精准检测
PRECISE TESTING
股票代码：870761

Test Report

Report No.: PTCHX07171120716C-EN01 **Date:** Dec. 21, 2017

Applicant: Donguan Xintai Instrument Instrument Co. LTD

Address: No. 149-102, Chunfeng Road, Longbeiling Village, Tangxia Town, Dongguan City, Guangdong

The following merchandise was (were) submitted and identified by client as:

Sample Description: Four in one gas detector

Style No.: HT-1805

Sample Received Date: Dec. 20, 2017

Completed Date: Dec. 21, 2017

Test Requested and Conclusion(s):

No.	Test Sample	Standard and Requirement	Conclusion(s)
1	Submitted samples	RoHS Directive 2011/65/EU and its subsequent amendments - Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr^{6+}), PBBs and PBDEs	PASS

Test Result(s): Please refer to next page(s).

Signed for and on Behalf of PTC

Raul Cheng / P & C Department General Manager

DongGuan Precise Testing and Certification Corp. Ltd.

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Report No.: PTCHX07171120716C-EN01 **Date:** Dec. 21, 2017

Test Result(s):

RoHS - Lead (Pb)/Cadmium(Cd)/Mercury(Hg)/Hexavalent Chromium(Cr^{6+})/PBBs/PBDEs

Test Method: IEC62321-3-1: 2013, IEC62321-5: 2013, IEC62321-4: 2013, IEC 62321-7-1: 2015, IEC 62321-7-2: 2017, analyzed by EDXRF & AAS & ICP-AES & GC-MS & UV-Vis.

No.	Material Description	EDXRF Result					Chemical Result (mg/kg)	Conclusion
		Pb	Cd	Hg	Cr	Br		
1	Yellow plastic(shell)	BL	BL	BL	BL	BL	--	PASS
2	Transparent plastic with black coating (display)	BL	BL	BL	BL	BL	--	PASS
3	Black plastic with white printing(button)	BL	BL	BL	BL	BL	--	PASS
4	Silvery metal with silvery plating(sensor window)	BL	BL	BL	BL	--	--	PASS
5	Black plastic(sensor window)	BL	BL	BL	BL	BL	--	PASS
6^{E}	Golden metal(nut)	OL	BL	BL	BL	--	Pb: 36140	PASS
7	Black nonwoven with glue(sensor window)	BL	BL	BL	BL	BL	--	PASS
8	Silvery plastic with black printing(label)	BL	BL	BL	BL	BL	--	PASS
9	Golden plastic with black printing(label)	BL	BL	BL	BL	BL	--	PASS
10	Black plastic (border)	BL	BL	BL	BL	BL	--	PASS
11	Transparent plastic (pipe)	BL	BL	BL	BL	BL	--	PASS
12	Silvery metal (clip)	BL	BL	BL	IN	--	Cr^{6+}: Negative	PASS
13	Silvery metal (D ring)	BL	BL	BL	IN	--	Cr^{6+}: Negative	PASS
14	Transparent glass (display)	BL	BL	BL	BL	BL	--	PASS
15	Silvery plastic (display)	BL	BL	BL	BL	BL	--	PASS
16	Gray plastic (display)	BL	BL	BL	BL	BL	--	PASS
17	Transparent plastic with	BL	BL	BL	BL	BL	--	PASS

