

## 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 03:56 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
FSUSB22BQX	FSUSB22BQX	16-MLP DQFN 2.5X3.5			INTERNAL PENANG	0.021	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	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 16-MLP DQFN 2.5X3.5

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	0.078	Supplier		Silicon	0.078	7440-21-3	3710
Die Attach	Other Organic Materials	0.220	Supplier		Acrylic Resin	0.022	54208-63-8	1044
			Supplier		Silver	0.198	7440-22-4	9394
Encapsulation	Thermoplastics	11.900	Supplier		Carbon Black	0.119	1333-86-4	5641
			Supplier		Epoxy Resin	1.189	29690-82-2	56414
			Supplier		Silica, vitreous	10.582	60676-86-0	502081
Lead Frame	Other Ferrous alloys, non-stainless steels	8.410	Supplier		Copper	8.190	7440-50-8	388585
			Supplier		Iron	0.202	7439-89-6	9584
			Supplier		Phosphorus	0.003	7723-14-0	159
			Supplier		Zinc	0.011	7440-66-6	517
Terminal Finish	Precious metals	0.085	Supplier		Gold	0.001	7440-57-5	58
			B	Nickel (external applications only)	Nickel	0.076	7440-02-0	3611
			Supplier		Palladium	0.008	7440-05-3	365
Wire Bond	Precious metals	0.397	Supplier		Gold	0.397	7440-57-5	18836