

## 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	<b>Company Unique ID</b> 00-489-5751	<b>Unique ID Authority</b> Dun & Bradstreet	<b>Response Date*</b> Sat, Feb 22, 2014 03:15 AM
<b>Contact Name *</b> David Lancaster	<b>Title - Contact</b> Product Ecology	<b>Phone - Contact *</b> 801-562-7455	<b>Email - Contact *</b> david.lancaster@fairchildsemi.com
<b>Authorized Representative *</b> David Lancaster	<b>Title - Representative</b> Product Ecology	<b>Phone - Representative *</b> 801-562-7455	<b>Email - Representative *</b> david.lancaster@fairchildsemi.com

Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight*	UOM	Unit Type
FSUSB42UMX	FSUSB42UMX	10-uMPL 1.4X1.8 (NiPdAu)			INTERNAL PENANG	0.003570	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

RoHS Material Composition Declaration		Declaration Type * Custom
<b>RoHS Directive 2011/65/EU</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	
<p>This document is Fairchild Semiconductor's statement regarding the directive 2011/65/EU of the European Parliament and of the council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Recast). The content of this document is based upon information collected from Fairchild Semiconductor supply chain, manufacturing facilities and affiliates worldwide.</p> <p>The FSC part number listed above and the homogenous materials in the product are compliant with the Directive 2011/65/EU. Fairchild has implemented systems to ensure our products are compliant to environmental regulations and laws worldwide. However, not all materials in Fairchild's products may have been independently verified regarding 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.</p> <p>Note: The substance content disclosed herewith is approximate and is based on various methods including, engineering calculations, supplier surveys, Material Safety Data Sheets, analytical measurements. Fairchild may update this document without notification. This statement may not include information regarding the miniscule quantities of dopant and metal materials in the electrical devices contained within the finished product. CAS numbers listed for Resin substances are generic and may contain alternate substances of similar composition.</p>		
<b>RoHS Declaration *</b>	<b>1 - Item(s) does not contain RoHS restricted substances per the definition above</b>	<b>Supplier Acceptance * Accepted</b>
<p><b>Exemptions:</b> 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.</p>		
<p>Exemption List Version EL-2011/534/EU None</p>		

#### Declaration Signature

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

Item/SubItem Name 10-uMLP 1.4X1.8 (NiPdAu)

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	0.459	Supplier		Silicon	0.459	7440-21-3	128571
Die Attach	Other Organic Materials	0.116	Supplier		Acrylic Resin	0.116	54208-63-8	32493
Encapsulation	Thermoplastics	1.980	Supplier		Carbon Black	0.020	1333-86-4	5546
			Supplier		Epoxy Resin	0.396	29690-82-2	110924
			Supplier		Phenol resin	0.099	9003-35-4	27731
			Supplier		Silica, vitreous	1.465	60676-86-0	410420
Lead Frame	Copper & its alloys	0.932	Supplier		Copper	0.908	7440-50-8	254224
			Supplier		Iron	0.022	7439-89-6	6266
			Supplier		Phosphorus	0.001	7723-14-0	235
			Supplier		Zinc	0.001	7440-66-6	392
Plating	Precious metals	0.040	Supplier		Gold	0.001	7440-57-5	164
			B	Nickel (external applications only)	Nickel	0.036	7440-02-0	10056
			Supplier		Palladium	0.004	7440-05-3	1017
Wire Bond	Precious metals	0.047	Supplier		Gold	0.047	7440-57-5	13109