Material Composition Declaration

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 Infomation

Supplier Information

Company Name * **Fairchild Semiconductor**	Company Unique ID 00-489-5751	Unique ID Authority Dun & Bradstreet	**Response Date*** **Sat, Aug 09, 2014 03:14 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	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	**Weight***	UOM	Unit Type
FSBB20CH60F	FSBB20CH60F	SPM27-CC			INTERNAL SUZHOU	**16.492363**	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	Not Applicable	C	seconds	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

This document is Fairchild Semiconductor's statement regarding the directive 2011/65/EU of the European Parliament and of the council of 8 June 2011on 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.

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.

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.

RoHS Declaration *	**1 - Item(s) does not contain RoHS restricted substances per the definition above**	**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.

Exemption List Version EL-2011/534/EU

Declaration Signature

Supplier Signature	David Lancaster DAVID LANCASTER - PRODUCT ECOLOGY MANAGER

Homogeneous Material Composition Declaration for Electronic Products

Item/SubItem Name SPM27-CC

Component	Material	Weight (mg)	Jig Level	Substance Category	Substance	Weight (mg)	CAS	PPM
Chip	Other inorganic materials	67.700	Supplier		Silicon	67.700	7440-21-3	4105
Die Attach Epoxy	Other Organic Materials	0.163	Supplier		Epoxy Resin	0.016	61788-97-4	1
			Supplier		Silver	0.147	7440-22-4	9
Die Attach Soft Solder	Other Nonferrous metals & alloys	31.400	Supplier		Copper	29.045	7440-50-8	1761
			Supplier		Silver	0.785	7440-22-4	48
			Supplier		Tin	1.570	7440-31-5	95
Encapsulation	Thermoplastics	10122.000	B	Antimony/Antimony Compounds	Antimony Trioxide	101.000	1309-64-4	6124
			B	Brominated Flame Retardants (other than PBCs or PBDEs)	Bromine Resin	101.000	6386-73-8	6124
			Supplier		Carbon Black	101.220	1333-86-4	6137
			Supplier		Epoxy Resin	1010.000	29690-82-2	61240
			Supplier		Silica, vitreous	8808.780	60676-86-0	534113
Heat Sink	Aluminum & its alloys	1880.000	Supplier		Aluminum Oxide	1880.000	1344-28-1	113992
Lead Frame	Copper & its alloys	4318.380	Supplier		Copper	4310.000	7440-50-8	261333
			Supplier		Iron	5.180	7439-89-6	314
			Supplier		Phosphorus	1.730	7723-14-0	105
			Supplier		Silver	1.470	7440-22-4	89
Plating	Other Nonferrous metals & alloys	53.300	Supplier		Tin	53.300	7440-31-5	3232
Wire Bond	Aluminum & its alloys	18.300	Supplier		Aluminum	18.300	7429-90-5	1110
Wire Bond2	Precious metals	1.120	Supplier		Gold	1.120	7440-57-5	68