TEST REPORT

LAB NO. : **(8822)056-0008**
DATE : **Mar 2, 2022**

Applicant Name: **PARTICLE INDUSTRIES,INC**

Applicant Address: 325 9TH STREET, SAN FRANCISCO, CA 94103 UNITED STATES

Date of Submission: FEB 25, 2022

Test Period: FEB 25, 2022 TO MAR 2, 2022

Sample Description: WI-FI MODULE

Style No. : P2
Sample Size: 1

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION	REMARK
European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendment Directive (EU)2015/863	PASS	-

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REMARK

If there are questions or concerns on this report, please contact the following persons:
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Photo of the Submitted Sample

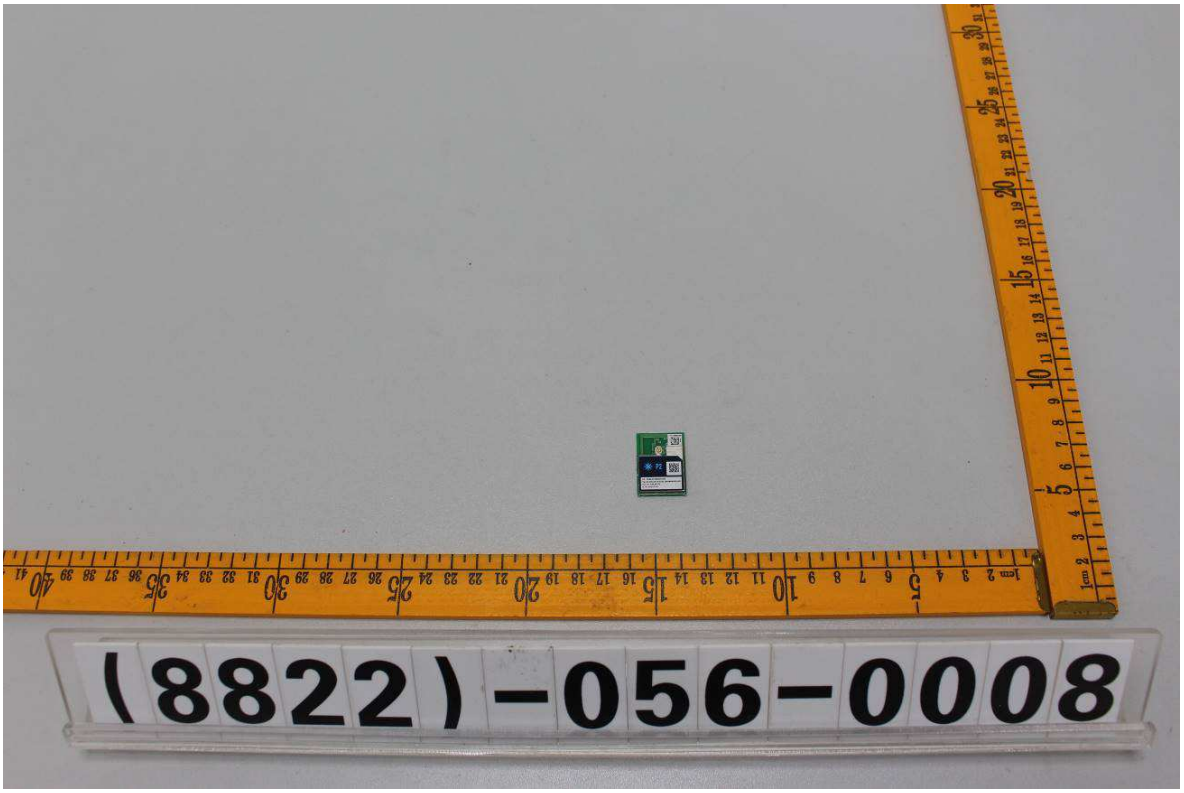
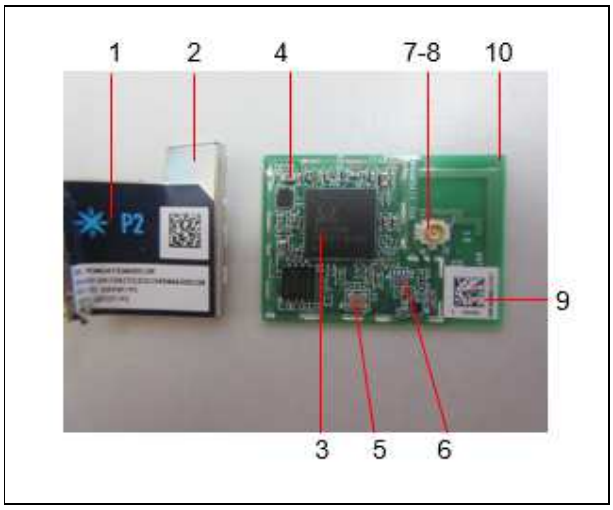


Photo of Test Item(s)



Component Description List

Test Item(s)	Component Description(s)	Location	Style(s)
1	Blue/black/white printed yellow plastic	Sticker	-
2	Silvery metal	Cover, PCB	-
3	Black body	IC, PCB	-
4	Brown body	SMD capacitor, PCB	-
5	Silvery/coppery metal	EC, PCB	-
6	Blue body	EC, PCB	-
7	Golden metal	Socket, PCB	-
8	Beige plastic	Socket, PCB	-
9	Black printed white plastic	Sticker, PCB	-
10	Green PCB	PCB	-

TEST RESULT

Compliance Test – European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendment Directive (EU)2015/863

Test Method : See Appendix.

