



**Test Report No. F690501/LF-CTSAYA08-03221** Issued Date: February 04, 2008 Page 1 of 4

To: **ACQUTEK SEMICONDUCTOR & TECHNOLOGY.**  
#493-3  
Sungsung-dong  
Cheonan-city  
CHUNGNAM  
Korea

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

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**Product Name** : Lead Frame  
**SGS File No.** : AYA08-03221  
**Received Date** : January 29, 2008  
**Test Performing Date** : January 30, 2008  
**Test Performed** : SGS Testing Korea tested the sample(s) selected by applicant with following results  
**Test Requested** : Selected test(s) as requested by client.  
**Test Method** : Please refer to next page(s).  
**Test Result(s)** : Please refer to next page(s).  
**Conclusion** : Based on the performed tests on submitted sample(s), the results **comply with the** RoHS Directive 2002/95/EC and its subsequent amendments.  
**Buyer(s)** : AMKOR  
**Comments** : The sampling and testing was performed only for the part indicated in the photo without disassembly by the applicant's specific request.

**SGS Testing Korea Co., Ltd.**

Pluto Kim  
Jinee Song  
Billy Oh/Testing Person

**Jeff Jang / Technical Mgr**



# Test Report No. F690501/LF-CTSAYA08-03221

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**Sample No.** : AYA08-03221.001  
**Sample Description** : Lead Frame  
**Item / Part No.** : C-194  
**Comments** : Material is Cu.

## RoHS Directive 2002/95/EC

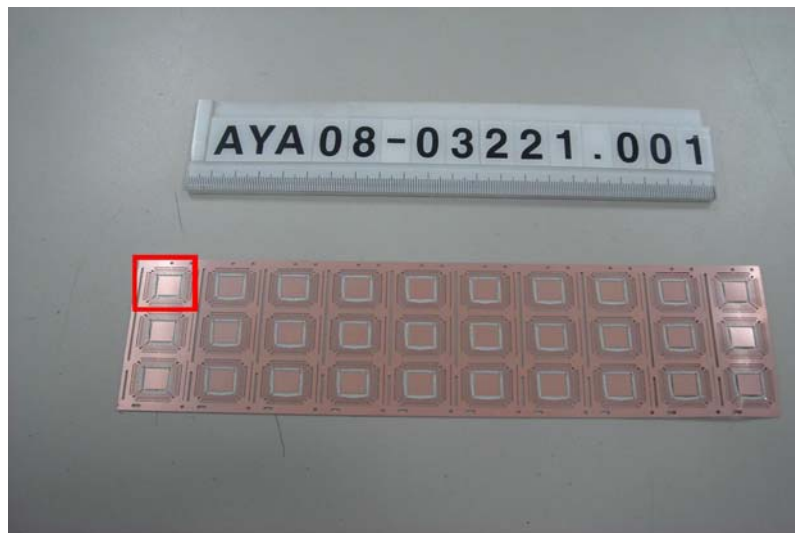
| Test Item(s):                                            | Unit  | Test Method                                            | Result   | MDL | Limit |
|----------------------------------------------------------|-------|--------------------------------------------------------|----------|-----|-------|
| Cadmium(Cd)                                              | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV),<br>ICP-OES | N.D.     | 0.5 | 100   |
| Lead (Pb)                                                | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV),<br>ICP-OES | N.D.     | 5   | 1000  |
| Mercury (Hg)                                             | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV),<br>ICP-OES | N.D.     | 2   | 1000  |
| Hexavalent Chromium(CrVI)                                | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV),<br>UV-VIS  | -        | 1   | 1000  |
| Hexavalent Chromium(CrVI)<br>by boiling water extraction | -     | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV),            | Negative | -   | #     |
| <b>Sum of PBBs</b>                                       | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | -   | 1000  |
| Monobromobiphenyl                                        | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Dibromobiphenyl                                          | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Tribromobiphenyl                                         | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Tetrabromobiphenyl                                       | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Hexabromobiphenyl                                        | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Pentabromobiphenyl                                       | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Heptabromobiphenyl                                       | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Octabromobiphenyl                                        | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Nonabromobiphenyl                                        | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Decabromobiphenyl                                        | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| <b>Sum of PBDEs (Mono to Nona)(Note (4))</b>             | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | -   | 1000  |
| Monobromodiphenyl ether                                  | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Dibromodiphenyl ether                                    | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Tribromodiphenyl ether                                   | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Tetrabromodiphenyl ether                                 | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Pentabromodiphenyl ether                                 | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Hexabromodiphenyl ether                                  | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Heptabromodiphenyl ether                                 | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Octabromodiphenyl ether                                  | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Nonabromodiphenyl ether                                  | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| Decabromodiphenyl ether                                  | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | 5   | -     |
| <b>Sum of PBDEs (Mono to Deca)</b>                       | mg/kg | IEC 62321/2 <sup>nd</sup> CDV (111/95/CDV), GC-MS      | N.D.     | -   | -     |

