

## Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

1752-2 1.1

ICP Web Site for information on IPC-1752 Standard  
<http://www.ipc.org/IPC-175x>

Form Type\*  
Distribute

**Declaration Class\***  
**Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Information**

### Supplier Information

<b>Company Name *</b> Fairchild Semiconductor	Company Unique ID 00-489-5751	Unique ID Authority Dun & Bradstreet	<b>Response Date*</b> Sat, Aug 09, 2014 03:01 AM
<b>Contact Name *</b> David Lancaster	Title - Contact Product Ecology	<b>Phone - Contact *</b> 801-562-7455	<b>Email - Contact *</b> david.lancaster@fairchildsemi.com
<b>Authorized Representative *</b> David Lancaster	Title - Representative Product Ecology	<b>Phone - Representative *</b> 801-562-7455	Email - Representative * david.lancaster@fairchildsemi.com

Requester Item Number	Mf Item Number	Mf Item Name	Effective Date	Version	Manufacturing Site	Weight*	UOM	Unit Type
FOD8523SD	FOD8523SD	DIPB-4			SUBCONTRACTOR	0.244946	g	Each

### Manufacturing Process Information

Terminal Finish	Base Alloy	J-STD-020 MSL Rating	Peak Process Body Temperature	Max Time at Peak Temperature	No Reflow cycles
Matte Tin (Sn)	CU Alloy	1	260 C	30 seconds	3

\* Required Field

RoHS Material Composition Declaration		Declaration Type * Custom
<b>RoHS Directive 2011/65/EU</b>	<b>RoHS Definition:</b> Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium	
<p>This document is Fairchild Semiconductor's statement regarding the directive 2011/65/EU of the European Parliament and of the council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Recast). The content of this document is based upon information collected from Fairchild Semiconductor supply chain, manufacturing facilities and affiliates worldwide.</p> <p>The FSC part number listed above and the homogenous materials in the product are compliant with the Directive 2011/65/EU. 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.</p> <p>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. 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.</p>		
<b>RoHS Declaration *</b>	<b>1 - Item(s) does not contain RoHS restricted substances per the definition above</b>	<b>Supplier Acceptance * Accepted</b>
<p><b>Exemptions:</b> If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.</p>		
Exemption List Version EL-2011/534/EU		

**Declaration Signature**

Supplier Signature	 DAVID LANCASTER - PRODUCT ECOLOGY MANAGER
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**Homogeneous Material Composition Declaration for Electronic Products**

Item/SubItem Name DIPB-4

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	0.262	Supplier		Gallium Arsenide	0.066	1303-00-0	267
			Supplier		Silicon	0.196	7440-21-3	800
Coupling Gel	Other Organic Materials	8.800	Supplier		Silane	4.270	2530-85-0	17432
			Supplier		Siloxane	1.480	68083-19-2	6042
			Supplier		Titanium Dioxide	3.050	13463-67-7	12452
			Supplier		Phenolic resin	0.003	54208-63-8	11
Die Attach	Other Organic Materials	0.013	Supplier		Silver	0.010	7440-22-4	41
Encapsulation	Thermoplastics	175.840	B	Antimony/Antimony Compounds	Antimony Trioxide	5.290	1309-64-4	21597
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	7.050	6386-73-8	28782
			Supplier		Carbon Black	1.760	1333-86-4	7185
			Supplier		Epoxy Resin	40.500	29690-82-2	165342
			Supplier		Silica, vitreous	121.240	60676-86-0	494966
Lead Frame	Copper & its alloys	55.769	Supplier		Copper	54.400	7440-50-8	222089
			Supplier		Iron	1.280	7439-89-6	5226
			Supplier		Phosphorus	0.017	7723-14-0	68
			Supplier		Silver	0.006	7440-22-4	23
			Supplier		Zinc	0.067	7440-66-6	274
Plating	Other Nonferrous metals & alloys	4.210	Supplier		Tin	4.210	7440-31-5	17187
Wire Bond	Precious metals	0.053	Supplier		Gold	0.053	7440-57-5	216