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	white coating(display)							
18	Silvery plastic film(display)	BL	BL	BL	BL	BL	--	PASS
19	White plastic with glue(display)	BL	BL	BL	BL	BL	--	PASS
20	Black plastic(wire jacket)	BL	BL	BL	BL	BL	--	PASS
21	Red plastic(wire jacket)	BL	BL	BL	BL	BL	--	PASS
22	Silvery metal(wire)	BL	BL	BL	BL	--	--	PASS
23	Black rubber(inner)	BL	BL	BL	BL	BL	--	PASS
24	White PCB(display PCB)	BL	BL	BL	BL	IN	PBBs: N.D. PBDEs: N.D.	PASS
25	Silvery solder(display PCB)	BL	BL	BL	BL	--	--	PASS
26	White plastic (inner)	BL	BL	BL	BL	BL	--	PASS
27	Green PCB(PCB"HT1805-B V2-2017.05.22")	BL	BL	BL	BL	IN	PBBs: N.D. PBDEs: N.D.	PASS
28	Silvery solder(PCB"HT1805-B V2-2017.05.22")	BL	BL	BL	BL	--	--	PASS
29	Golden body(PCB"HT1805-B V2-2017.05.22")	BL	BL	BL	BL	BL	--	PASS
30	Blue body（DUAL TOXIC SENSOR)	BL	BL	BL	BL	BL	--	PASS
31	Black body（OXYGEN SENSOR)	BL	BL	BL	BL	BL	--	PASS
32	White plastic with multicolor printing(label)	BL	BL	BL	BL	BL	--	PASS
33	Golden metal(pin)	BL	BL	BL	BL	--	--	PASS
34	Black plastic(pin holder)	BL	BL	BL	BL	IN	PBBs: N.D. PBDEs: N.D.	PASS
35	Green	BL	BL	BL	BL	IN	PBBs: N.D.	PASS

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	PCB(PCB"HT1805 V3-2017.05.22")						PBDEs: N.D.	
36	Silvery solder(PCB"HT1805 V3-2017.05.22")	BL	BL	BL	BL	--	--	PASS
37	Silvery body(crystal oscillator)	BL	BL	BL	BL	BL	--	PASS
38	Black body(U1)	BL	BL	BL	BL	BL	--	PASS
39	Black body(U16)	BL	BL	BL	BL	BL	--	PASS
40	Gray magnet with black printing(core, magnet)	BL	BL	BL	BL	--	--	PASS
41	Coppery metal(coil)	BL	BL	BL	BL	--	--	PASS
42	Black body(diode)	BL	BL	BL	BL	BL	--	PASS
43	Black body(audion Q12)	BL	BL	BL	BL	BL	--	PASS
44	Black/white body(chip resistor)	BL	BL	BL	BL	BL	--	PASS
45	Brown body(chip capacitor)	BL	BL	BL	BL	BL	--	PASS
46	White plastic(wire socket)	BL	BL	BL	BL	BL	--	PASS
47	Silvery metal(pin)	BL	BL	BL	BL	--	--	PASS
48	Red body with silvery metal edge (diode)	BL	BL	BL	BL	BL	--	PASS
49	Black plastic (buzzer shell)	BL	BL	BL	BL	BL	--	PASS
50	Silvery metal(inner buzzer)	BL	BL	BL	BL	--	--	PASS
51	Coppery metal(bearing)	BL	BL	BL	BL	--	--	PASS
52	Silvery metal(axle)	BL	BL	BL	IN	--	Cr^{6+}: Negative	PASS
53	Silvery metal(gasket)	BL	BL	BL	BL	--	--	PASS
54	Green PCB(inner buzzer)	BL	BL	BL	BL	BL	--	PASS
55	Silvery metal (vibrator eccentric gear)	BL	BL	BL	BL	--	--	PASS

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56	Silvery metal(vibrator shell)	BL	BL	BL	244	--	--	PASS
57	Coppery metal(vibrator bearing)	BL	BL	BL	BL	--	--	PASS
58	Golden metal with silvery plating(vibrator)	BL	BL	BL	BL	--	--	PASS
59	Coppery metal(coil)	BL	BL	BL	BL	--	--	PASS
60	Silvery metal(axle)	BL	BL	BL	IN	--	Cr^{6+}: Negative	PASS
61	Transparent body(LED)	BL	BL	BL	BL	BL	--	PASS
62	Silvery metal(data cable socket)	BL	BL	BL	BL	--	--	PASS
63	Golden metal(pin)	BL	BL	BL	BL	--	--	PASS
64	Gray plastic(pin holder)	BL	BL	BL	BL	98	--	PASS
65	Silvery metal(screw)	BL	BL	BL	BL	--	--	PASS

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Note:
1. mg/kg = milligram per kilogram (ppm).
2. N.D. = Not Detected (<RL).
3. Negative = Absence of Cr^{6+}.
4. Positive = Presence of Cr^{6+}: the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm^2 sample surface area.
5. The result are obtained by EDXRF for primary screening, if the result exceeds the below limit (BL), and further chemical testing.
6. "E"= This material is tin-lead solder or metal alloy proved by client, lead in tin-lead solder or copper alloy is exempted on the requirements of RoHS directive (EU Directive 2011/65/EU).