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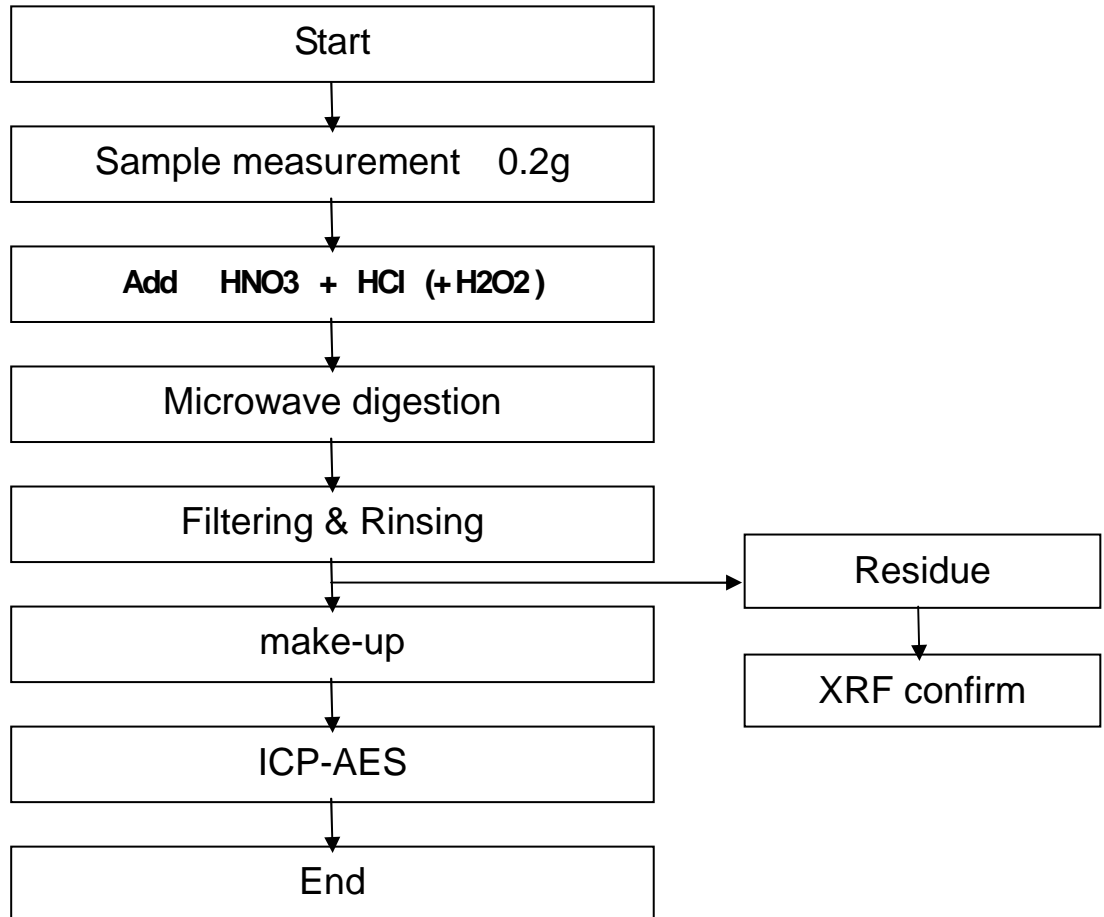
- Note :
- (1) mg/kg = ppm ; 0.1wt% = 1000ppm
  - (2) N.D. = Not detected.
  - (3) MDL = Method Detection Limit
  - (4) Sum of Mono to NonaBDE. According to 2005/717/EC DecaBDE is exempt in polymer applications.
  - (5) # : Positive means the presence of CrVI on the tested areas  
Negative means the absence of CrVI on the tested areas
  - (6) "-" = Not regulated
  - (7) \* : Exceeds limit

**Picture of Sample as Received :**

**Sample Color :                      Brown**



### FLOW CHART OF DIGESTION (1)



Operator           Dami Yeom

Section Chief      Jeff Jang

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