

## Test Report (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 1 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



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

Sample Description : SEMICONDUCTOR WAFERS  
Style/Item No. : J19165 SBC18H2  
Sample Receiving Date : 2012/01/02  
Testing Period : 2012/01/02 TO 2012/01/09

=====  
**Test Requested** : Seventy-three(73) Substances of Very High Concern (SVHC) screening. SVHC candidate list based on the publication by European Chemicals Agency (ECHA) on 2011 December 19, regarding Regulation (EC) No 1907/2006 concerning the REACH.

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

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

**Summary** : According to the interpretation of ECHA and the majority of EU member states on the definition of an article as well as the specified scope and analytical technique, concentrations of all SVHC are <0.1% in the submitted sample(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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 2 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



**Test Sample :** WAFER

**Test Method :** SGS In-House method-RSTS-EE-SVHC-003, RSTS-EE-SVHC-004, RSTS-EE-SVHC-006.  
Analyzed by ICP-AES, UV-VIS, GC/MS, LC/MS and GC/FPD.

**Remark:**

- The chemical analysis of 73 SVHC is performed by means of currently available analytical techniques against the list published by ECHA on 2011 December 19. This list is under evaluation by ECHA and may subject to change in the future.  
Refer to: [http://echa.europa.eu/chem\\_data/authorisation\\_process/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp)
- In accordance with Regulation (EC) No 1907/2006, any producer or importer of articles shall notify ECHA, in accordance with paragraph 2 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance is present in those articles above a concentration of 0.1% weight by weight (w/w).
- Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance.
- If a SVHC is found over the reporting limit, client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

**Test Result(s)**

Substance Name	Concentration of Article (%)	RL (%)	Classification [Appendix A]
Anthracene (CAS No.: 120-12-7)	n.d.	0.005	PBT
4,4' - Diaminodiphenylmethane (CAS No.: 101-77-9)	n.d.	0.005	CC2
DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	n.d.	0.005	TRC2
BBP (Benzyl butyl phthalate) (CAS No.: 85-68-7)	n.d.	0.005	TRC2
Bis (2-ethyl(hexyl)phthalate) (DEHP) (CAS No.: 117-81-7)	n.d.	0.005	TRC2
5-tert-butyl-2,4,6-trinitro- m-xylene (Musk Xylene) (CAS No.: 81-15-2)	n.d.	0.005	vPvB
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ - HBCDD, $\beta$ - HBCDD, $\gamma$ - HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	n.d.	0.005	PBT
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No.: 85535-84-8)	n.d.	0.01	PBT
Bis(tributyltin)oxide*** (CAS No.: 56-35-9)	n.d.	-	PBT

