Test Report

Report No.: DGC251208036NE

Applicant : Shenzhen INNO Technology Co., LTD

Address : F9, Building 20, Xiangnan District 4, Zhangkeng Community, Minzhi Street, Longhua District, Shenzhen,Guangdong,China

The following sample(s) was/were submitted and identified on behalf of the client as:

Product Name : DAC HAT

Manufacturer : Shenzhen INNO Technology Co., LTD

Address : F9, Building 20, Xiangnan District 4, Zhangkeng Community, Minzhi Street, Longhua District, Shenzhen,Guangdong,China

Date of Sample Received : Dec. 08, 2025

Test period : Dec. 08, 2025 - Dec. 12, 2025

Test requested	**Conclusion**
In accordance with RoHS Directive 2011/65/EU and amendment 2015/863/EU, to determine Cadmium (Cd), Lead (Pb), Mercury (Hg), Chromium (Cr (VI)), PBBs, PBDEs, Di (2-ethyl hexyl)-phthalate (DEHP), Dibutyl phthalate (DBP), Butylbenzyl phthalate (BBP), Diisobuty phthalate (DIBP) content on submitted samples.	Pass

Test method : Please refer to next page.

Test result : Please refer to next page.

Approved by: Richard Ke **Date:** Dec. 12, 2025

Richard Ke
(Signed for and on behalf)

Dongguan NTEK Testing Technology Co., Ltd. NTEK Report Seal

Test method:

1. For the Cadmium (Cd), Lead (Pb),Mercury (Hg), Chromium (Cr (VI)), PBBs, PBDEs:

With reference to IEC 62321 Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products, XRF scanning first test, then using chemical test method to confirm.

Testing Item		Test Method	Measuring Instrument	MDL
Screening test		IEC 62321-3-1: 2013 scanning	XRF	--
Wet Chemical test	Lead (Pb)	IEC 62321-5: 2013	ICP-OES	2mg/kg
	Cadmium (Cd)	IEC 62321-5: 2013	ICP-OES	2mg/kg
	Mercury (Hg)	IEC 62321-4: 2013+AMD1:2017	ICP-OES	2mg/kg
	Chromium (Cr (VI))▼	IEC 62321-7-2:2017	UV-Vis	8mg/kg
		IEC 62321-7-1: 2015		0.10μg/cm^2
	PBBs, PBDEs	IEC 62321-6: 2015	GC-MS	5 mg/kg

2. For the DEHP, DBP, BBP and DIBP:

Testing Item	Pretreatment Method	Measuring Instrument	MDL
Di (2-ethyl hexyl)-phthalate (DEHP)	IEC 62321-8: 2017	GC-MS	30mg/kg
Butylbenzyl phthalate (BBP)			30mg/kg
Dibutyl phthalate (DBP)			30mg/kg
Diisobuty phthalate (DIBP)			30mg/kg

1. Description of the test subject:

Sample No.	Location	Sample Description
1	DAC HAT	black plastic shell
2	DAC HAT	Silver metal ring
3	DAC HAT	Silver metal pins
4	DAC HAT	Golden metal tube
5	DAC HAT	White plastic seat
6	DAC HAT	Silver metal pin
7	DAC HAT	Red plastic seat
8	DAC HAT	Chip Resistor
9	DAC HAT	Chip IC
10	DAC HAT	Chip Inductor
11	DAC HAT	Chip Capacitor
12	DAC HAT	Chip IC
13	DAC HAT	Chip IC
14	DAC HAT	SMD LED
15	DAC HAT	Silver patch crystal oscillator
16	DAC HAT	Capacitor red plastic shell
17	DAC HAT	Yellow filling resin at the bottom of the capacitor
18	DAC HAT	Silver capacitor film
19	DAC HAT	Capacitor pin
20	DAC HAT	Silver metal pin
21	DAC HAT	Capacitor red plastic shell
22	DAC HAT	Yellow filling resin at the bottom of the capacitor
23	DAC HAT	Silver capacitor film
24	DAC HAT	Capacitor pin
25	DAC HAT	SMD diode
26	DAC HAT	Black plastic terminal block
27	DAC HAT	Golden metal pins
28	DAC HAT	Green PCB board
29	DAC HAT	Silver solder

