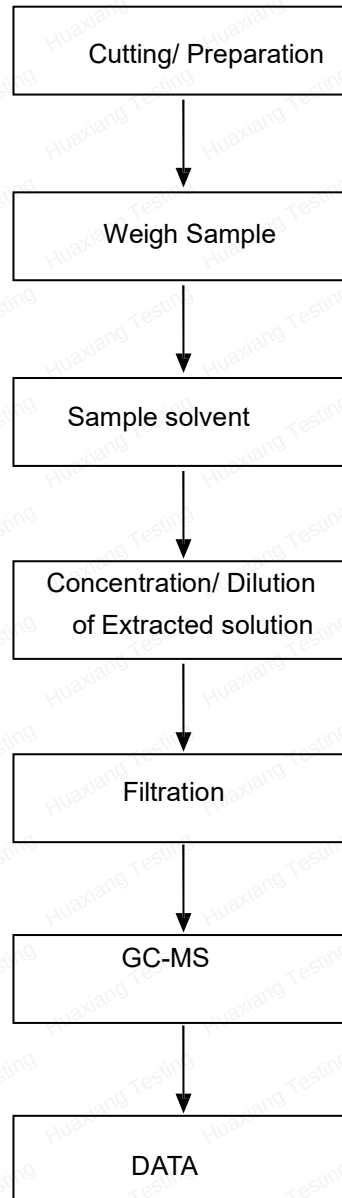
1) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr⁶⁺ test method excluded)



PBBs/PBDEs Testing Flow Chart



Phthalates Testing Flow Chart



PHOTOGRAPH OF SAMPLE:



