

## 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 02:12 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
74VHC161284MTDX	74VHC161284MTDX	TSSOP-48 (NiPdAu) (G)			INTERNAL PENANG	0.192	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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**Declaration Signature**

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

Item/SubItem Name TSSOP-48 (NiPdAu) (G)

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	2.300	Supplier		Silicon	2.300	7440-21-3	11994
Die Attach	Other Organic Materials	0.272	Supplier		Acrylic Resin	0.071	54208-63-8	369
			Supplier		Silver	0.201	7440-22-4	1048
Encapsulation	Thermoplastics	111.000	Supplier		Carbon Black	1.111	1333-86-4	5794
			Supplier		Epoxy Resin	11.110	29690-82-2	57936
			Supplier		Silica, vitreous	98.879	60676-86-0	515635
Lead Frame	Copper & its alloys	70.200	Supplier		Copper	67.200	7440-50-8	350435
			Supplier		Magnesium	0.105	7439-95-4	548
			B	Nickel (external applications only)	Nickel	2.110	7440-02-0	11003
			Supplier		Silicon	0.456	7440-21-3	2378
			Supplier		Silver	0.324	7440-22-4	1690
Plating	Precious metals	6.700	Supplier		Gold	0.127	7440-57-5	662
			B	Nickel (external applications only)	Nickel	6.390	7440-02-0	33323
			Supplier		Palladium	0.188	7440-05-3	980
Wire Bond	Precious metals	1.190	Supplier		Gold	1.190	7440-57-5	6206