Screening limits in mg/kg for regulated elements in various matrices

Elements	Polymer	Metal	Composite Materials
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	--	BL≤(250-3σ)<X

BL = Below Limit, OL = Over Limit, IN = Inconclusive, LOD = Limit of Detection

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Chemical Testing - Detection Limit & 2011/65/EU Limit:

No	Name of Chemicals	Detection Limit (mg/kg)	2011/65/EU Limit (mg/kg)
1	Lead (Pb)	5	1000
2	Cadmium (Cd)	5	100
3	Mercury (Hg)	5	1000
4	Chromium VI (Cr VI)	Non-metal: 10 Metal: Negative	Non-metal: 1000 Metal: Negative
5	Polybromobiphenyls (PBBs) -Bromobiphenyl (MonoBB) -Dibromobiphenyl (DiBB) -Tribromobiphenyl (TriBB) -Tetrabromobiphenyl (TetraBB) -Pentabromobiphenyl (PentaBB) -Hexabromobiphenyl (HexaBB) -Heptabromobiphenyl (HeptaBB) -Octabromobiphenyl (OctaBB) -Nonabromobiphenyl (NonaBB) -Decabromobiphenyl (DecaBB)	Each 5	Sum: 1 000
6	Polybromodiphenyl ethers (PBDEs) -Bromodiphenyl ether (MonoBDE) -Dibromodiphenyl ether (DiBDE) -Tribromodiphenyl ether (TriBDE) -Tetrabromodiphenyl ether (TetraBDE) -Pentabromodiphenyl ether (PentaBDE) -Hexabromodiphenyl ether (HexaBDE) -Heptabromodiphenyl ether (HeptaBDE) -Octabromodiphenyl ether (OctaBDE) -Nonabromodiphenyl ether (NonaBDE) -Decabromodiphenyl ether (DecaBDE)	Each 5	Sum: 1 000

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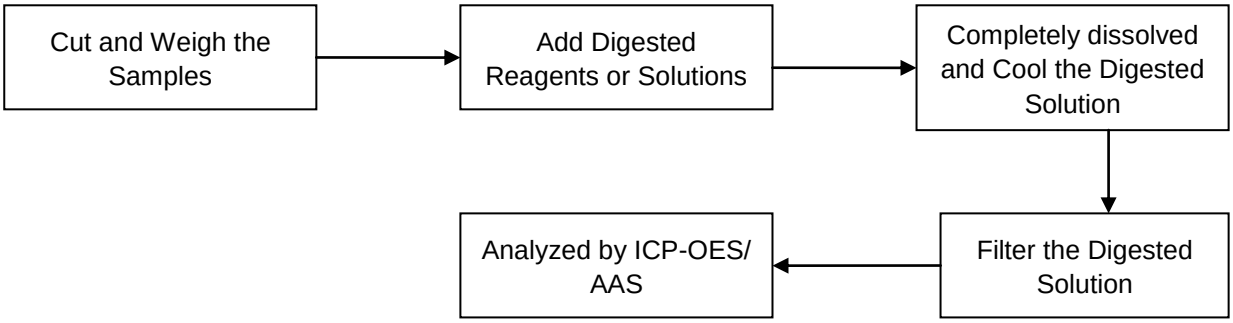
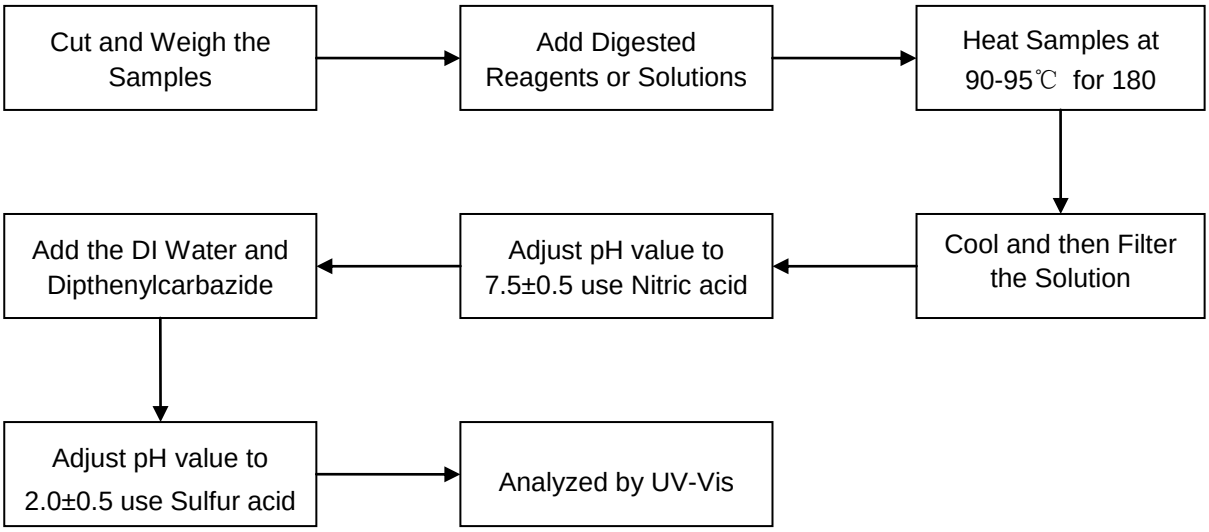
Test Process Flow:

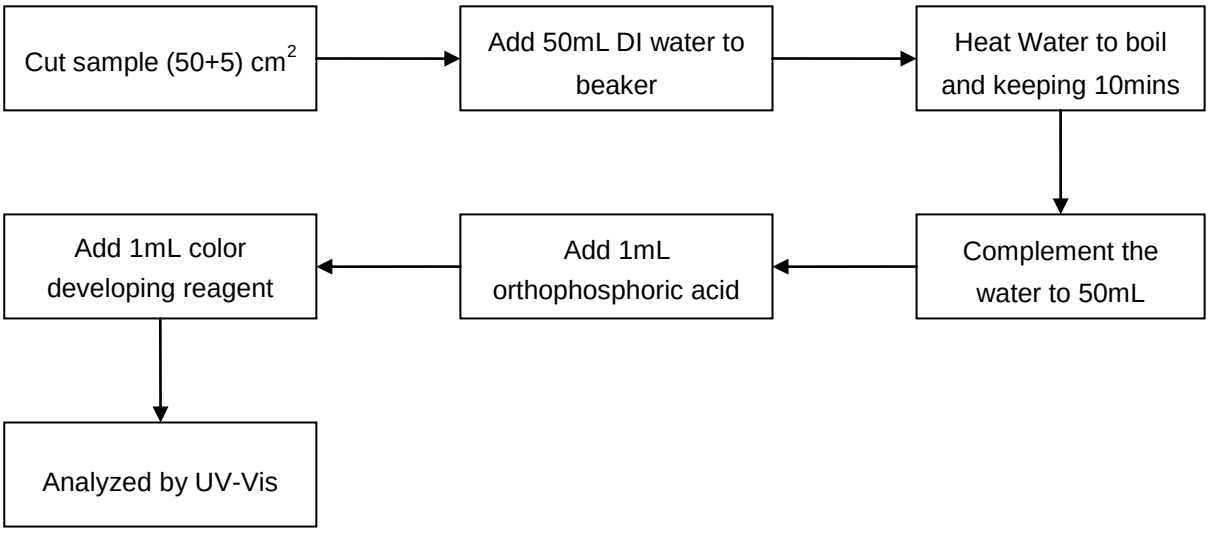
1. Lead, Cadmium, Mercury



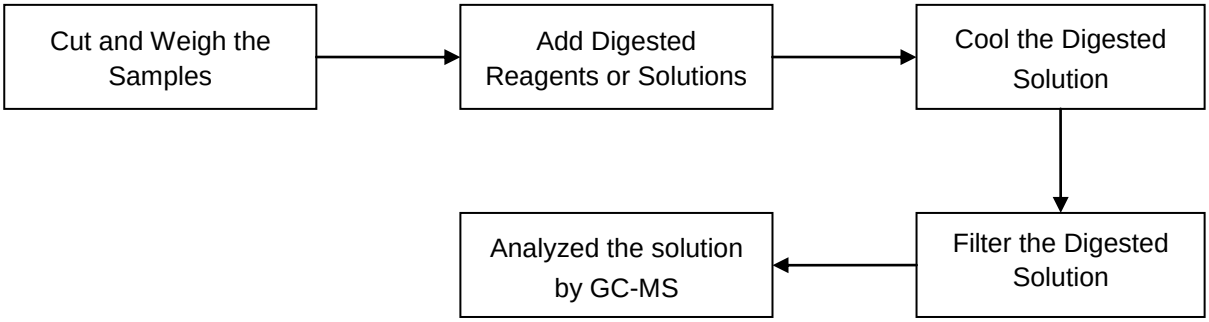
2. Hexavalent Chromium（Non-metal）



Hexavalent Chromium（Metal）



3. PBBs & PBDEs