Figure-1



Figure-2



Figure-3



Figure-4



Figure-5



Figure-6



Figure-7

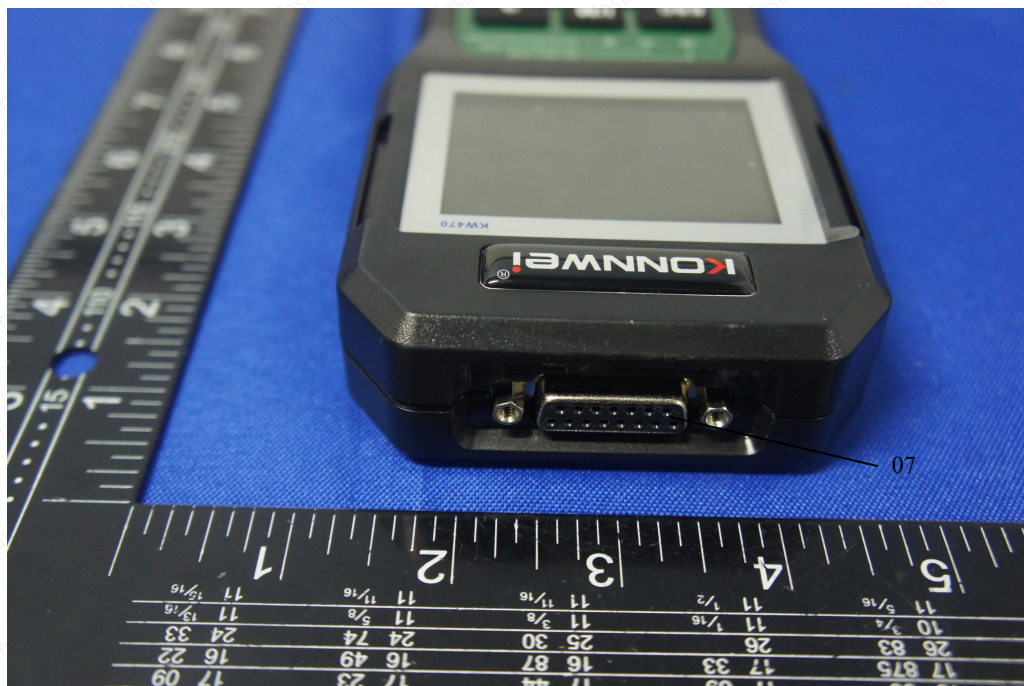


Figure-8

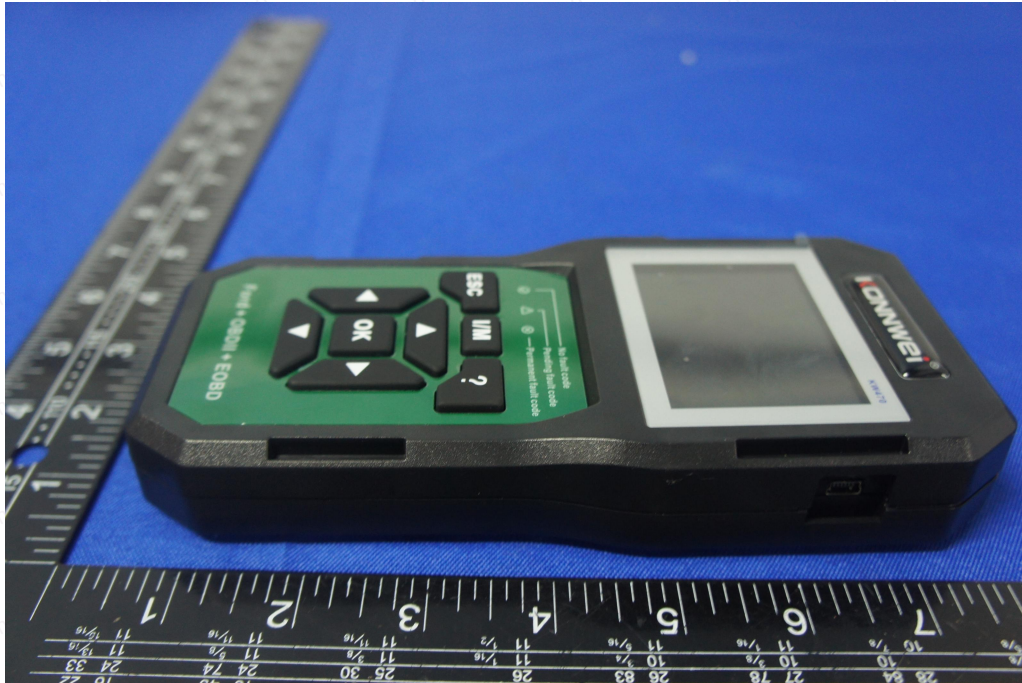


