

## Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 1 of 9

DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



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

Sample Description : DSL MEMORY MODULE  
Style/Item No. : DDR 266/333/400 200PIN/184PIN 64MB~1GB, DDR2 400/533/667/800  
200PIN/240PIN 128MB~4GB, DDR3 800/1066/1333/1600/1866 204PIN/240PIN  
512MB~16GB  
Sample Receiving Date : 2012/08/31  
Testing Period : 2012/08/31 TO 2012/09/07

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

  
  
**Chenyu Kung / Operation Manager**  
**Signed for and on behalf of**  
**SGS TAIWAN LTD.**  
**Chemical Laboratory – Taipei**

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.

# Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 2 of 9

DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



## Test Result(s)

PART NAME No.1 : MIXED ALL GREEN PCB AND ALL COMPONENTS ON IT (5 TYPES)

| Test Item(s)  | Unit  | Method  | MDL | Result |
|---|-------|---|-----|--------|
|   |       |   |     | No.1   |
| Cadmium (Cd)  | mg/kg | With reference to IEC 62321: 2008 and performed by ICP-AES.             | 2   | n.d.   |
| Lead (Pb)   | mg/kg | With reference to IEC 62321: 2008 and performed by ICP-AES.             | 2   | n.d.   |
| Mercury (Hg)  | mg/kg | With reference to IEC 62321: 2008 and performed by ICP-AES.             | 2   | n.d.   |
| Hexavalent Chromium Cr(VI)                                | mg/kg | With reference to IEC 62321: 2008 and performed by UV-VIS.              | 2   | n.d.   |
| Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide) | mg/kg | With reference to US EPA 3550C: 2007. Analysis was performed by LC/MS.  | 10  | n.d.   |
| PFOA (CAS No.: 335-67-1)                                  | mg/kg | With reference to US EPA 3550C: 2007. Analysis was performed by LC/MS.  | 10  | n.d.   |
| Hexabromocyclododecane (HBCDD) (CAS No.: 25637-99-4)      | mg/kg | With reference to US EPA 3540C method. Analysis was performed by GC/MS. | 5   | n.d.   |
| <b>Sum of PBBs</b>  | mg/kg | With reference to IEC 62321: 2008 and performed by GC/MS.               | -   | n.d.   |
| Monobromobiphenyl   | mg/kg |   | 5   | n.d.   |
| Dibromobiphenyl   | mg/kg |   | 5   | n.d.   |
| Tribromobiphenyl  | mg/kg |   | 5   | n.d.   |
| Tetrabromobiphenyl  | mg/kg |   | 5   | n.d.   |
| Pentabromobiphenyl  | mg/kg |   | 5   | n.d.   |
| Hexabromobiphenyl   | mg/kg |   | 5   | n.d.   |
| Heptabromobiphenyl  | mg/kg |   | 5   | n.d.   |
| Octabromobiphenyl   | mg/kg |   | 5   | n.d.   |
| Nonabromobiphenyl   | mg/kg |   | 5   | n.d.   |
| Decabromobiphenyl   | mg/kg |   | 5   | n.d.   |

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.

# Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 3 of 9

DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



| Test Item(s)  | Unit  | Method   | MDL   | Result |
|---|-------|--|-------|--------|
|   |       |  |       | No.1   |
| <b>Sum of PBDEs</b>                                     | mg/kg | With reference to IEC 62321: 2008 and performed by GC/MS.    | -     | n.d.   |
| Monobromodiphenyl ether                                 | mg/kg |  | 5     | n.d.   |
| Dibromodiphenyl ether                                   | mg/kg |  | 5     | n.d.   |
| Tribromodiphenyl ether                                  | mg/kg |  | 5     | n.d.   |
| Tetrabromodiphenyl ether                                | mg/kg |  | 5     | n.d.   |
| Pentabromodiphenyl ether                                | mg/kg |  | 5     | n.d.   |
| Hexabromodiphenyl ether                                 | mg/kg |  | 5     | n.d.   |
| Heptabromodiphenyl ether                                | mg/kg |  | 5     | n.d.   |
| Octabromodiphenyl ether                                 | mg/kg |  | 5     | n.d.   |
| Nonabromodiphenyl ether                                 | mg/kg |  | 5     | n.d.   |
| Decabromodiphenyl ether                                 | mg/kg |  | 5     | n.d.   |
| BBP (Benzyl butyl phthalate) (CAS No.: 85-68-7)         | %     | With reference to EN 14372. Analysis was performed by GC/MS. | 0.003 | n.d.   |
| DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7) | %     | With reference to EN 14372. Analysis was performed by GC/MS. | 0.003 | n.d.   |
| DIDP (Di-isodecyl phthalate) (CAS No.: 26761-40-0)      | %     | With reference to EN 14372. Analysis was performed by GC/MS. | 0.01  | n.d.   |
| DINP (Di-isononyl phthalate) (CAS No.: 28553-12-0)      | %     | With reference to EN 14372. Analysis was performed by GC/MS. | 0.01  | n.d.   |
| DNOP (Di-n-octyl phthalate) (CAS No.: 117-84-0)         | %     | With reference to EN 14372. Analysis was performed by GC/MS. | 0.003 | n.d.   |
| DBP (Dibutyl phthalate) (CAS No.: 84-74-2)              | %     | With reference to EN 14372. Analysis was performed by GC/MS. | 0.003 | n.d.   |

**Note :**

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. " - " = Not Regulated
5. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

**PFOS Reference Information : POPs - (EU) 757/2010**

Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above 1µg/m<sup>2</sup>.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.

## Test Report

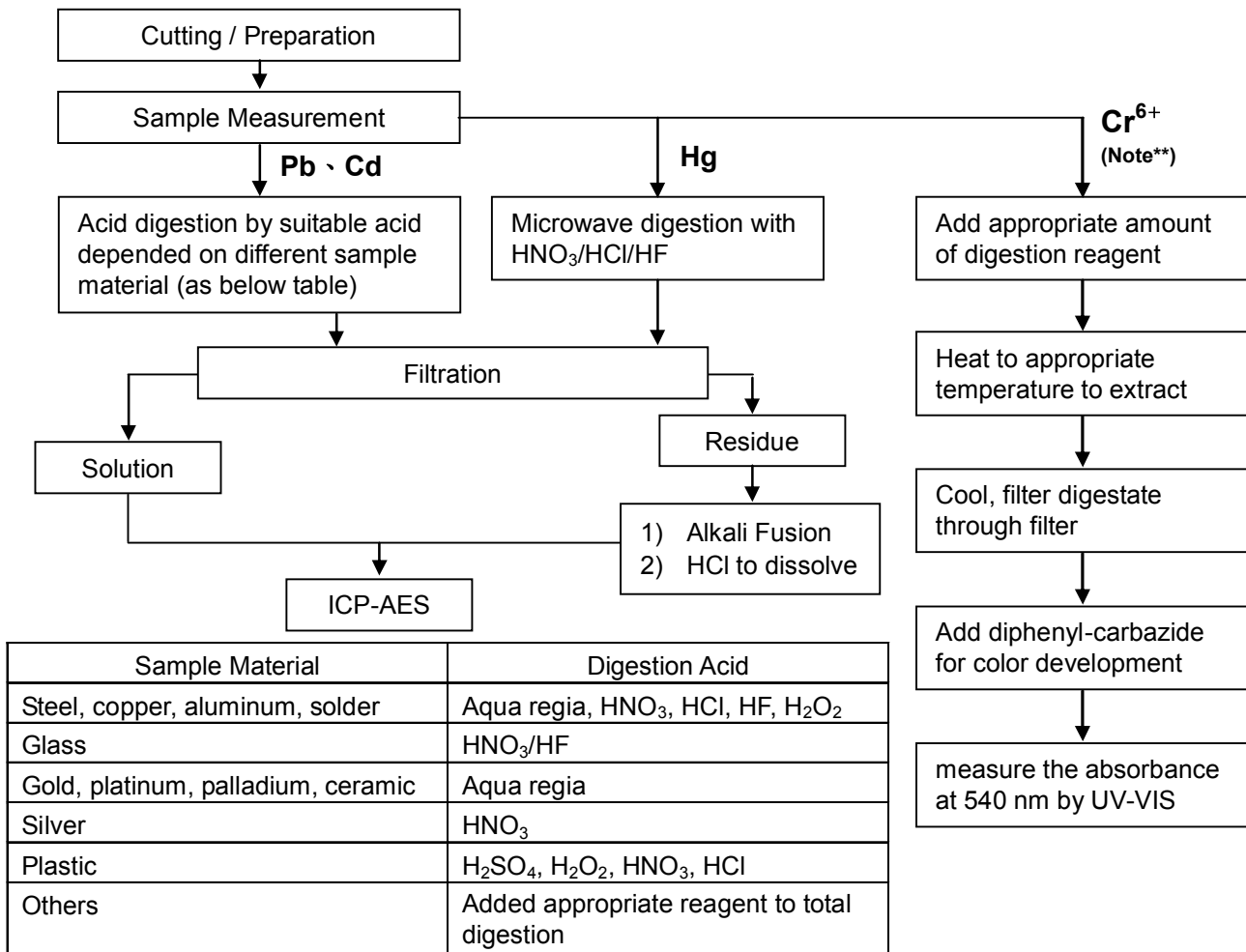
No. : CE/2012/85039 Date : 2012/09/07 Page : 4 of 9

DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart.  
(Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang



**Note\*\* :** (1) For non-metallic material, add alkaline digestion reagent and heat to 90~95 °C.  
(2) For metallic material, add pure water and heat to boiling.

## Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 5 of 9

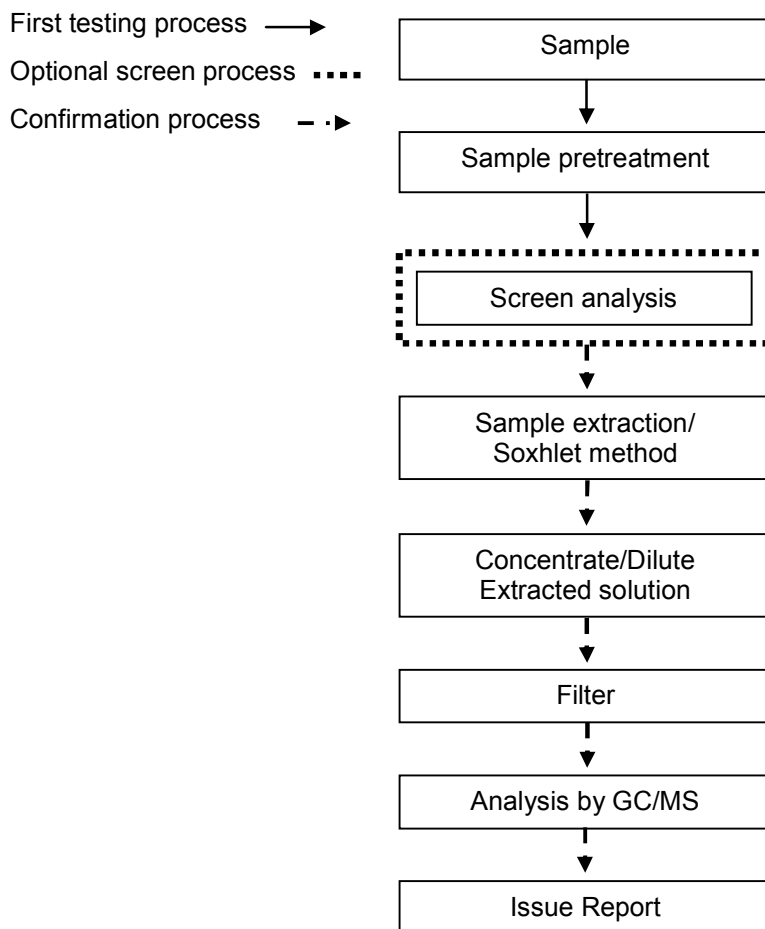
DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



### PBB/PBDE analytical FLOW CHART

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.

## Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 6 of 9

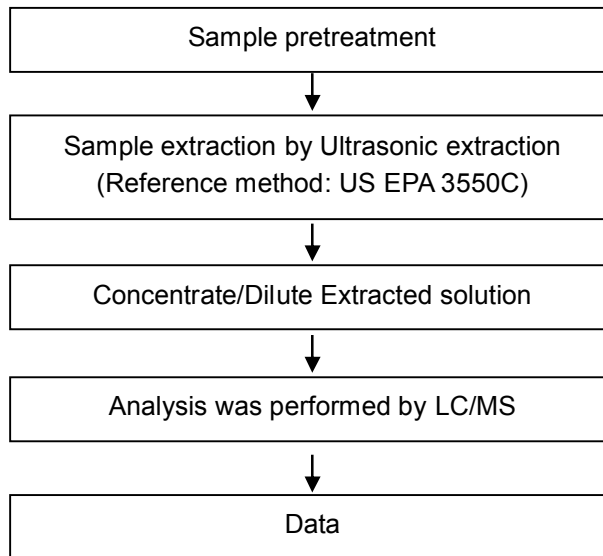
DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



### PFOA/PFOS analytical flow chart of Ultrasonic extraction (LC/MS) procedure

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.

## Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 7 of 9

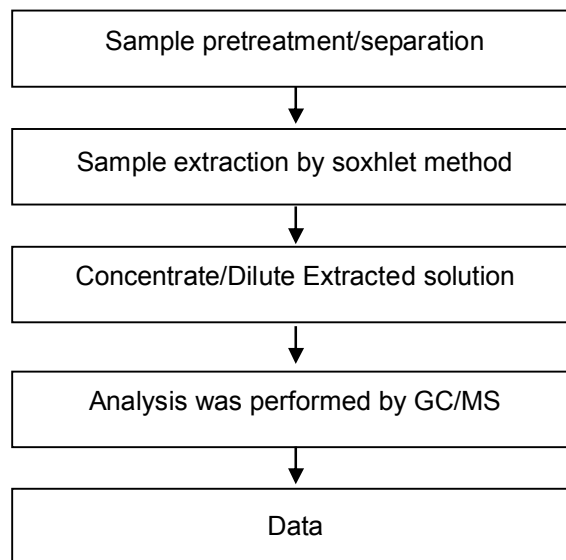
DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



### HBCDD analytical flow chart

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.

## Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 8 of 9

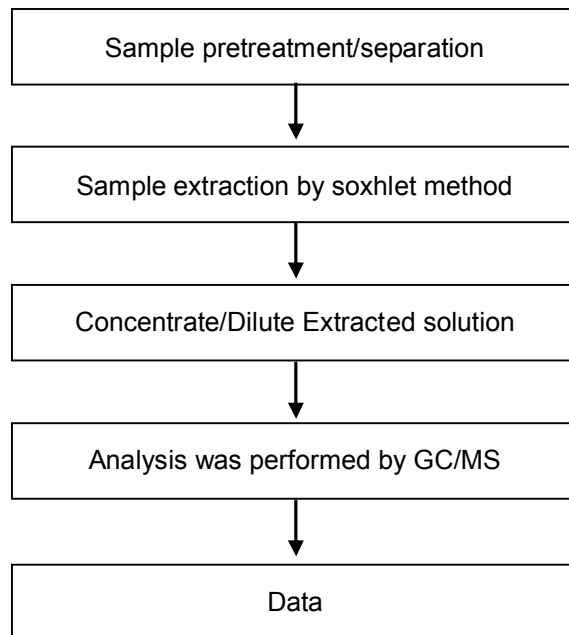
DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.