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 3 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance Name	Concentration of Article (%)	RL (%)	Classification [Appendix A]
Cobalt dichloride (CAS No.: 7646-79-9)	n.d.	0.05	CC2; TRC2
Diarsenic pentoxide*** (CAS No.: 1303-28-2)	n.d.	-	CC1
Diarsenic trioxide*** (CAS No.: 1327-53-3)	n.d.	-	CC1
Triethyl arsenate*** (CAS No.: 15606-95-8)	n.d.	-	CC1
Lead hydrogen arsenate*** (CAS No.: 7784-40-9) (※1)	n.d.	-	CC1; TRC1
Sodium chromate*** (CAS No.: 7775-11-3)	n.d.	-	CC2; MC2; TRC2
Ammonium dichromate*** (CAS No.: 7789-09-5)	n.d.	-	CC2; MC2; TRC2
Potassium dichromate*** (CAS No.: 7778-50-9)	n.d.	-	CC2; MC2; TRC2
Potassium chromate*** (CAS No.: 7789-00-6)	n.d.	-	CC2; MC2
Sodium dichromate*** (CAS No.: 10588-01-9, 7789-12-0(*)	n.d.	-	CC2; MC2; TRC2
Chromium trioxide*** (CAS No.: 1333-82-0)	n.d.	-	CC1; MC2
Acids generated from chromium trioxide and their oligomers: Chromic acid*** (CAS No.: 7738-94-5)	n.d.	-	CC2
Acids generated from chromium trioxide and their oligomers: Dichromic acid*** (CAS No.: 13530-68-2)	n.d.	-	CC2
Acids generated from chromium trioxide and their oligomers: Oligomers of chromic acid and dichromic acid (* 1)	n.d.	-	CC2
Strontium chromate*** (CAS No.: 7789-06-2)	n.d.	-	CC2
Anthracene oil (CAS No.: 90640-80-5) (**)	n.d.	0.05	PBT; vPvB; CC2
Anthracene oil, anthracene paste, distn. Lights (CAS No.: 91995-17-4) (**)	n.d.	0.05	PBT; vPvB; CC2; MC2
Anthracene oil, anthracene paste, anthracene fraction (CAS No.: 91995-15-2) (**)	n.d.	0.05	PBT; vPvB; CC2; MC2
Anthracene oil, anthracene-low (CAS No.: 90640-82-7) (**)	n.d.	0.05	PBT; vPvB; CC2; MC2
Anthracene oil, anthracene paste (CAS No.: 90640-81-6) (**)	n.d.	0.05	PBT; vPvB; CC2; MC2
Pitch, coal tar, high-temp. (CAS No.: 65996-93-2) (**)	n.d.	0.05	PBT; vPvB; CC2
Aluminosilicate, Refractory Ceramic Fibres Al <sub>2</sub> O <sub>3</sub> : 43.5 - 47 % w/w, and SiO <sub>2</sub> : 49.5 - 53.5 % w/w, or Al <sub>2</sub> O <sub>3</sub> : 45.5 - 50.5 % w/w, and SiO <sub>2</sub> : 48.5 - 54 % w/w	n.d.	0.05	CC2
Zirconia Aluminosilicate, Refractory Ceramic Fibres Al <sub>2</sub> O <sub>3</sub> : 35- 36 % w/w, and SiO <sub>2</sub> : 47.5 - 50 % w/w, and ZrO <sub>2</sub> : 15- 17 % w/w	n.d.	0.05	CC2
DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)	n.d.	0.005	TRC2
2,4-Dinitrotoluene (CAS No.: 121-14-2)	n.d.	0.005	CC2

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 4 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance Name	Concentration of Article (%)	RL (%)	Classification [Appendix A]
Tris(2-chloroethyl) phosphate (TCEP) (CAS No.: 115-96-8)	n.d.	0.005	TRC2
Lead chromate (CAS No.: 7758-97-6)	n.d.	0.01	CC2; TRC1
Lead chromate molybdate sulphate red (C.I. Pigment Red 104) (CAS No.: 12656-85-8)	n.d.	0.01	CC2; TRC1
Lead sulfochromate yellow (C.I. Pigment Yellow 34) (CAS No.: 1344-37-2)	n.d.	0.01	CC2; TRC1
Acrylamide (CAS No.: 79-06-1)	n.d.	0.005	CC2; MC2
Boric acid*** (CAS No.: 10043-35-3; 11113-50-1)	n.d.	-	TRC2
Disodium tetraborate, anhydrous*** (CAS No.: 1303-96-4, 1330-43-4, 12179-04-3)	n.d.	-	TRC2
Tetraboron disodium heptaoxide, hydrate (CAS No.: 12267-73-1) (*2)	n.d.	-	TRC2
Trichloroethylene (CAS No.: 79-01-6)	n.d.	0.005	CC2
Cobalt(II) sulphate*** (CAS No.: 10124-43-3)	n.d.	-	CC2; TRC2
Cobalt(II) dinitrate*** (CAS No.: 10141-05-6)	n.d.	-	CC2; TRC2
Cobalt(II) carbonate*** (CAS No.: 513-79-1)	n.d.	-	CC2; TRC2
Cobalt(II) diacetate*** (CAS No.: 71-48-7)	n.d.	-	CC2; TRC2
2-Methoxyethanol (CAS No.: 109-86-4)	n.d.	0.005	TRC2
2-Ethoxyethanol (CAS No.: 110-80-5)	n.d.	0.005	TRC2
2-ethoxyethyl acetate (CAS No.: 111-15-9)	n.d.	0.05	TRC2
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (CAS No.: 68515-42-4)	n.d.	0.05	TRC2
Hydrazine (CAS No.: 7803-57-8; 302-01-2)	n.d.	0.05	CC2
1-methyl-2-pyrrolidone (CAS No.: 872-50-4)	n.d.	0.05	TRC2
1,2,3-trichloropropane (CAS No.: 96-18-4)	n.d.	0.05	CC2; TRC2
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (CAS No.: 71888-89-6)	n.d.	0.05	TRC2
Arsenic acid*** (CAS No.: 7778-39-4)	n.d.	-	CC1
Calcium arsenate*** (CAS No.: 7778-44-1)	n.d.	-	CC1
Trilead diarsenate*** (CAS No.: 3687-31-8) (※1)	n.d.	-	CC1; TRC1
Lead diazide, Lead azide*** (CAS No.: 13424-46-9)	n.d.	-	TRC1
Lead styphnate*** (CAS No.: 15245-44-0)	n.d.	-	TRC1
Lead dipicrate*** (CAS No.: 6477-64-1)	n.d.	-	TRC1
Dichromium tris (chromate)*** (CAS No.: 24613-89-6)	n.d.	-	CC2