Figure-9



Figure-10



Figure-11

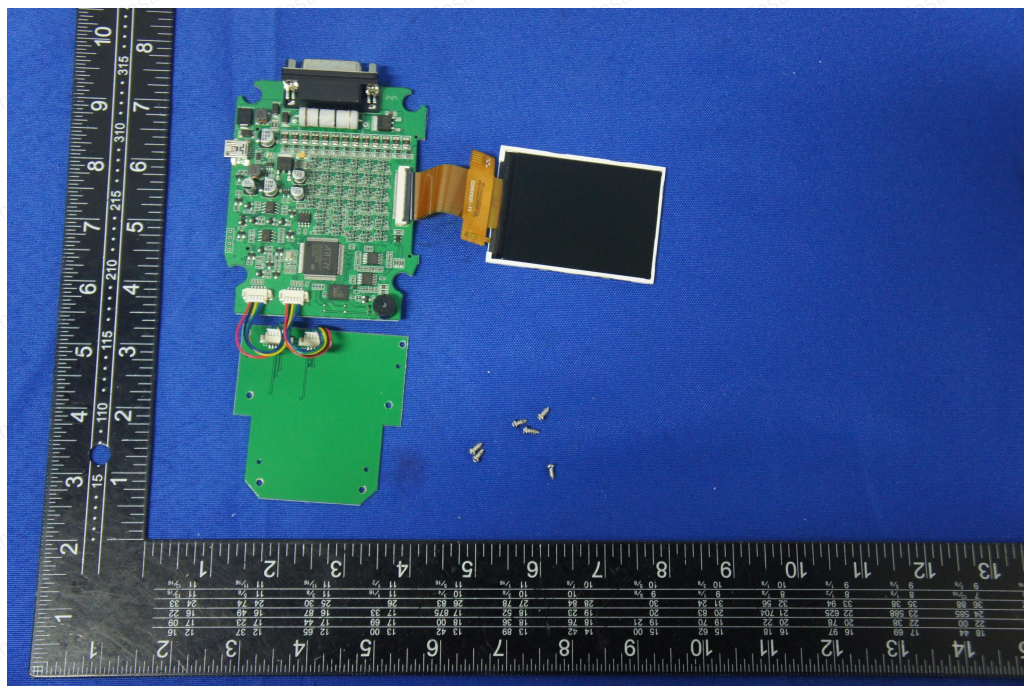


Figure-12

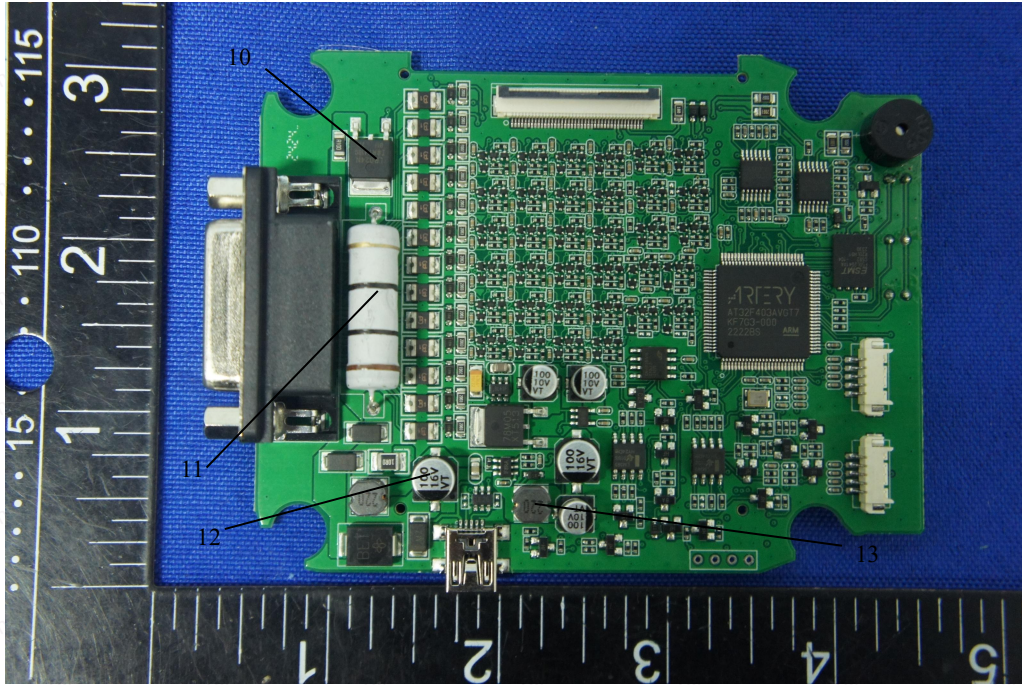


Figure-13

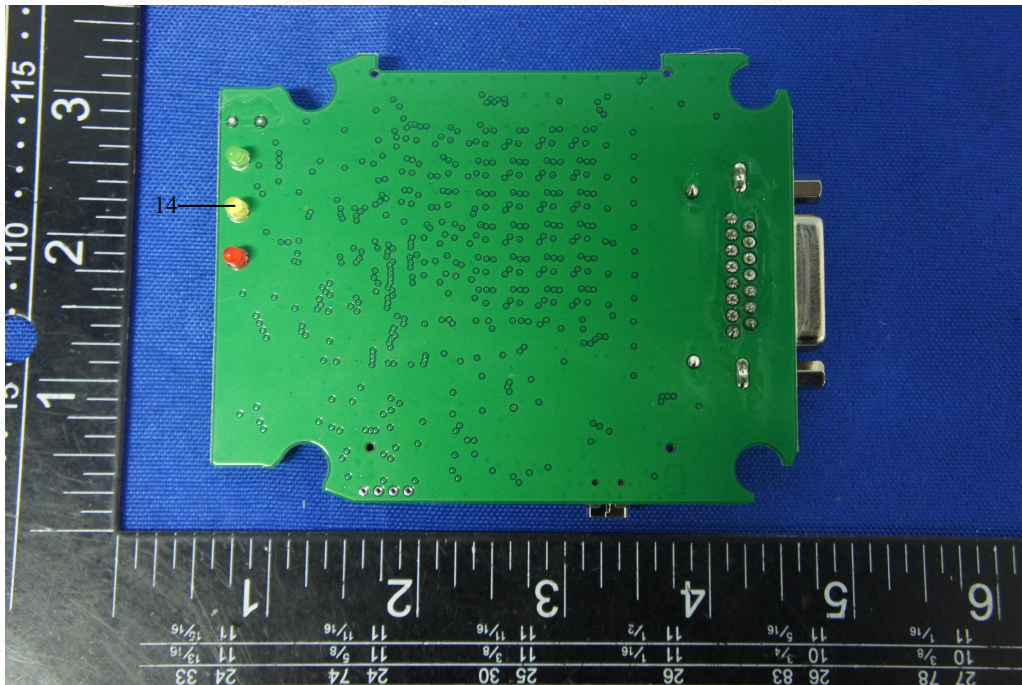


