

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

Company Name * Fairchild Semiconductor	Company Unique ID 00-489-5751	Unique ID Authority Dun & Bradstreet	Response Date* Sat, May 19, 2012 03:46 AM
Contact Name * David Lancaster	Title - Contact Product Ecology	Phone - Contact * 801-562-7455	Email - Contact * david.lancaster@fairchildsemi.com
Authorized Representative * David Lancaster	Title - Representative Product Ecology	Phone - Representative * 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
FSA221L10X	FSA221L10X	MicroPAK-10 (BT) G			SUBCONTRACTOR	0.009	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/Gold (Ni/Au)	Other	1	260 C	30 seconds	3

* Required Field

RoHS Material Composition Declaration	Declaration Type * Custom
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RoHS Directive 2002/95/EC	RoHS Definition: 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.

RoHS Declaration *	1 - Item(s) does not contain RoHS restricted substances per the definition above	Supplier Acceptance * Accepted
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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 MicroPAK-10 (BT) G

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	2.140	Supplier		Silicon	2.140	7440-21-3	238949
Conductive Material	Precious metals	0.481	Supplier		Copper	0.473	7440-50-8	52815
			Supplier		Gold	0.002	7440-57-5	174
			B	Nickel (external applications only)	Nickel	0.007	7440-02-0	772
Die Attach	Other Organic Materials	0.016	Supplier		Acrylic Resin	0.003	54208-63-8	357
			Supplier		Bis-phenol A diglycidyl ether	0.003	1675-54-3	357
			Supplier		Epoxy Resin	0.010	29690-82-2	1072
Encapsulation	Thermoplastics	4.450	Supplier		Carbon Black	0.045	1333-86-4	4969
			Supplier		Epoxy Resin	0.890	29690-82-2	99376
			Supplier		Silica, vitreous	3.516	60676-86-0	392536
Substrate	Other Organic Materials	1.790	Supplier		Aluminum Oxide	0.045	1344-28-1	5069
			Supplier		Bismaleimide	1.170	13676-54-5	130641
			Supplier		Triazine Resin	0.573	25722-66-1	63980
Wire Bond	Precious metals	0.080	Supplier		Gold	0.080	7440-57-5	8933