



ASSOCIATION CONNECTING
ELECTRONICS INDUSTRIES®

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>

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* Jul 14, 2015
Contact Name * Jolene Small	Title - Contact Product Ecology	Phone - Contact * 207-761-6214	Email - Contact * jolene.small@fairchildsemi.com
Authorized Representative * Jolene Small	Title - Representative Product Ecology	Phone - Representative * 207-761-6214	Email - Representative * jolene.small@fairchildsemi.com


Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	FSC Version	Manufacturing Site	Weight*	UOM	Unit Type
TIP32C	TIP32C	TO220-3 (CuBW)	Jul 14, 2015	1.0	FSSZ	2.030199	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
Sn	Copper Alloy	NA	Not Applicable		Not Applicable

* Required Field

RoHS Material Composition Declaration		Declaration Type * Custom
RoHS Directive 2011/65/EU	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	
<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>		
RoHS Declaration * 4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions Supplier Acceptance * Accepted		
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.		
<p>Exemption List Version EL-2011/534/EU</p> <p>7(a) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).</p>		

Declaration Signature	
Supplier Signature	 JOLENE SMALL – PRODUCT ECOLOGY ENGINEER

Homogeneous Material Composition Declaration for Electronic Products

Item/SubItem Name TO220-3 (CuBW).csv

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	2.81	Supplier		Silicon	2.81	7440-21-3	1384
Die Attach	Other Nonferrous metals & alloys	1.11	A	Lead/Lead Compounds	Lead	1.038	7439-92-1	511
			Supplier		Silver	0.017	7440-22-4	8
			Supplier		Tin	0.056	7440-31-5	27
Encapsulation	Thermoplastics	518.4	B	Antimony/Antimony Compounds	Antimony Trioxide	12.9	1309-64-4	6354
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	15.5	6386-73-8	7635
			Supplier		Carbon Black	5.184	1333-86-4	2553
			Supplier		Epoxy Resin	104	29690-82-2	51227
			Supplier		Silica, vitreous	380.816	60676-86-0	187576
Lead Frame	Copper & its alloys	1494.949	Supplier		Copper	1490	7440-50-8	733918
			Supplier		Iron	1.5	7439-89-6	739
			Supplier		Phosphorus	0.449	7723-14-0	221
			Supplier		Silver	3	7440-22-4	1478
Plating	Other Nonferrous metals & alloys	13.3	Supplier		Tin	13.3	7440-31-5	6551
Wire Bond	Copper & its alloys	2.44	Supplier		Copper	2.44	7440-50-8	1202