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2. Test results (Unit: mg/kg):

No.	Test Method	Heavy Metals and Flame Retardants					Phthalates				Conclusion
		Cd	Pb	Hg	Cr (Cr (VI))	Br (PBBs, PBDEs)	DEHP	BBP	DBP	DIBP	
1	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
2	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
3	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
4	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
5	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
6	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
7	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
8	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
9	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
10	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
11	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
12	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
13	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
14	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
15	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
16	Screening	BL	BL	BL	BL	IN	BL	BL	BL	BL	Pass
	Wet Chem.	---	---	---	---	N.D.	---	---	---	---	
17	Screening	BL	BL	BL	BL	IN	BL	BL	BL	BL	Pass
	Wet Chem.	---	---	---	---	N.D.	---	---	---	---	
18	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
19	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
20	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
21	Screening	BL	BL	BL	BL	IN	BL	BL	BL	BL	Pass
	Wet Chem.	---	---	---	---	N.D.	---	---	---	---	
22	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
23	Screening	BL	BL	BL	BL	BL	BL	BL	BL	BL	Pass
24	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
25	Screening	BL	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	Pass
26	Screening	BL	BL	BL	BL	IN	BL	BL	BL	BL	Pass
	Wet Chem.	---	---	---	---	N.D.	---	---	---	---	
27	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass
28	Screening	BL	BL	BL	BL	IN	BL	BL	BL	BL	Pass
	Wet Chem.	---	---	---	---	N.D.	---	---	---	---	
29	Screening	BL	BL	BL	BL	N.A.	N.A.	N.A.	N.A.	N.A.	Pass

Note:

(1) (a) It is the result on total Br while test PBBs, PBDEs by XRF, It is the result on total Cr while test Cr (VI)I by XRF.

(b) Results are obtained by XRF for primary screening and further chemical testing by ICP-OES (for Pb, Cd and Hg), UV-Vis (for Cr (VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013 (unit: mg/kg).

Element	Polymer	Metal	Composite Materials
Cadmium (Cd)	BL≤70<X<130≤OL	BL≤70<X<130≤OL	LOD<X<150≤OL
Lead (Pb)	BL≤700<X<1300≤OL	BL≤700<X<1300≤OL	BL≤500<X<1500≤OL
Mercury (Hg)	BL≤700<X<1300≤OL	BL≤700<X<1300≤OL	BL≤500<X<1500≤OL
Chromium (Cr)	BL≤700<X	BL≤700<X	BL≤500<X
Bromine (Br)	BL≤300<X	--	BL≤250<X

(c) The XRF screening test for RoHS elements –The reading may be different to the actual content in the sample be of non-uniformity composition.

(d) The Screening results of Phthalates are for primary screening, and further chemical testing by GC-MS are recommended to be performed if the concentration exceeds the warning value.Where n= number of mixed tests.

Compound	Polymer
DBP	BL ≤ 1000/n< X
BBP	BL ≤ 1000/n< X
DEHP	BL ≤ 1000/n< X
DIBP	BL ≤ 1000/n< X

(e) OL=Over Limit, BL=Below Limit, IN=Inconclusive, LOD= Limit of Detection;

(2) mg/kg=ppm=0.0001%, N.D.=Not detected(<MDL), MDL=Method Detection Limit,
"---"=Not conducted, "--"=Not regulated, "N.A."=Not applicable.

(3)"▼" =Metal sample

a. The sample is positive for Cr (VI) if the Cr (VI) concentration is greater than 0.13 μg/cm².
The sample coating is considered to contain Cr (VI) ;

b. The sample is negative for Cr (VI) if Cr (VI) concentration is less than 0.10 μg/cm².
The coating is considered a non-Cr (VI) based coating ;

c. The result between 0.10 μg/cm² and 0.13 μg/cm² is considered to be inconclusive
- unavoidable coating variations may influence the determination ;
Information on storage conditions and production date of the tested sample is unavailable and thus Cr (VI) results represent status of the sample at the time of testing.

