

## 測試報告

號碼(No.) : CE/2018/A4841

日期(Date) : 2018/10/31

頁數(Page): 1 of 6

## Test Report

台灣嘉碩科技股份有限公司

TAI-SAW TECHNOLOGY CO., LTD.

桃園市平鎮區工業二路3號

NO. 3, INDUSTRIAL 2ND RD., PING-CHEN INDUSTRIAL DISTRICT, TAOYUAN CITY 324, TAIWAN, R. O. C.



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as):

送樣廠商(Sample Submitted By) : 台灣嘉碩科技股份有限公司 (TAI-SAW TECHNOLOGY CO., LTD.)  
樣品名稱(Sample Description) : SAW SMD PROUDCTS  
樣品型號(Style/Item No.) : TA-SERIES /TB-SERIES/TC-SERIES/TD-SERIES/TE-SERIES/TF-SERIES  
收件日期(Sample Receiving Date) : 2018/10/24  
測試期間(Testing Period) : 2018/10/24 TO 2018/10/31

=====  
測試需求(Test Requested) : 依據客戶指定，參考RoHS指令2011/65/EU Annex II測試鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚。(As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample(s).)

測試方法(Test Method) : 請參閱下一頁 (Please refer to following pages).

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages).

  
Troy Chang, Manager, Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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) tested.

# 測試報告

號碼(No.) : CE/2018/A4841

日期(Date) : 2018/10/31

頁數(Page): 2 of 6

## Test Report

台灣嘉碩科技股份有限公司

TAI-SAW TECHNOLOGY CO., LTD.

桃園市平鎮區工業二路3號

NO. 3, INDUSTRIAL 2ND RD., PING-CHEN INDUSTRIAL DISTRICT, TAOYUAN CITY 324, TAIWAN, R. O. C.



### 測試結果(Test Results)

測試部位(PART NAME)No. 1 : SAW SMD PROUDCTS (TB-SERIES)

| 測試項目<br>(Test Items)             | 單位<br>(Unit) | 測試方法<br>(Method)   | 方法偵測<br>極限值<br>(MDL) | 結果<br>(Result) |
|----------------------------------|--------------|--|----------------------|----------------|
|                                  |              |  |                      | No. 1          |
| 鎘 / Cadmium (Cd)                 | mg/kg        | 參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES. | 2                    | n. d.          |
| 鉛 / Lead (Pb)                    | mg/kg        | 參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES. | 2                    | n. d.          |
| 汞 / Mercury (Hg)                 | mg/kg        | 參考IEC 62321-4 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES. | 2                    | n. d.          |
| 六價鉻 / Hexavalent Chromium Cr(VI) | mg/kg        | 參考IEC 62321-7-2 (2017), 以UV-VIS檢測. / With reference to IEC 62321-7-2 (2017) and performed by UV-VIS.     | 8                    | n. d.          |
| 多溴聯苯總和 / Sum of PBBs             | mg/kg        | 參考IEC 62321-6 (2015), 以氣相層析/質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.        | -                    | n. d.          |
| 一溴聯苯 / Monobromobiphenyl         | mg/kg        |  | 5                    | n. d.          |
| 二溴聯苯 / Dibromobiphenyl           | mg/kg        |  | 5                    | n. d.          |
| 三溴聯苯 / Tribromobiphenyl          | mg/kg        |  | 5                    | n. d.          |
| 四溴聯苯 / Tetrabromobiphenyl        | mg/kg        |  | 5                    | n. d.          |
| 五溴聯苯 / Pentabromobiphenyl        | mg/kg        |  | 5                    | n. d.          |
| 六溴聯苯 / Hexabromobiphenyl         | mg/kg        |  | 5                    | n. d.          |
| 七溴聯苯 / Heptabromobiphenyl        | mg/kg        |  | 5                    | n. d.          |
| 八溴聯苯 / Octabromobiphenyl         | mg/kg        |  | 5                    | n. d.          |
| 九溴聯苯 / Nonabromobiphenyl         | mg/kg        |  | 5                    | n. d.          |
| 十溴聯苯 / Decabromobiphenyl         | mg/kg        | 5  | n. d.                |                |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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 instruction, 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) tested.

# 測試報告

號碼(No.) : CE/2018/A4841

日期(Date) : 2018/10/31

頁數(Page): 3 of 6

## Test Report

台灣嘉碩科技股份有限公司



TAI-SAW TECHNOLOGY CO., LTD.