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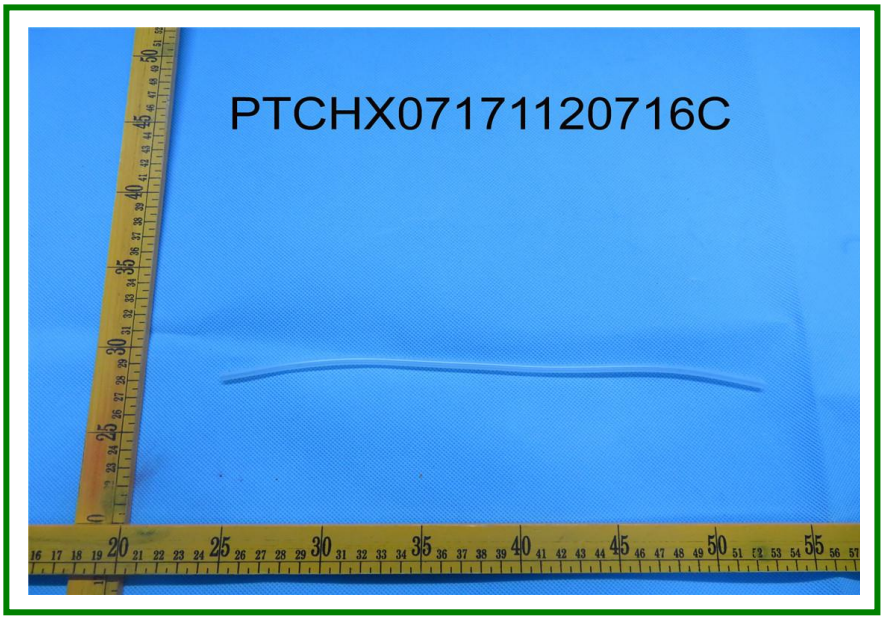
Photo(s) of Sample:



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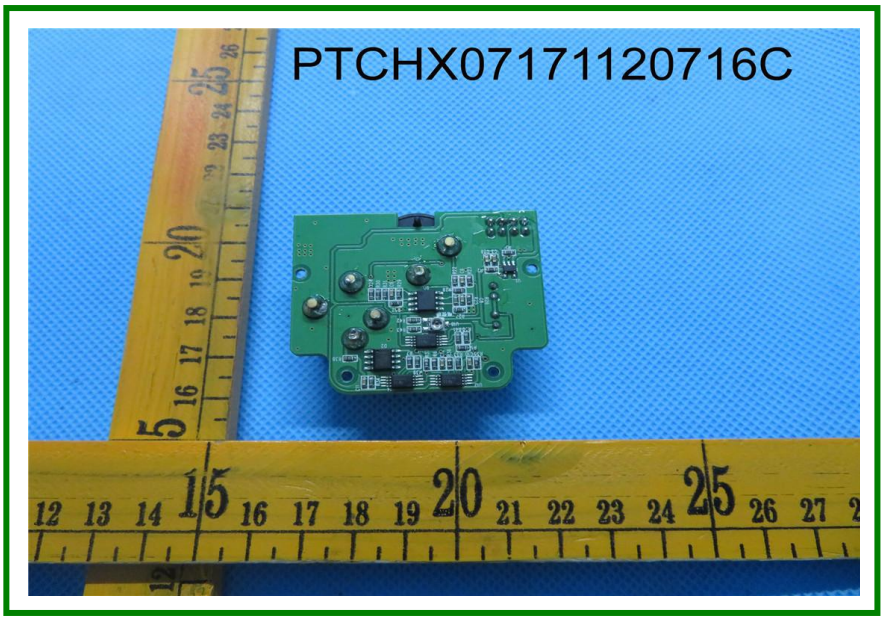