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 5 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance Name	Concentration of Article (%)	RL (%)	Classification [Appendix A]
Potassium hydroxyoctaoxidizincatedi- chromate*** (CAS No.: 11103-86-9)	n.d.	-	CC1
Pentazinc chromate octahydroxide*** (CAS No.: 49663-84-5)	n.d.	-	CC1
Formaldehyde, oligomeric reaction products with aniline (technical MDA) (CAS No.: 25214-70-4)	n.d.	0.05	CC2
Bis(2-methoxyethyl) phthalate (CAS No.: 117-82-8)	n.d.	0.05	TRC2
2-Methoxyaniline; o-Anisidine (CAS No.: 90-04-0)	n.d.	0.05	CC2
4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol) (CAS No.: 140-66-9)	n.d.	0.05	Equivalent concern
1,2-Dichloroethane (CAS No.: 107-06-2)	n.d.	0.05	CC2
Bis(2-methoxyethyl) ether (CAS No.: 111-96-6)	n.d.	0.05	TRC2
N,N-dimethylacetamide (DMAC) (CAS No.: 127-19-5)	n.d.	0.05	TRC2
2,2'-dichloro- 4,4'-methylenedianiline (MOCA) (CAS No.: 101-14-4)	n.d.	0.05	CC2
Phenolphthalein (CAS No.: 77-09-8)	n.d.	0.05	CC2
Aluminosilicate, Refractory Ceramic Fibres oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges	n.d.	0.05	CC2
Zirconia Aluminosilicate, Refractory Ceramic Fibres oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges	n.d.	0.05	CC2

## Note :

1. mg/kg = ppm; 0.1wt% = 1000ppm
2. n.d.= not detected = below Reporting Limit
3. RL = Reporting Limit
4. Definition of classification is listed in Appendix A of this report in accordance with 67/548/EEC and Regulation (EC) No 1907/2006.
5. Please refer to Appendix C to find the concentration and the weight of each tested unit.
6. " - " = Not Regulated
7. (\*): conc. of Sodium dichromate dihydrate (CAS No.: 7789-12-0) = conc. of sodium dichromate  $\times$  1.1374
8. (\*\*): The concentrations of above-mentioned mixtures are evaluated per the gained composition rate between the selected marks and the mixtures.
9. (\* 1): Oligomers of chromic acid and dichromic acid : since the oligomers are made of the unknown amount of chromic acid or dichromic acid that results in no fixed molecular weight, therefore the monomer of chromic acid or dichromic acid is relevant and considered.

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 6 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



10. (\*2): Tetraboron disodium heptaoxide, hydrate: Only anhydrous form of disodium tetraborate is relevant and considered according to ECHA explanation (Ref no.: INC 000000032519).
11. (\*1): Regarding the compound containing arsenic and lead, lead and arsenic are tested and respectively used for the calculation of the independent concentration of the compound containing arsenic and lead. The minimum value of the two independently calculated concentrations is used as the final concentration for the report.
12. \*\*\*: The substance was calculated by the test results of Tributyl Tin or element (Ex. Arsenic, Lead, Cr(VI), Boron, Cobalt respectively).