桃園市平鎮區工業二路3號

NO. 3, INDUSTRIAL 2ND RD., PING-CHEN INDUSTRIAL DISTRICT, TAOYUAN CITY 324, TAIWAN, R. O. C.

| 測試項目<br>(Test Items)             | 單位<br>(Unit) | 測試方法<br>(Method)  | 方法偵測<br>極限值<br>(MDL) | 結果<br>(Result) |
|----------------------------------|--------------|---|----------------------|----------------|
|                                  |              |   |                      | No. 1          |
| 多溴聯苯醚總和 / Sum of PBDEs           | mg/kg        | 參考IEC 62321-6 (2015), 以氣相層析/質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS. | -                    | n. d.          |
| 一溴聯苯醚 / Monobromodiphenyl ether  | mg/kg        |   | 5                    | n. d.          |
| 二溴聯苯醚 / Dibromodiphenyl ether    | mg/kg        |   | 5                    | n. d.          |
| 三溴聯苯醚 / Tribromodiphenyl ether   | mg/kg        |   | 5                    | n. d.          |
| 四溴聯苯醚 / Tetrabromodiphenyl ether | mg/kg        |   | 5                    | n. d.          |
| 五溴聯苯醚 / Pentabromodiphenyl ether | mg/kg        |   | 5                    | n. d.          |
| 六溴聯苯醚 / Hexabromodiphenyl ether  | mg/kg        |   | 5                    | n. d.          |
| 七溴聯苯醚 / Heptabromodiphenyl ether | mg/kg        |   | 5                    | n. d.          |
| 八溴聯苯醚 / Octabromodiphenyl ether  | mg/kg        |   | 5                    | n. d.          |
| 九溴聯苯醚 / Nonabromodiphenyl ether  | mg/kg        |   | 5                    | n. d.          |
| 十溴聯苯醚 / Decabromodiphenyl ether  | mg/kg        | 5   | n. d.                |                |

### 備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. "-" = Not Regulated (無規格值)

## 測試報告

號碼(No.) : CE/2018/A4841

日期(Date) : 2018/10/31

頁數(Page): 4 of 6

## Test Report

台灣嘉碩科技股份有限公司



TAI-SAW TECHNOLOGY CO., LTD.

桃園市平鎮區工業二路3號

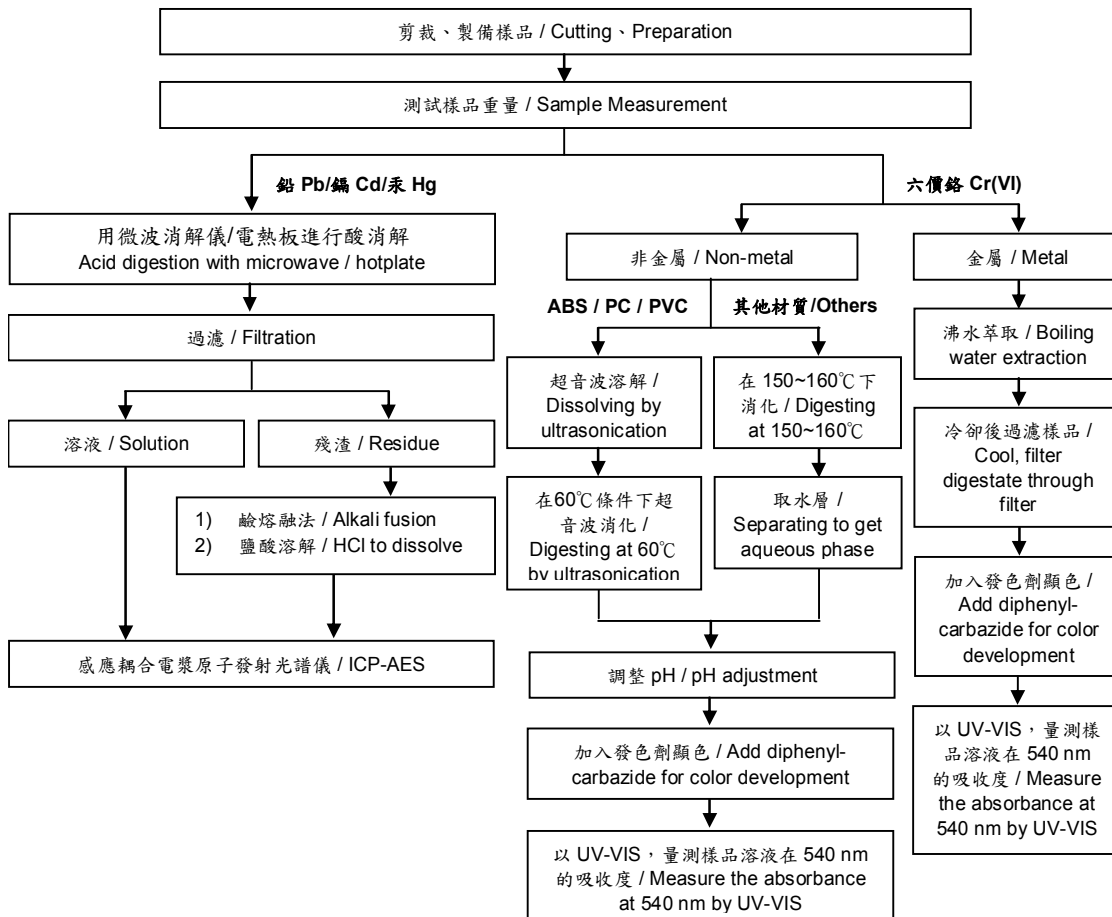
NO. 3, INDUSTRIAL 2ND RD., PING-CHEN INDUSTRIAL DISTRICT, TAOYUAN CITY 324, TAIWAN, R. O. C.

