

## 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 26, 2012 01:54 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
4N33M	4N33M	DIPW-6			INTERNAL PENANG	0.537	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	Not Applicable	C	seconds	Not Applicable

\* 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 DIPW-6

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	4.040	Supplier		Gallium Arsenide	0.283	1303-00-0	527
			Supplier		Silicon	3.760	7440-21-3	7000
Coupling Gel	Other Organic Materials	1.830	Supplier		Dimethyl Cyclosiloxanes	0.635	69430-24-6	1182
			Supplier		Methyltrimethoxysilane	0.888	1185-55-3	1653
			Supplier		Xylene	0.307	1330-20-7	572
Die Attach	Other Organic Materials	1.660	Supplier		Acrylic Resin	0.415	54208-63-8	773
			Supplier		Silver	1.250	7440-22-4	2327
Encapsulation	Thermoplastics	415.000	B	Antimony/Antimony Compounds	Antimony Trioxide	12.400	1309-64-4	23087
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	16.600	6386-73-8	30906
			Supplier		Epoxy Resin	95.400	29690-82-2	177617
			Supplier		Silica, vitreous	290.000	60676-86-0	539927
Lead Frame	Other Ferrous alloys, non-stainless steels	108.000	Supplier		Copper	105.000	7440-50-8	195491
			Supplier		Iron	2.480	7439-89-6	4617
			Supplier		Phosphorus	0.032	7723-14-0	60
			Supplier		Silver	0.680	7440-22-4	1266
			Supplier		Zinc	0.130	7440-66-6	242
Plating	Other Nonferrous metals & alloys	6.700	Supplier		Tin	6.700	7440-31-5	12474
Wire Bond	Precious metals	0.149	Supplier		Gold	0.149	7440-57-5	277