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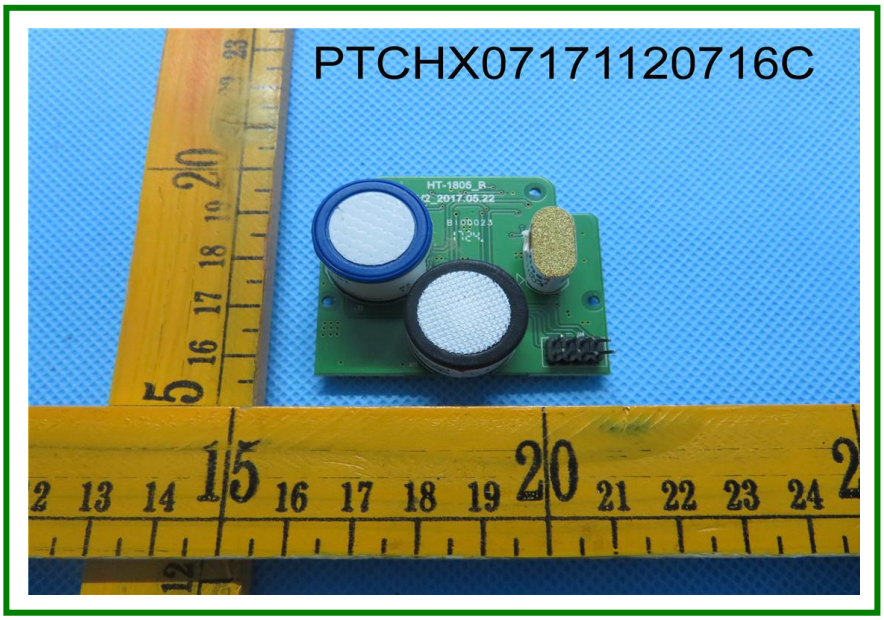