### 重金屬流程圖 / Analytical flow chart of Heavy Metal

根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)

- 測試人員：陳恩臻 / Technician : Rita Chen
- 測試負責人：張啟興 / Supervisor: Troy Chang



## 測試報告

號碼(No.) : CE/2018/A4841

日期(Date) : 2018/10/31

頁數(Page): 5 of 6

## Test Report

台灣嘉碩科技股份有限公司

TAI-SAW TECHNOLOGY CO., LTD.

桃園市平鎮區工業二路3號

NO. 3, INDUSTRIAL 2ND RD., PING-CHEN INDUSTRIAL DISTRICT, TAOYUAN CITY 324, TAIWAN, R. O. C.



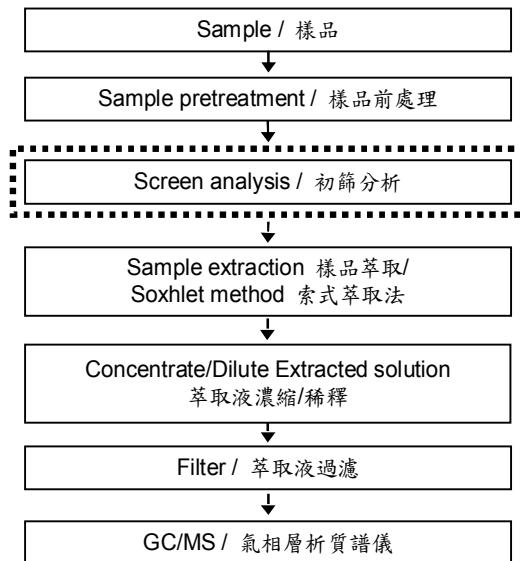
### 多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang

初次測試程序 / First testing process ———→

選擇性篩檢程序 / Optional screen process .....→

確認程序 / Confirmation process - - - →



## 測試報告

號碼(No.) : CE/2018/A4841

日期(Date) : 2018/10/31

頁數(Page): 6 of 6

## Test Report

台灣嘉碩科技股份有限公司

TAI-SAW TECHNOLOGY CO., LTD.

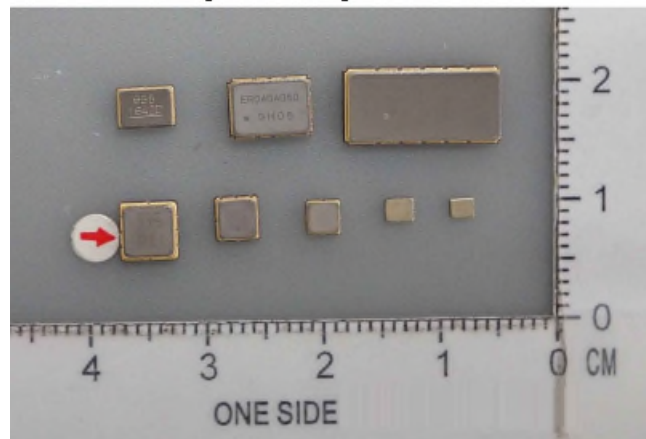
桃園市平鎮區工業二路3號

NO. 3, INDUSTRIAL 2ND RD., PING-CHEN INDUSTRIAL DISTRICT, TAOYUAN CITY 324, TAIWAN, R. O. C.

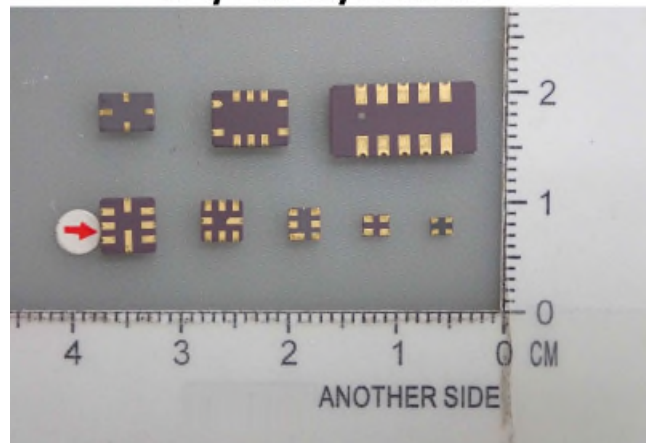


\* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 \*  
(The tested sample / part is marked by an arrow if it's shown on the photo.)

### CE/2018/A4841



### CE/2018/A4841



\*\* 報告結尾 (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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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 instruction, 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) tested.