

## 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 03:53 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
FSHDMI08MTDX	FSHDMI08MTDX	TSSOP-56 (NiPdAu) (G)			INTERNAL PENANG	0.223	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
Nickel/Palladium/Gold (Ni/Pd/Au)	CU Alloy	2	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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<b>Declaration Signature</b>
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Supplier Signature	 DAVID LANCASTER - PRODUCT ECOLOGY MANAGER
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**Homogeneous Material Composition Declaration for Electronic Products**

Item/SubItem Name TSSOP-56 (NiPdAu) (G)

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	2.050	Supplier		Silicon	2.050	7440-21-3	9192
Die Attach	Other Organic Materials	0.254	Supplier		Acrylic Resin	0.064	54208-63-8	285
			Supplier		Silver	0.191	7440-22-4	856
Encapsulation	Thermoplastics	126.000	Supplier		Carbon Black	1.259	1333-86-4	5645
			Supplier		Epoxy Resin	12.590	29690-82-2	56450
			Supplier		Silica, vitreous	112.051	60676-86-0	502409
Lead Frame	Copper & its alloys	85.300	Supplier		Copper	81.100	7440-50-8	363632
			Supplier		Magnesium	0.128	7439-95-4	574
			B	Nickel (external applications only)	Nickel	2.560	7440-02-0	11478
			Supplier		Silicon	0.554	7440-21-3	2484
			Supplier		Silver	0.938	7440-22-4	4206
Plating	Precious metals	8.150	Supplier		Gold	0.155	7440-57-5	695
			B	Nickel (external applications only)	Nickel	7.770	7440-02-0	34839
			Supplier		Palladium	0.228	7440-05-3	1022
Wire Bond	Precious metals	1.390	Supplier		Gold	1.390	7440-57-5	6232