### Analytical flow chart of phthalate content

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.



## Test Report

No. : CE/2012/85039 Date : 2012/09/07 Page : 9 of 9

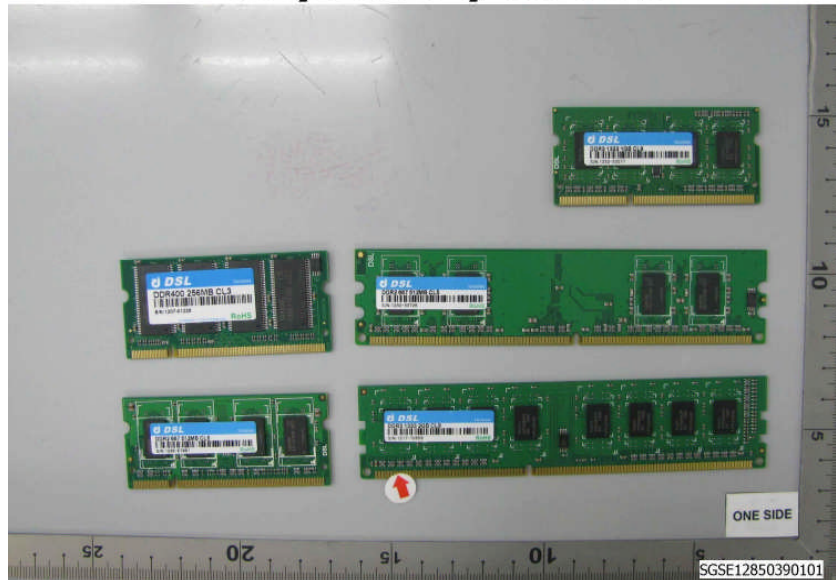
DATA SPECIALTIES CO., LTD.

4F, NO. 1, LANE 112, RUEIGUANG RD, NEI-HU, 114 TAIPEI, TAIWAN, R. O. C.

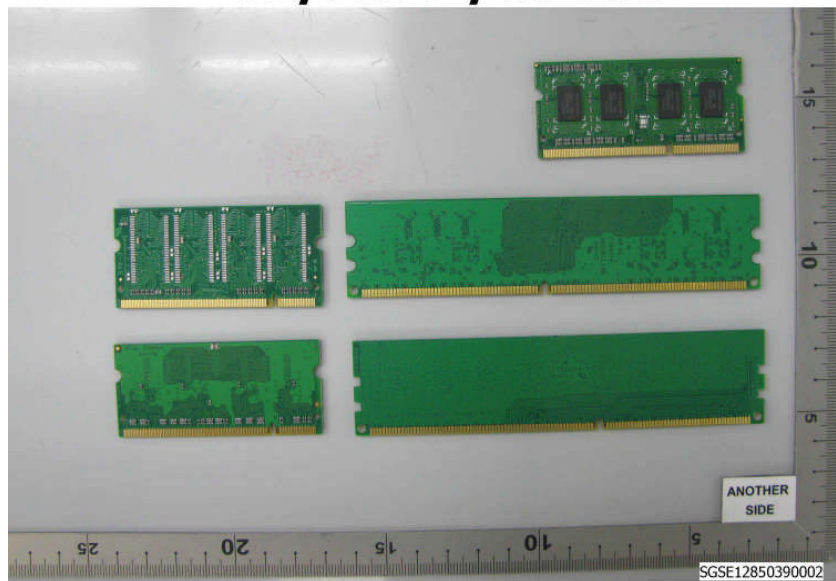


\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

### CE/2012/85039



### CE/2012/85039



\*\* End of Report \*\*

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部分複製。  
 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at [www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm) and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at [www.sgs.com/en/Terms-and-Conditions/Terms-e-Document](http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document). 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.