

# **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
BC548BU	TO-92-3 (EutecticFeLFAuBW)	Suzhou	SUBCONTRACTOR	0.223	Not Applicable
Terminal Finish	Base Alloy	Green Status	Reflow Cycles	Max Time at Temp	Peak Temp
Matte Tin (Sn)	CU Alloy	Not Green Product	Not Applicable	Not Applicable	

# **Homogenous Material Composition Declaration**

Component	Material	Weight (mg)	Substance	Weight (mg)	CAS	PPM
Chip	Silicon	0.075	Silicon	0.075	7440-21-3	336
Die Attach	Eutectic	0.000	Eutectic	0.000	-	0
Encapsulation	Epoxy	112.000	Carbon Black	0.840	1333-86-4	3765
			Antimony Trioxide	2.800	1309-64-4	12551
			Bromine Resin	3.360	6386-73-8	15061
			Epoxy Resin	22.400	29690-82-2	100407
			Silica	82.600	60676-86-0	370252
Lead Frame	Iron Alloy	101.000	Nickel (Plating)	0.091	7440-02-0	407
			Copper (plating)	0.162	7440-50-8	724
			Manganese	0.212	7439-96-5	951
			Nickel	0.646	7440-02-0	2897
			Copper	0.778	7440-50-8	3486
			Iron	99.111	7439-89-6	444264
Plating	Pb-Free Solder	9.940	Tin	9.940	7440-31-5	44556
Wire Bond	Gold Wire	0.076	Gold	0.076	7440-57-5	341

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 minute 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 2002/95/EC of FSC is aware of the Courts annulment of the exemption of decabromodiphenyl ether (decaBDE) effective June 30, 2008. FSC products do not contain Decabromodiphenyl ether (decaBDE).

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**

The Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) entered into force on June 1, 2007. Fairchild Semiconductor is aware of and 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 has provided information regarding the chemical composition of our product(s) in this document.

Fairchild Semiconductor is neither a manufacturer nor importer of preparations into Europe and therefore the registration requirements do not apply to us. It is expected that any electronic materials manufactures that use 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 in concentrations greater than 0.1% by weight per article.

Fairchild will continue to monitor the developments of the REACH legislation and is committed to meeting our responsibilities as an environmentally-responsible company. Refer to the ECHA European Chemical Agency weblink for a complete list of SVHC. ECHA European Chemical Agency

## 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.

Substance Name	Threshold		
Asbestos	Intentially added		
Certain Azocolourants and Azodyes	Intentially added		
Cadmium / Cadmium Compounds	75 PPm or Intentionally added		
Hexavalent Chromium / Hexavalent Chromium Compounds	1000 ppm or intentionally added		
Lead / Lead Compounds	1000 ppm or intentionally added		
Mercury / Mercury Coumpounds	1000 ppm or intentionally added		
Ozone Depleting substances (CFCs, HCFCs, HBFCs, carbon tetrachloride	Class I: Intentionally added Class I: HCFCs 1000 ppm		
Polybrominated Biphenyls (PBBs)	1000 ppm or intentionally added		
Polybrominated Diphenylethers (PBDEs)	1000 ppm or intentionally added		
Polychlorinated Biphenyl's (PCBs)	1000 ppm or intentionally added		
Polychlorinated Naphthalenes (more than 3 chlorine atoms)	Intentionally added		
Radioactive substances	Intentionally added		
Certain Shortchain Chloronated Pataffins	Intentionally added		
Tributyl Tin (TBT) and Triphenyl Tin (TPT)	Intentionally added		
Tributyl Tin Oxide (TBTO)	Intentionally added		

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.