$$AX = A \times F$$

AX	A	F
Diarsenic pentaoxide	Arsenic	1.5339
Diarsenic trioxide		1.3203
Triethyl arsenate		3.0179
Lead hydrogen arsenate		4.6332
Lead dipicrate	Lead	1.6753
Lead styphnate		3.2017
Lead diazide, Lead azide		2.1732
Trilead diarsenate		1.4056
Trilead diarsenate	Arsenic	1.447
Arsenic acid		6.0025
Calcium arsenate		1.8946
Bis(tributyltin)oxide	Tributyl Tin (TBT)	2.6566
Boric acid	Boron	1.0276
Disodium tetraborate, anhydrous		5.7195
Disodium tetraborate, pentahydrate		4.6531
Disodium tetraborate, decahydrate		6.7361
Cobalt(II) sulphate	Cobalt	8.8191
Cobalt(II) dinitrate		2.63
Cobalt(II) carbonate		3.1042
Cobalt(II) diacetate		2.0183
		3.0038

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 7 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



AX = A × F

AX	A	F
Sodium dichromate	Hexavalent Chromium Cr(VI)	2.5192
Sodium chromate		3.1151
Ammonium dichromate		2.4239
Potassium dichromate		2.8289
Potassium chromate		3.7347
Chromium trioxide		1.9231
Chromic acid		2.2696
Dichromic acid		2.0963
Strontium chromate		3.9159
Pentazinc chromate octahydroxide		11.1345
Potassium hydroxyoctaoxidizincatedi-chromate		4.0277
Dichromium tris (chromate)		2.8975

### The test result is given as:

Substance Name	Concentration of Article (%)	RL (%)
Tributyl Tin (TBT)	n.d.	0.005
Arsenic (As) (※2)	n.d.	0.005
Lead (Pb)	n.d.	0.005
Hexavalent Chromium Cr(VI)	n.d.	0.005
Boron (B) (※2)	n.d.	0.005
Cobalt (Co)	n.d.	0.005

13. (※2): The extracted soluble Boron / Arsenic are detected by ICP-AES.

## Test Report (SVHC)

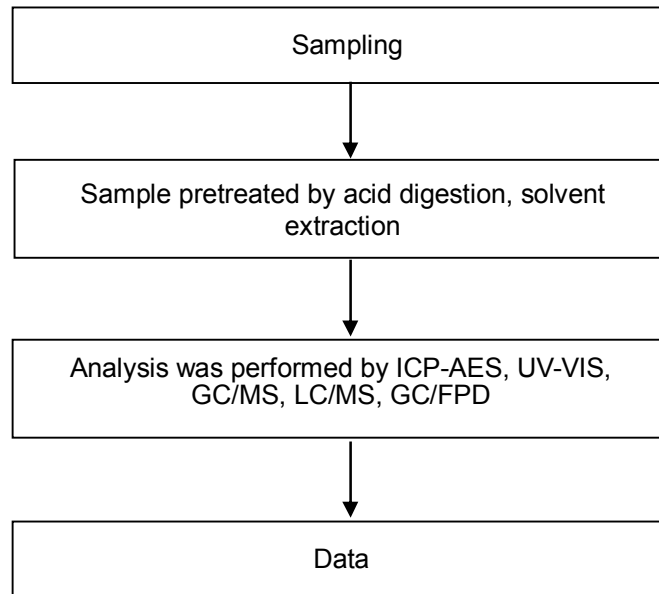
No. : CR/2012/10004 Date : 2012/01/09 Page : 8 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



### Analytical flow chart of SVHC

- 1) Name of the person who made measurement: Roman Wong / Stacy Chou / Climbgreat Yang
- 2) Name of the person in charge of measurement: Chenyu Kung



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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