Figure-14

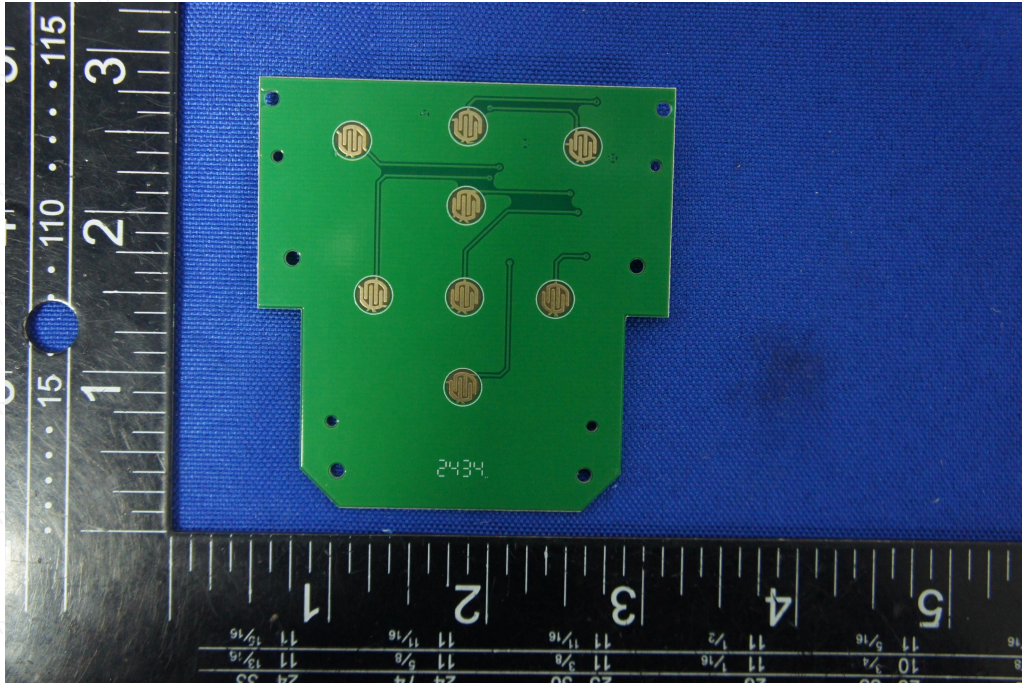


Figure-15

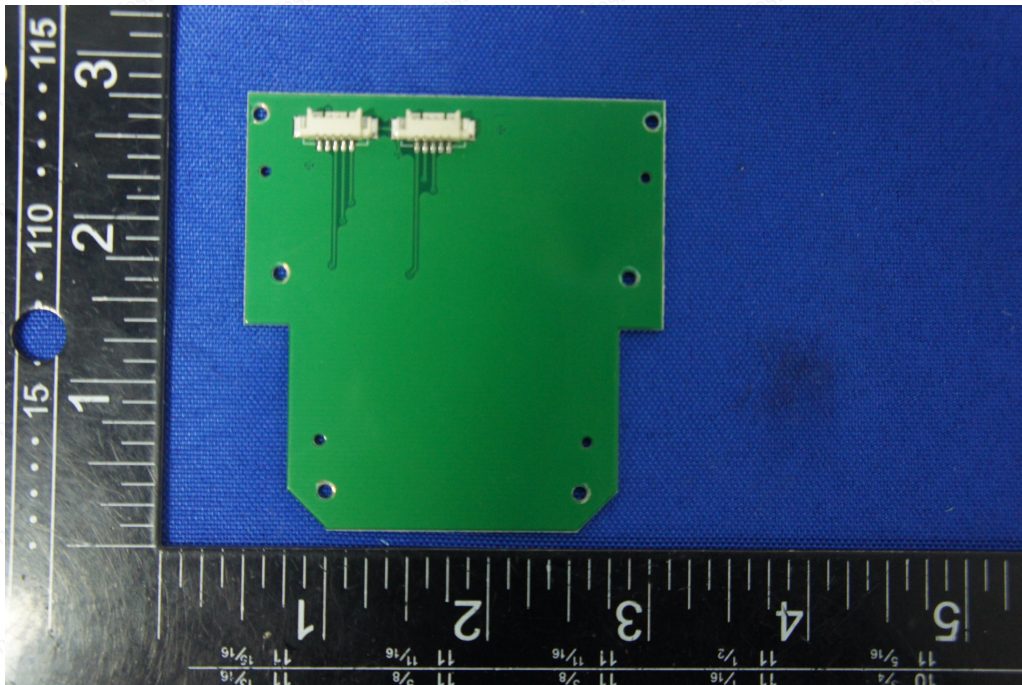


Figure-16

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