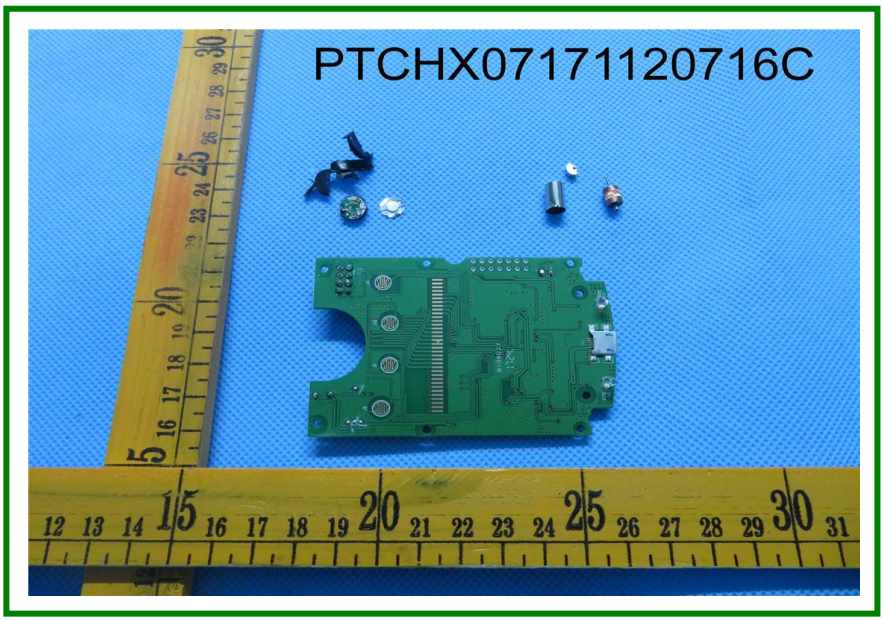

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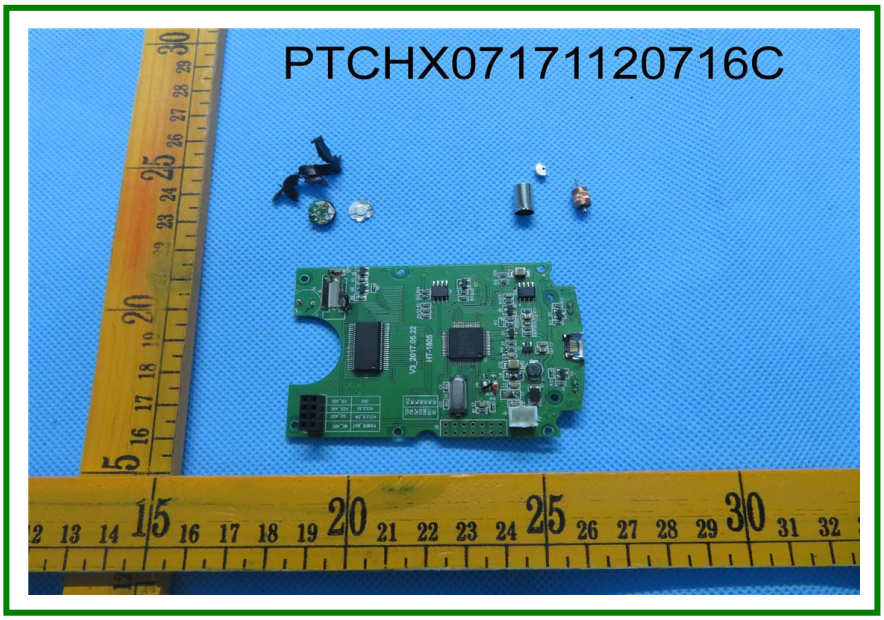

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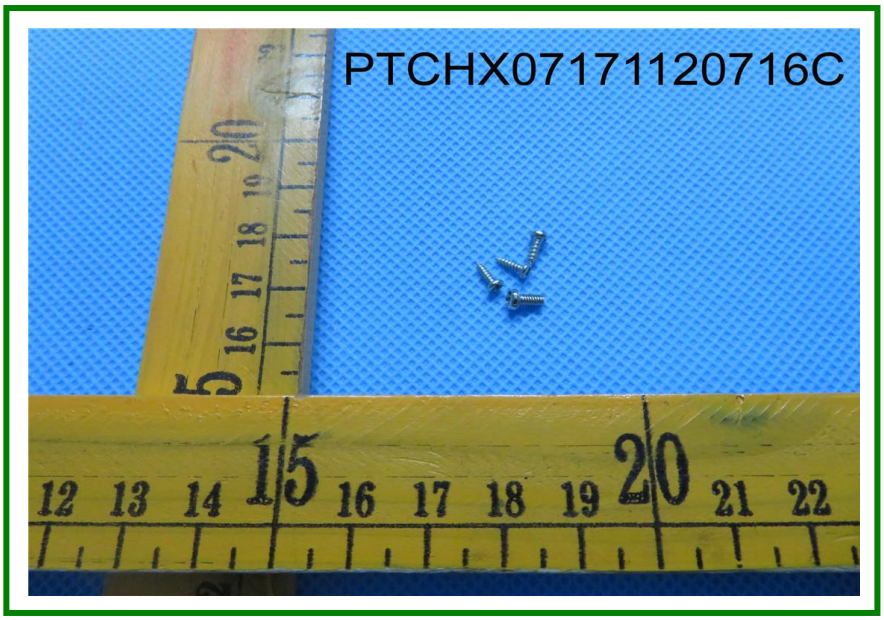

End of Report

DongGuan Precise Testing and Certification Corp. Ltd. (PTC)
Building D, Baoding Technology Park, Guangming 2th Road, Guangming Community,
Dongcheng District, Dongguan, Guangdong, China
Tel: 86-769-38808222 Fax: 86-769-38826111 http:// www.ptc-testing.com