

HAN SAEM DIGITEC CO., LTD.

15, Seongnam-ro Seo-gu, Incheon Korea

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

SGS File No. : AYAA21-03933

Product Name: HANSAEM DIGITEC PCB - REACH

Item No./Part No. : N/A

Buyer(s) : SEC

**Received Date** : 2021. 01. 13

Test Period : 2021. 01. 13 to 2021. 01. 20

Test Comments : By the applicant's specific request, the sampling and testing was performed only for the part

indicated in the photo without disassembly.

**Test Results**: For further details, please refer to following page(s)

SGS Korea Co., Ltd.

Page 1 of 4

Issued Date: 2021. 01. 20

Tommy Oh / Chemical Lab Mgr

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/en/Terms-and-Conditions.aspx">https://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/en/terms-and-conditions/terms-e-document">https://www.sgs.com/en/terms-and-conditions/terms-e-document</a>. Attention is drawn to the limitation of the bility, indemnitication and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intercention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



**Sample No.** : AYAA21-03933.001

Sample Description : HANSAEM DIGITEC PCB - REACH

Item No./Part No. : N/A
Materials : PCB

#### Flame Retardants

Test Items	Unit	Test Method	MDL	Results
Hexabromocyclododecane (HBCDD)	mg/kg	With reference to USEPA 3540 C, by LC/MS	5	N.D.

Issued Date: 2021. 01. 20

Page 2 of 4

#### Other(s)

Test items	Unit	Test Method	MDL	Results
Polychlorinated Biphenyls (PCBs)	mg/kg	With reference to US EPA 8082,(US EPA 3550C), by GC/MS	3	N.D.

### Perfluorinated Compounds (PFC)

Test Items	Unit	Test Method	MDL	Results
PFOA	μg/kg	CEN/TS 15968, LC/MS/MS	10	N.D.
PFOS	μg/kg	CEN/TS 15968, LC/MS/MS	10	N.D.

NOTE: (1) N.D. = Not detected.(<MDL)

(2) mg/kg = ppm,  $\mu$ g/kg = ppb, mg/L=ppm

(3) MDL = Method Detection Limit

(4) - = No regulation

(5) \*\* = Qualitative analysis (No Unit)

(6) Negative = Undetectable / Positive = Detectable

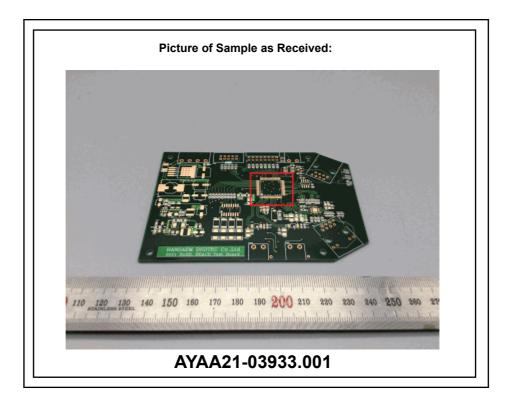
(7) The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

This test report is not related to Korea Laboratory Accreditation Scheme.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">https://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/en/terms-and-conditions/terms-e-document">https://www.sgs.com/en/terms-and-conditions/terms-e-document</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Page 3 of 4



Issued Date: 2021. 01. 20

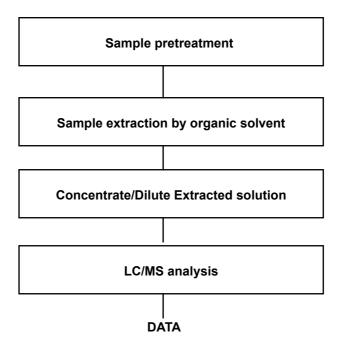
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">https://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/en/Terms-and-conditions/terms-e-document">https://www.sgs.com/en/Terms-and-conditions/terms-e-document</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).



Page 4 of 4

### **Testing Flow Chart for HBCD**

Issued Date: 2021. 01. 20



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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">https://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/en/Terms-and-conditions/terms-e-document">https://www.sgs.com/en/Terms-and-conditions/terms-e-document</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s).