

## 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, May 19, 2012 04:03 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
HCPL0453R2	HCPL0453R2	SO8-OPMOC(LFCu)			INTERNAL PENANG	0.169	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

<b>RoHS Material Composition Declaration</b>	<b>Declaration Type * Custom</b>
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<b>RoHS Directive 2002/95/EC</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
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Providing for limitations below, we certify that the Fairchild Semiconductor product(s) list in this document are compliant to directive 2002/95/EC of the European Parliament and of the council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS directive). Specifically, this product(s) does not contain the substances in the RoHS definition above in concentrations greater than the maximum limit value(a).

Fairchild has implemented procedures to ensure our products and the materials in our products conform to regulatory requirements worldwide. Fairchild Semiconductor certifies that the information provided in this document is correct as of the date indicated on this document. However, not all materials in Fairchild's products may have been independently verified or tested with regard to 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.

(a) Maximum limit does not apply to applications for which exemptions have been granted by the RoHS directive. Fairchild product may utilize exemption 5 and 7a.

<b>RoHS Declaration *</b>	<b>1 - Item(s) does not contain RoHS restricted substances per the definition above</b>	<b>Supplier Acceptance * Accepted</b>
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**Exemptions:** 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.

Exemption List Version EL-2006/690/EC	0
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**Declaration Signature**

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

Item/SubItem Name SO8-OPMOC(LFCu)

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	4.043	Supplier		Gallium Arsenide	0.283	1303-00-0	1675
			Supplier		Silicon	3.760	7440-21-3	22249
Coupling Gel	Other Organic Materials	4.596	Supplier		Dimethyl Cyclosiloxanes	0.046	69430-24-6	272
			Supplier		Methyltrimethoxysilane	0.460	1185-55-3	2722
			Supplier		Xylene	4.090	1330-20-7	24201
Die Attach	Other Organic Materials	0.754	Supplier		Acrylic Resin	0.151	54208-63-8	893
			Supplier		Silver	0.603	7440-22-4	3568
Encapsulation	Thermoplastics	98.060	B	Antimony/Antimony Compounds	Antimony Trioxide	2.940	1309-64-4	17396
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	3.920	6386-73-8	23195
			Supplier		Epoxy Resin	23.500	29690-82-2	139053
			Supplier		Silica, vitreous	67.700	60676-86-0	400592
Lead Frame	Other Ferrous alloys, non-stainless steels	59.197	Supplier		Copper	57.600	7440-50-8	340829
			Supplier		Iron	1.360	7439-89-6	8047
			Supplier		Phosphorus	0.018	7723-14-0	105
			Supplier		Silver	0.148	7440-22-4	876
			Supplier		Zinc	0.071	7440-66-6	420
Plating	Other Nonferrous metals & alloys	2.100	Supplier		Tin	2.100	7440-31-5	12426
Wire Bond	Precious metals	0.250	Supplier		Gold	0.250	7440-57-5	1479