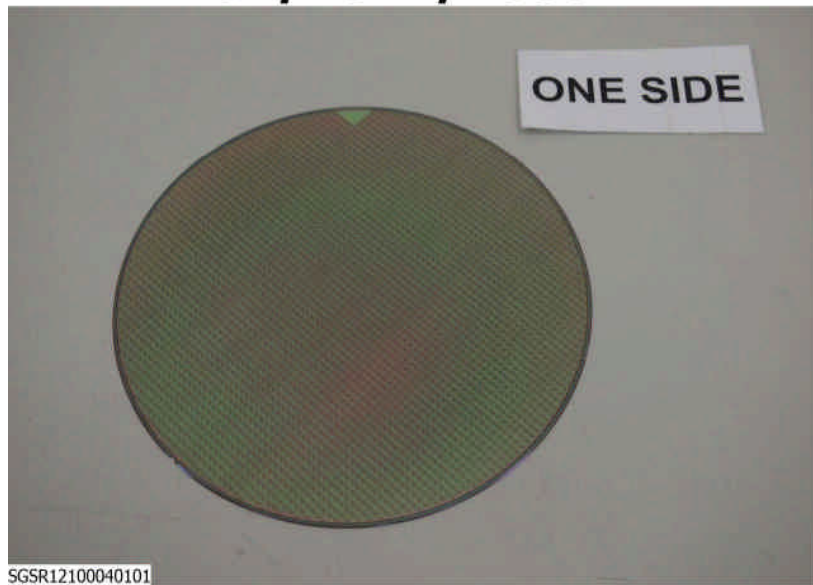
No. : CR/2012/10004 Date : 2012/01/09 Page : 9 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



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

### CR/2012/10004



### CR/2012/10004



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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 10 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



## 【Appendix A】

Classification	Definition under 67/548/EEC and Regulation (EC) No 1907/2006
CC1 (Carcinogen Category 1)	Substances known to be carcinogenic to man. There is sufficient evidence to establish a causal association between human exposure to a substance and the development of cancer.
CC2 (Carcinogen Category 2)	Substances which should be regarded as if they are carcinogenic to man. There is sufficient evidence to provide a strong presumption that human exposure to a substance may result in the development of cancer. Generally on the basis of: - appropriate long-term animal studies - other relevant information.
MC1 (Mutagen Category 1)	Substances known to be mutagenic to man. There is sufficient evidence to establish a causal association between human exposure to a substance and heritable genetic damage.
MC2 (Mutagen Category 2)	Substances which should be regarded as if they are mutagenic to man. There is sufficient evidence to provide a strong presumption that human exposure to the substance may result in the development of heritable genetic damage, generally on the basis of: - appropriate animal studies, - other relevant information.
TRC1 (Toxic to Reproduction Category 1)	Substances known to impair fertility in humans. There is sufficient evidence to establish a causal relationship between human exposure to the substance and impaired fertility. Substances known to cause developmental toxicity in humans. There is sufficient evidence to establish a causal relationship between human exposure to the substance and subsequent developmental toxic effects in the progeny.
TRC2 (Toxic to Reproduction Category 2)	Substances which should be regarded as if they impair fertility in humans. There is sufficient evidence to provide a strong presumption that human exposure to the substance may result in impaired fertility on the basis of: - clear evidence in animal studies of impaired fertility in the absence of toxic effects, or, evidence of impaired fertility occurring at around the same dose levels as other toxic effects but which is not a secondary nonspecific consequence of the other toxic effects, - other relevant information. Substances which should be regarded as if they cause developmental toxicity to humans. There is sufficient evidence to provide a strong presumption that human exposure to the substance may result in developmental toxicity, generally on the basis of: - clear results in appropriate animal studies where effects have been observed in the absence of signs of marked maternal toxicity, or at around the same dose levels as other toxic effects but which are not a secondary non-specific consequence of the other toxic effects, - other relevant information.
PBT & vPvB	Substances which are persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) pose a particular challenge to the chemicals safety management. For these substances a "safe" concentration in the environment cannot be established with sufficient reliability.

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 11 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