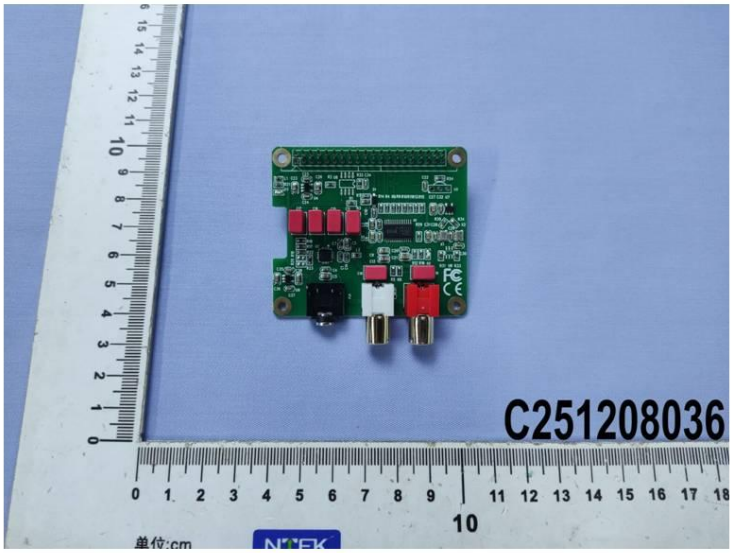
(4) RoHS Requirement

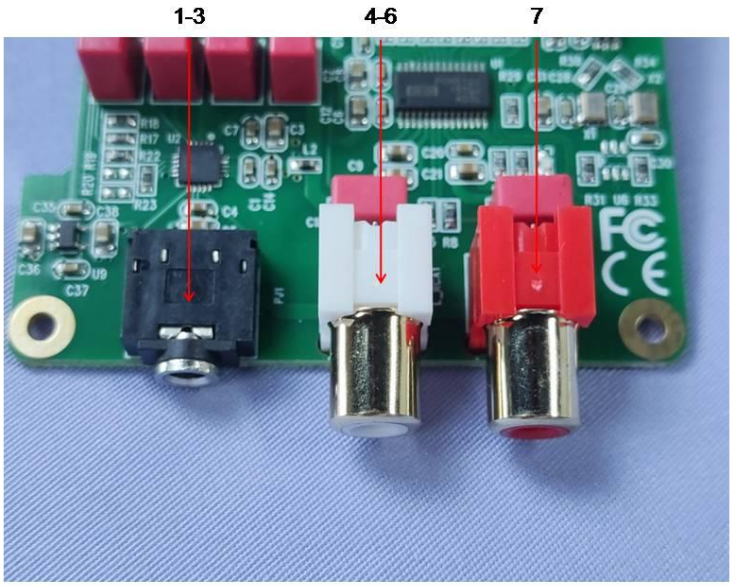
Restricted substances	Limits
Lead (Pb)	0.1% (1000 ppm)
Cadmium (Cd)	0.01% (100 ppm)
Chromium(VI) (Cr (VI))	0.1% (1000 ppm)
Mercury (Hg)	0.1% (1000 ppm)
Polybrominated biphenyls (PBBs)	0.1% (1000 ppm)
Polybrominated diphenyl ethers (PBDEs)	0.1% (1000 ppm)
Di (2-ethyl hexyl)-phthalate (DEHP)	0.1% (1000 ppm)
Butylbenzyl phthalate (BBP)	0.1% (1000 ppm)
Dibutyl phthalate (DBP)	0.1% (1000 ppm)
Diisobuty phthalate (DIBP)	0.1% (1000 ppm)

