

# **Certificate of Compliance**

DUNS		<b>Document Date</b>	URL for Additional Information
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## **Material Declaration Processing Information**

FSID	Material Declaration	Site Owner	Assembly Location	Package Weight(g)	MSL Rating
FOD3150	DIPW-8	PENANG	INTERNAL PENANG	0.4738852	Not Applicable
Terminal Finish	Base Alloy	Green Status	Reflow Cycles	Max Time at Temp	Peak Temp
Matte Tin (Sn)	CU Alloy	This product is not considered GREEN as defined by Fairchild's Green Policy. Please use this link to access Fairchild's Green Product Definition.	Not Applicable		

## **Homogenous Material Composition Declaration**

Component	Material	Weight of Component(mg)	Substance	Weight (mg)	CAS	PPM in FSID
Chip	Other inorganic materials	3.7500	Gallium Arsenide	0.2630	1303-00-0	555
			Silicon	3.4900	7440-21-3	7365
Coupling Gel	Other Organic Materials	4.3700	Methyltrimethoxysilane	0.7340	1185-55-3	1549
			Dimethyl Cyclosiloxanes	1.5200	69430-24-6	3208
			Xylene	2.1300	1330-20-7	4495
Die Attach		0.4230	Acrylic Resin	0.1060	54208-63-8	224
			Silver	0.3170	7440-22-4	669
Encapsulation	Thermoplastics	344.0000	Antimony Trioxide	10.3000	1309-64-4	21735
			Bromine Resin	13.7000	6386-73-8	28910
			Epoxy Resin	68.7000	29690-82-2	144972
			Silica, vitreous	251.0000	60676-86-0	529664
Lead Frame	Copper & its alloys	117.0000	Phosphorus	0.0352	7723-14-0	74
			Zinc	0.1410	7440-66-6	298
			Silver	0.7400	7440-22-4	1562
			Iron	2.7000	7439-89-6	5698
			Copper	114.0000	7440-50-8	240565
Plating	Other Nonferrous metals & alloys	3.8100	Tin	3.8100	7440-31-5	8040
Wire Bond	Precious metals	0.1990	Gold	0.1990	7440-57-5	420

Note: The substance content disclosed herewith is approximate and is based on various methods including, engineering calculations, supplier surveys, Material Safety Data Sheets, analytical measurements. Fairchild may update this document without notification.

Additionally, the following should be noted:

- This statement may not include information regarding the miniscule quantities of dopant and metal materials in the electrical devices contained within the finished product.
- CAS numbers listed for Resin substances are generic and may contain alternate substances of similar composition.

#### **RoHS Declaration**

The European Parliament and of the Council on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive restricts the concentration of Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) to 0.1% (1000 PPM) and restricts the concentration of Cadmium (Cd) to 0.01% (1000 PPM) in homogeneous materials of electronic products.

The FSC part number listed above and the homogenous materials in the product are compliant with the Directive 2011/65/EU.

Exemptions as declared for the directive are: None

#### China RoHS

With the possible exception of lead, if applicable (refer to the RoHS Declaration statement above), this product and all homogeneous materials in the product comply with the China RoHS standard SJ/T 11363-2006.

### **REACH Compliance**

European Union Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) entered into force on June 1, 2007. Fairchild Semiconductor agrees with the purpose of REACH, which is to ensure a high level of protection of human health and the environment. Fairchild semiconductor is compliant with all applicable requirements of REACH and upon request will provide information regarding the chemical composition of our products.

Fairchild Semiconductor is neither a manufacturer nor importer of preparations into Europe and therefore the registration requirements of REACH do not apply to us. It is expected that any electronic materials manufacturer that uses preparations from Europe in their products will ensure compliance with REACH registration requirements.

Product (articles) manufacturers or importers into Europe are obligated under Article 33 of REACH to inform recipients of any articles that contain chemicals on the Substances of Very High Concern (SVHC) candidate list above a 0.1% concentration (by weight per article). Products manufactured and marketed by Fairchild Semiconductor do not contain substances on the REACH SVHC candidate list (as published by the ECHA on the following publication dates) in concentrations greater than 0.1% by weight per article:

October 28, 2008; January 13; 2010, March 30, 2010; June 18, 2010; December 15, 2010; June 20, 2011; December 19, 2011; June 18, 2012\*; December 19, 2012; June 20, 2013.

Fairchild Semiconductor will continue to monitor the developments of REACH and is committed to meeting our responsibilities as an environmentally-responsible company. Please refer to the web site below for additional information regarding SVHC:

ECHA European Chemical Agency

\* Diboron trioxide was added to REACH Annex XIV as a Substance of Very High Concern(SVHC) on June 18, 2012. Fairchild products in glass encapsulated packages may list Diboron trioxide as a constituent material in the glass encapsulation, in a concentration greater than 0.1%; REACH classifies; glass as a substance of unknown or variable composition, complex reaction products or biological matter (UVCB) containing the elements silica, calcium, sodium, potassium, magnesium and other cautions bonded together with oxygen. In glass, these elements are bonded into a non crystalline molecular structure with completely different properties than the starting material; Therefore Diboron trioxide is not present in the finished Fairchild product and does not require notification of the presents of a SVHC.

## Joint Industry Guide (JIG) 101

With the exception of RoHS exemptions listed above (if applicable), this product does not contain any restricted substances listed in the Joint Industry Guide (JIG) 101 in concentrations greater than the threshold listed. The list of JIG substances may be viewed using this web link.

### Joint Industry Guide (JIG) 101

The signature below is of the Company's designated personnel with delegated product ecology compliance responsibility and verifies that to the best of our knowledge the statements above are valid and accurate.

**David Lancaster** 

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#### **Environmental Declaration**

The content of this document is based upon information collected from Fairchild Semiconductor's supply chain, manufacturing facilities and affiliates worldwide. Providing for limitations below, Fairchild Semiconductor certifies that the information provided in this document is correct as of the date indicated on this page.

Fairchild has implemented systems to ensure our products are compliant to environmental regulations and laws worldwide. However, not all materials in Fairchild's products may have been independently verified regarding substance content. In the event of any issues arising from information in this document, the warranty section of Fairchild's standard terms and conditions of sale shall apply, unless alternate contracts have been agreed upon in writing by both parties.