### 【Appendix B】

SVHC SURVEY FORM			
Company Name	JAZZ SEMICONDUCTOR		
Product name	SEMICONDUCTOR WAFERS		
Product/Sampling weight	53.9 g		
Report No.	CR/2012/10004		
Substance identification			
Substance name	Concentration of Article (%)	weight (mg)	providing information about safe use according to Article 33 is necessary
Anthracene	n.d.	N/A	No
4,4' - Diaminodiphenylmethane	n.d.	N/A	No
DBP (Dibutyl phthalate)	n.d.	N/A	No
BBP (Benzyl butyl phthalate)	n.d.	N/A	No
Bis (2-ethyl(hexyl)phthalate) (DEHP)	n.d.	N/A	No
5-tert-butyl-2,4,6-trinitro- m-xylene (Musk Xylene)	n.d.	N/A	No
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ - HBCDD, $\beta$ - HBCDD, $\gamma$ - HBCDD)	n.d.	N/A	No
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	n.d.	N/A	No
Bis(tributyltin)oxide	n.d.	N/A	No
Cobalt dichloride	n.d.	N/A	No
Diarsenic pentaoxide	n.d.	N/A	No
Diarsenic trioxide	n.d.	N/A	No
Triethyl arsenate	n.d.	N/A	No
Lead hydrogen arsenate	n.d.	N/A	No
Sodium chromate	n.d.	N/A	No
Ammonium dichromate	n.d.	N/A	No
Potassium dichromate	n.d.	N/A	No
Potassium chromate	n.d.	N/A	No
Sodium dichromate	n.d.	N/A	No
Chromium trioxide	n.d.	N/A	No

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 12 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance name	Concentration of Article (%)	weight (mg)	providing information about safe use according to Article 33 is necessary
Acids generated from chromium trioxide and their oligomers: Chromic acid	n.d.	N/A	No
Acids generated from chromium trioxide and their oligomers: Dichromic acid	n.d.	N/A	No
Acids generated from chromium trioxide and their oligomers: Oligomers of chromic acid and dichromic acid	n.d.	N/A	No
Strontium chromate	n.d.	N/A	No
Anthracene oil	n.d.	N/A	No
Anthracene oil, anthracene paste, distn. Lights	n.d.	N/A	No
Anthracene oil, anthracene paste, anthracene fraction	n.d.	N/A	No
Anthracene oil, anthracene-low	n.d.	N/A	No
Anthracene oil, anthracene paste	n.d.	N/A	No
Pitch, coal tar, high-temp.	n.d.	N/A	No
Aluminosilicate, Refractory Ceramic Fibres Al <sub>2</sub> O <sub>3</sub> : 43.5 - 47 % w/w, and SiO <sub>2</sub> : 49.5 - 53.5 % w/w, or Al <sub>2</sub> O <sub>3</sub> : 45.5 - 50.5 % w/w, and SiO <sub>2</sub> : 48.5 - 54 % w/w	n.d.	N/A	No
Zirconia Aluminosilicate, Refractory Ceramic Fibres Al <sub>2</sub> O <sub>3</sub> : 35- 36 % w/w, and SiO <sub>2</sub> : 47.5 - 50 % w/w, and ZrO <sub>2</sub> : 15- 17 % w/w	n.d.	N/A	No
DIBP (Di-isobutyl phthalate)	n.d.	N/A	No
2,4-Dinitrotoluene	n.d.	N/A	No
Tris(2-chloroethyl) phosphate (TCEP)	n.d.	N/A	No
Lead chromate	n.d.	N/A	No
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	n.d.	N/A	No
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	n.d.	N/A	No
Acrylamide	n.d.	N/A	No
Boric acid	n.d.	N/A	No
Disodium tetraborate, anhydrous	n.d.	N/A	No
Tetraboron disodium heptaoxide, hydrate	n.d.	N/A	No
Trichloroethylene	n.d.	N/A	No
Cobalt(II) sulphate	n.d.	N/A	No

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 13 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance name	Concentration of Article (%)	weight (mg)	providing information about safe use according to Article 33 is necessary
Cobalt(II) dinitrate	n.d.	N/A	No
Cobalt(II) carbonate	n.d.	N/A	No
Cobalt(II) diacetate	n.d.	N/A	No
2-Methoxyethanol	n.d.	N/A	No
2-Ethoxyethanol	n.d.	N/A	No
2-ethoxyethyl acetate	n.d.	N/A	No
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	n.d.	N/A	No
Hydrazine	n.d.	N/A	No
1-methyl-2-pyrrolidone	n.d.	N/A	No
1,2,3-trichloropropane	n.d.	N/A	No
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	n.d.	N/A	No
Arsenic acid	n.d.	N/A	No
Calcium arsenate	n.d.	N/A	No
Trilead diarsenate	n.d.	N/A	No
Lead diazide, Lead azide	n.d.	N/A	No
Lead styphnate	n.d.	N/A	No
Lead dipicrate	n.d.	N/A	No
Dichromium tris (chromate)	n.d.	N/A	No
Potassium hydroxyoctaoxodizincatedi-chromate	n.d.	N/A	No
Pentazinc chromate octahydroxide	n.d.	N/A	No
Formaldehyde, oligomeric reaction products with aniline (technical MDA)	n.d.	N/A	No
Bis(2-methoxyethyl) phthalate	n.d.	N/A	No
2-Methoxyaniline; o-Anisidine	n.d.	N/A	No
4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol)	n.d.	N/A	No
1,2-Dichloroethane	n.d.	N/A	No
Bis(2-methoxyethyl) ether	n.d.	N/A	No
N,N-dimethylacetamide (DMAC)	n.d.	N/A	No
2,2'-dichloro- 4,4'-methylenedianiline (MOCA)	n.d.	N/A	No
Phenolphthalein	n.d.	N/A	No