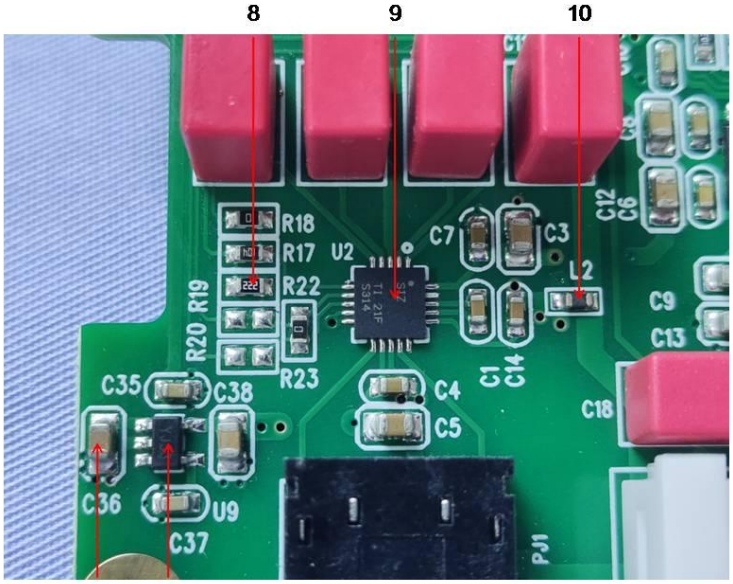
The above limits are reference with RoHS Directive 2011/65/EU and amendment 2015/863/EU.

(5) Unless otherwise specified, refer to ILAC-G8:09/2019 and use the binary decision rule of simple acceptance (W=0) for conformity assessment.

Photographs of Sample:



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C3
C12
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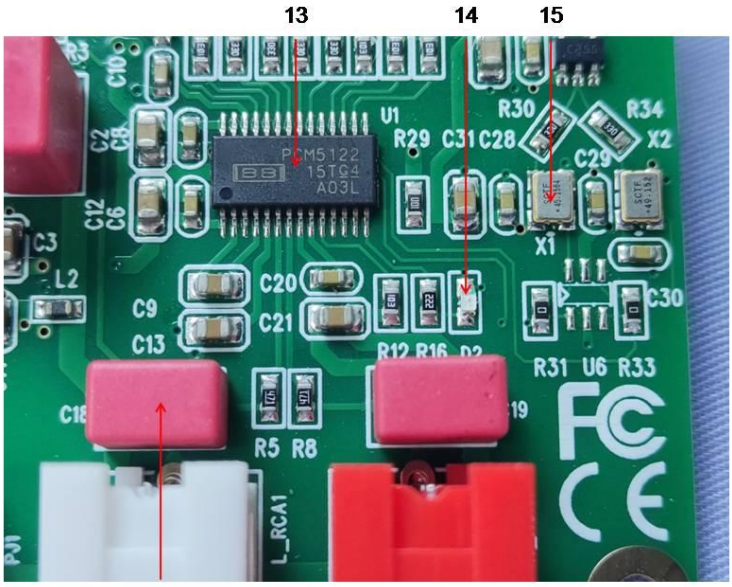
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L2
X1
C20
C9
C21
C30
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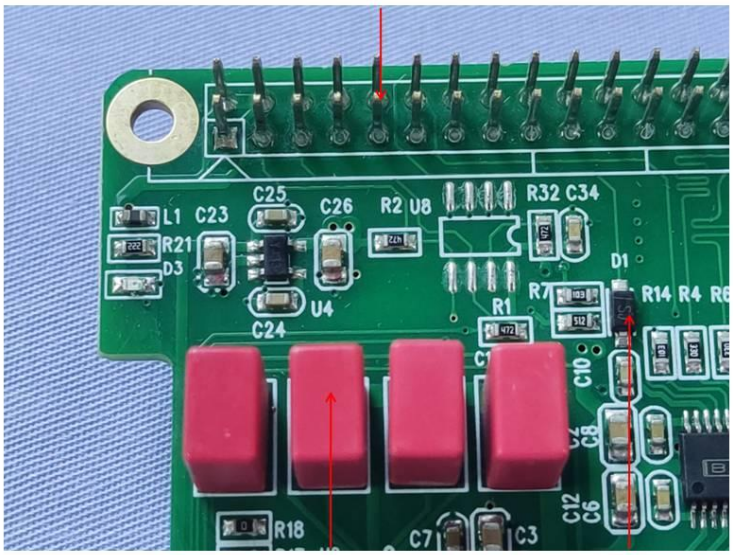
PJ1
16-19