-	Result (s)									
Parameter	**Lead (Pb)**	**Mercury (Hg)**	**Cadmium (Cd)**	**Chromium VI (Cr VI)**	**PBBs & PBDEs**	**BBP**	**DBP**	**DEHP**	**DIBP**	**Conclusion**
Unit	mg/kg									-
Test Item(s)	-	-	-	-	-	-	-	-	-	-
1	BL	BL	BL	BL	BL	BL*	BL*	BL*	BL*	PASS
2	BL	BL	BL	Negative*	NA	NA	NA	NA	NA	PASS
3	BL	BL	BL	BL	NA	NA	NA	NA	NA	PASS
4	BL	BL	BL	BL	NA	NA	NA	NA	NA	PASS
5	BL	BL	BL	BL	NA	NA	NA	NA	NA	PASS
6	BL	BL	BL	BL	NA	NA	NA	NA	NA	PASS
7	BL	BL	BL	BL	NA	NA	NA	NA	NA	PASS
8	BL	BL	BL	BL	BL	BL*	BL*	BL*	BL*	PASS
9	BL	BL	BL	BL	BL	BL*	BL*	BL*	BL*	PASS
10	BL	BL	BL	BL	ND*	BL*	BL*	BL*	BL*	PASS

Note / Key:

BL = Below limit OL = Over limit ND = Not detected NA = Not applicable
mg/kg = milligram(s) per kilogram = ppm = part(s) per million
Detection Limit : See Appendix.

Remark:

- *Denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine. Also, the XRF result(s) may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, non-uniformity composition, surface flatness.
- *Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Council Directive 2011/65/EU, Article 4(1).
- According to European Council Directive 2011/65/EU, Article 5 “Adaptation of the Annexes to scientific and technical progress”, exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.

APPENDIX

List of Analytes and their Corresponding Test Methods, Detection Limit and Maximum Allowable Limit
[Compliance Test for European Parliament and Council Directive 2011/65/EU] :

No.	Name of Analytes	Detection Limit(mg/kg)				Maximum Allowable Limit (mg/kg)
		X-ray fluorescence (XRF)[a]			Wet Chemistry	
		Plastic	Metal/Glass/ Ceramic	Others		
1	Lead (Pb)	100	200	200	10[b]	1000
2	Cadmium (Cd)	50	50	50	10[b]	100
3	Mercury (Hg)	100	200	200	10[c]	1000
4	Chromium (Cr)	100	200	200	NA	NA
5	Chromium VI (Cr VI)	NA	NA	NA	See[d] /10[e] /3[f,g]	1000 / Negative[h]
6	Bromine (Br)	200	NA	200	NA	NA
7	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	NA	NA	NA	Each 50[i]	Sum 1000
8	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)	NA	NA	NA	Each 50[i]	Sum 1000
9	- Dibutyl phthalate (DBP) - Butyl benzyl phthalate (BBP) - Di-2-ethylhexyl phthalate (DEHP) - Diisobutyl phthalate (DIBP)	NA	NA	NA	Each 50[j]	Each 1000

	NA = Not applicable IEC = International Electrotechnical Commission
[a]	Test method with reference to International Standard IEC 62321-3-1: 2013.
[b]	Test method with reference to International Standard IEC 62321-5: 2013.
[c]	Test method with reference to International Standard IEC 62321-4:2013+A1:2017.
[d]	Metal - Test method with reference to International Standard IEC 62321-7-1: 2015.
[e]	Polymers and Electronics - Test method with reference to European Standard EN 62321-7-2: 2017.
[f]	Leather - Test method International Standard ISO 17075-1:2017.
[g]	Other Than Metal, Leather, Polymers and Electronics - Test method with reference to International Standard ISO 17075-1:2017.
[h]	Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Parliament and Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Parliament and Council Directive 2011/65/EU, Article 4(1).
[i]	Test method with reference to International Standard IEC 62321-6: 2015.
[j]	Test method with reference to International Standard IEC 62321-8: 2017.

Testing Approach [Compliance Test for European Parliament and Council Directive 2011/65/EU] :

The testing approach was with reference to the following document(s).

1	International Standards IEC 62321-1: 2013 and IEC 62321-2: 2013
2	“RoHS Enforcement Guidance Document Version 1” by EU RoHS Enforcement Authorities Informal Network. (May 2006)
3	“RoHS Regulations - Government Guidance Notes” by United Kingdom Department for Business Innovation & Skills. (February 2011)
4	“Final Report to RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium” by Belgium Federal Public Service Health, Food Chain Safety and Environment. (November 2005)

*** End of Report ***