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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 14 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



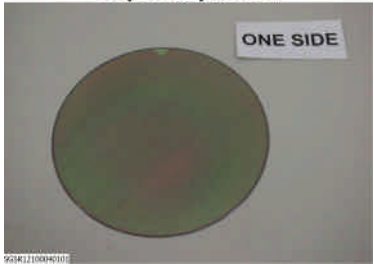

Substance name	Concentration of Article (%)	weight (mg)	providing information about safe use according to Article 33 is necessary
Aluminosilicate, Refractory Ceramic Fibres oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges	n.d.	N/A	No
Zirconia Aluminosilicate, Refractory Ceramic Fibres oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges	n.d.	N/A	No

**Note:**

(A) N/A = Non-Available

**【Appendix C】**

Tested Unit No.1 : WAFER (Weight: 53.9g)

Substance Name	Concentration (%)	RL (%)	Sample picture
Anthracene	n.d.	0.005	<p><b>CR/2012/10004</b></p>  <p><b>CR/2012/10004</b></p> 
4,4' - Diaminodiphenylmethane	n.d.	0.005	
DBP (Dibutyl phthalate)	n.d.	0.005	
BBP (Benzyl butyl phthalate)	n.d.	0.005	
Bis (2-ethyl(hexyl)phthalate) (DEHP)	n.d.	0.005	
5-tert-butyl-2,4,6-trinitro- m-xylene (Musk Xylene)	n.d.	0.005	
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α- HBCDD, β- HBCDD, γ- HBCDD)	n.d.	0.005	
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	n.d.	0.01	
Tributyl Tin (TBT)	n.d.	0.005	
Bis(tributyltin)oxide	n.d.	-	
Cobalt dichloride	n.d.	0.05	
Arsenic (As)	n.d.	0.005	
Diarsenic pentaoxide	n.d.	-	
Diarsenic trioxide	n.d.	-	
Triethyl arsenate	n.d.	-	
Lead (Pb)	n.d.	0.005	

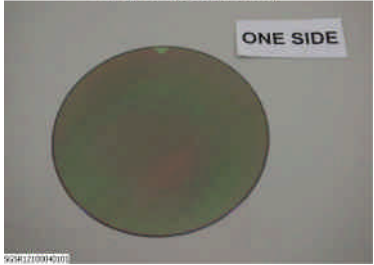

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試的樣品負責。本報告未經本公司書面許可，不可部份複製。  
This document is issued by the Company subject to its 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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 15 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance Name	Concentration (%)	RL (%)	Sample picture
Lead hydrogen arsenate	n.d.	-	<p><b>CR/2012/10004</b></p>  <p><b>CR/2012/10004</b></p> 
Hexavalent Chromium Cr(VI)	n.d.	0.005	
Sodium chromate	n.d.	-	
Ammonium dichromate	n.d.	-	
Potassium dichromate	n.d.	-	
Potassium chromate	n.d.	-	
Sodium dichromate	n.d.	-	
Chromium trioxide	n.d.	-	
Acids generated from chromium trioxide and their oligomers: Chromic acid	n.d.	-	
Acids generated from chromium trioxide and their oligomers: Dichromic acid	n.d.	-	
Acids generated from chromium trioxide and their oligomers: Oligomers of chromic acid and dichromic acid	n.d.	-	
Strontium chromate	n.d.	-	
Anthracene oil	n.d.	0.05	
Anthracene oil, anthracene paste, distn. Lights	n.d.	0.05	
Anthracene oil, anthracene paste, anthracene fraction	n.d.	0.05	
Anthracene oil, anthracene-low	n.d.	0.05	
Anthracene oil, anthracene paste	n.d.	0.05	
Pitch, coal tar, high-temp.	n.d.	0.05	
Aluminosilicate, Refractory Ceramic Fibres	n.d.	0.05	
Zirconia Aluminosilicate, Refractory Ceramic Fibres	n.d.	0.05	
DIBP (Di-isobutyl phthalate)	n.d.	0.005	
2,4-Dinitrotoluene	n.d.	0.005	
Tris(2-chloroethyl) phosphate (TCEP)	n.d.	0.005	
Lead chromate	n.d.	0.01	
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	n.d.	0.01	
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	n.d.	0.01	
Acrylamide	n.d.	0.005	



