



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/ContentPage.aspx?pageid=Materials-Declaration>

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> Sep 26, 2014 03:29 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	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight*	UOM	Unit Type
FSAM20SH60A	FSAM20SH60A	SPM32-AA.csv			FSSZ	31.60166	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
<b>RoHS Directive</b> 2011/65/EU	<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>4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions</b> <b>Supplier Acceptance * Accepted</b>		
<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.		
<div style="margin-left: 20px;">Exemption List Version EL-2011/534/EU</div> <div style="margin-left: 20px;">7(a) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead).</div>		

Declaration Signature	
Supplier Signature	<div style="text-align: center;">  </div> <div style="text-align: center; font-size: small; margin-top: 5px;">DAVID LANCASTER - PRODUCT ECOLOGY MANAGER</div>

## Homogeneous Material Composition Declaration for Electronic Products

Item/SubItem Name SPM32-AA.csv

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	67.7	Supplier		Silicon	67.7	7440-21-3	2142
Die Attach Epoxy	Other Organic Materials	14.36	Supplier		Phenolic resin	2.16	54208-63-8	68
			Supplier		Silver	12.2	7440-22-4	386
Die Attach Solder	Other Nonferrous metals & alloys	150	A	Lead/Lead Compounds	Lead	132	7439-92-1	4177
			Supplier		Silver	3	7440-22-4	95
			Supplier		Tin	15	7440-31-5	475
Encapsulation	Thermoplastics	13000	B	Antimony/Antimony Compounds	Antimony Trioxide	130	1309-64-4	4114
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	130	6386-73-8	4114
			Supplier		Carbon Black	130	1333-86-4	4114
			Supplier		Epoxy Resin	1300	29690-82-2	41137
			Supplier		Silica, vitreous	11310	60676-86-0	357893
Heat Sink	Aluminum & its alloys	5920	Supplier		Aluminum Oxide	5920	1344-28-1	187332
Lead Frame	Copper & its alloys	12303.9	Supplier		Copper	12280	7440-50-8	388587
			Supplier		Iron	14.8	7439-89-6	468
			Supplier		Phosphorus	4.92	7723-14-0	156
			Supplier		Silver	4.18	7440-22-4	132
Plating	Other Nonferrous metals & alloys	110	Supplier		Tin	110	7440-31-5	3481
Wire Bond	Precious metals	35.7	Supplier		Aluminum	34	7429-90-5	1076
			Supplier		Gold	1.7	7440-57-5	54