

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 03:39 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
FQB19N20TM	FQB19N20TM	TO-263-3 (NiLFAIBW)			INTERNAL SUZHOU	1.486	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
Matte Tin (Sn)	CU Alloy	1	245 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 *	4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions	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

7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85 % by weight or more lead).

Declaration Signature

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

Item/SubItem Name TO-263-3 (NiLFAIBW)

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	12.300	Supplier		Silicon	12.300	7440-21-3	8278
Die Attach	Other Nonferrous metals & alloys	7.330	A	Lead/Lead Compounds	Lead	6.780	7439-92-1	4563
			Supplier		Silver	0.183	7440-22-4	123
			Supplier		Tin	0.367	7440-31-5	247
Encapsulation	Thermoplastics	595.000	B	Antimony/Antimony Compounds	Antimony Trioxide	17.900	1309-64-4	12047
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	11.900	6386-73-8	8009
			Supplier		Epoxy Resin	164.000	29690-82-2	110371
			Supplier		Silica, vitreous	402.000	60676-86-0	270543
Lead Frame	Copper & its alloys	860.000	Supplier		Copper	857.000	7440-50-8	576756
			B	Nickel (external applications only)	Nickel	2.200	7440-02-0	1481
			Supplier		Tin	1.118	7440-31-5	752
Plating	Other Nonferrous metals & alloys	5.520	Supplier		Tin	5.520	7440-31-5	3715
Wire Bond	Aluminum & its alloys	4.630	Supplier		Aluminum	4.630	7429-90-5	3116