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的樣品負責。本報告未經本公司書面許可，不可部份複製。  
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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 16 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance Name	Concentration (%)	RL (%)	Sample picture
Boron (B)	n.d.	0.005	<p><b>CR/2012/10004</b></p>  <p><b>CR/2012/10004</b></p> 
Boric acid	n.d.	-	
Disodium tetraborate, anhydrous	n.d.	-	
Tetraboron disodium heptaoxide, hydrate	n.d.	-	
Trichloroethylene	n.d.	0.005	
Cobalt (Co)	n.d.	0.005	
Cobalt(II) sulphate	n.d.	-	
Cobalt(II) dinitrate	n.d.	-	
Cobalt(II) carbonate	n.d.	-	
Cobalt(II) diacetate	n.d.	-	
2-Methoxyethanol	n.d.	0.005	
2-Ethoxyethanol	n.d.	0.005	
2-ethoxyethyl acetate	n.d.	0.05	
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	n.d.	0.05	
Hydrazine	n.d.	0.05	
1-methyl-2-pyrrolidone	n.d.	0.05	
1,2,3-trichloropropane	n.d.	0.05	
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	n.d.	0.05	
Arsenic acid	n.d.	-	
Calcium arsenate	n.d.	-	
Trilead diarsenate	n.d.	-	
Lead diazide, Lead azide	n.d.	-	
Lead styphnate	n.d.	-	
Lead dipicrate	n.d.	-	
Dichromium tris (chromate)	n.d.	-	
Potassium hydroxyoctaoxodizincatedi-chromate	n.d.	-	
Pentazinc chromate octahydroxide	n.d.	-	
Formaldehyde, oligomeric reaction products with aniline (technical MDA)	n.d.	0.05	
Bis(2-methoxyethyl) phthalate	n.d.	0.05	
2-Methoxyaniline; o-Anisidine	n.d.	0.05	
4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol)	n.d.	0.05	

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的樣品負責。本報告未經本公司書面許可，不可部份複製。

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/terms\\_e-document.htm](http://www.sgs.com/terms_e-document.htm). 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 (SVHC)

No. : CR/2012/10004 Date : 2012/01/09 Page : 17 of 17

JAZZ SEMICONDUCTOR  
4321 JAMBOREE RD., NEWPORT BEACH, CA 92660



Substance Name	Concentration (%)	RL (%)	Sample picture
1,2-Dichloroethane	n.d.	0.05	
Bis(2-methoxyethyl) ether	n.d.	0.05	
N,N-dimethylacetamide (DMAC)	n.d.	0.05	
2,2'-dichloro- 4,4'-methylenedianiline (MOCA)	n.d.	0.05	
Phenolphthalein	n.d.	0.05	
Aluminosilicate, Refractory Ceramic Fibres oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges	n.d.	0.05	
Zirconia Aluminosilicate, Refractory Ceramic Fibres oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges	n.d.	0.05	

### Note:

A. The average concentration of a whole article can be calculated per the following formula.

$$C_{Average\ of\ Article} = \frac{\sum_{i=1}^n (C_i * W_i)}{\sum_{i=1}^n (W_i)}$$

$C_i$  : Concentration of a SVHC item in each tested unit

$W_i$  : Weight of each tested unit

$C_{Average\ of\ Article}$  : Average concentration of a whole article

\*\* End of Report \*\*