



## 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/ContentPage.aspx?pageid=Materials-Declaration>

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> Sep 26, 2014 03:28 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	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight*	UOM	Unit Type
FOD3180SD	FOD3180SD	SMDIPW-8.csv			FS_OPTO	0.497659	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
Sn	Copper Alloy	1	260 C	30 seconds	3

\* Required Field

RoHS Material Composition Declaration		Declaration Type * Custom
<b>RoHS Directive</b> 2011/65/EU	<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> <p>Exemption List Version EL-2011/534/EU none</p>		

**Declaration Signature**

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

Item/SubItem Name SMDIPW-8.csv

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	4.01	Supplier		Gallium Arsenide	0.281	1303-00-0	565
			Supplier		Silicon	3.73	7440-21-3	7495
Coupling Gel	Other Organic Materials	0.45	Supplier		Dimethyl Cyclosiloxanes	0.076	69430-24-6	152
			Supplier		Methyltrimethoxysilane	0.156	1185-55-3	313
			Supplier		Xylene	0.218	1330-20-7	438
Die Attach	Other Organic Materials	0.25	Supplier		Phenolic resin	0.063	54208-63-8	126
			Supplier		Silver	0.188	7440-22-4	378
Encapsulation	Thermoplastics	375	B	Antimony/Antimony Compounds	Antimony Trioxide	11.3	1309-64-4	22706
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	15	6386-73-8	30141
			Supplier		Epoxy Resin	86.3	29690-82-2	173412
			Supplier		Silica, vitreous	263	60676-86-0	528474
Lead Frame	Copper & its alloys	113	Supplier		Copper	109	7440-50-8	219026
			Supplier		Iron	2.59	7439-89-6	5204
			Supplier		Phosphorus	0.034	7723-14-0	68
			Supplier		Silver	0.709	7440-22-4	1425
			Supplier		Zinc	0.135	7440-66-6	271
Plating	Other Nonferrous metals & alloys	2.88	Supplier		Tin	2.88	7440-31-5	5787
Wire Bond	Precious metals	2	Supplier		Gold	2	7440-57-5	4019