20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C3

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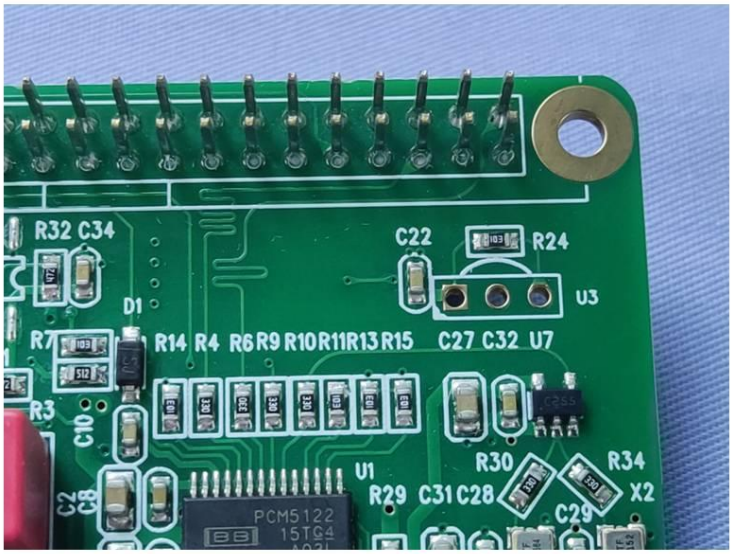
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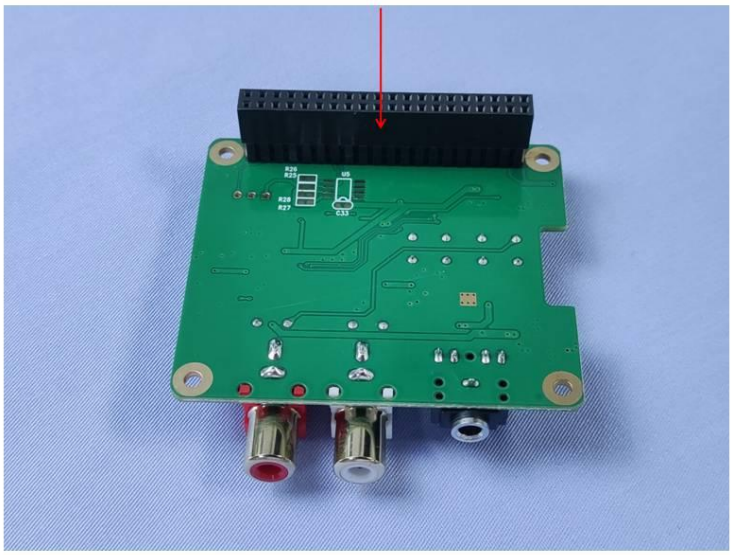

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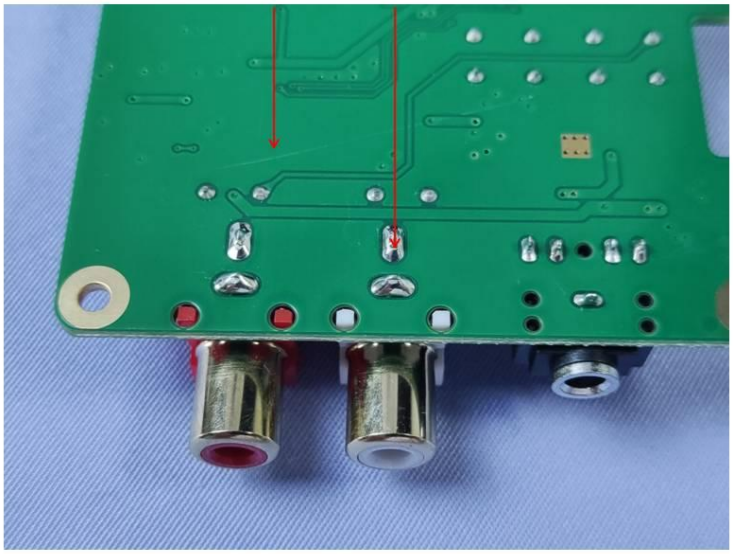

Test Report

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