# 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](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 ***<br>**Fairchild Semiconductor** | Company Unique ID<br>00-489-5751 | Unique ID Authority<br>Dun & Bradstreet | **Response Date***<br>**Sat, Aug 31, 2013 03:43 AM** |
| **Contact Name ***<br>**David Lancaster** | Title - Contact<br>Product Ecology | **Phone - Contact ***<br>**801-562-7455** | **Email - Contact ***<br>**david.lancaster@fairchildsemi.com** |
| **Authorized Representative ***<br>**David Lancaster** | Title - Representative<br>Product Ecology | **Phone - Representative ***<br>**801-562-7455** | Email - Representative *<br>david.lancaster@fairchildsemi.com |

| Requester Item Number | Mfr Item Number | Mfr Item Name | Effective Date | Version | Manufacturing Site | **Weight*** | UOM | Unit Type |
|---|---|---|---|---|---|---|---|---|
| MMBT2222AT | MMBT2222AT | SOT-523F-3 (G) | | | SUBCONTRACTOR | **0.002606** | 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 | 260 C | 30 seconds | 3 |

* 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
None

**Declaration Signature**

| | |
|---|---|
| Supplier Signature | David Lancaster<br>DAVID LANCASTER - PRODUCT ECOLOGY MANAGER |

## Homogeneous Material Composition Declaration for Electronic Products

Item/SubItem Name SOT-523F-3 (G)

| Component | Material | Weight (mg) | Jig Level | Substance Category | Substance | Weight (mg) | CAS | PPM |
|---|---|---|---|---|---|---|---|---|
| Chip | Other inorganic materials | 0.070 | Supplier | | Silicon | 0.070 | 7440-21-3 | 26859 |
| Encapsulation | Thermoplastics | 1.535 | Supplier | | Carbon Black | 0.008 | 1333-86-4 | 2935 |
| | | | Supplier | | Epoxy Resin | 0.383 | 29690-82-2 | 146958 |
| | | | Supplier | | Silica, vitreous | 1.140 | 60676-86-0 | 437420 |
| Lead Frame | Copper & its alloys | 0.926 | Supplier | | Copper | 0.878 | 7440-50-8 | 336890 |
| | | | B | Nickel (external applications only) | Nickel | 0.029 | 7440-02-0 | 11012 |
| | | | Supplier | | Silver | 0.011 | 7440-22-4 | 4297 |
| | | | Supplier | | Tin | 0.008 | 7440-31-5 | 2931 |
| Plating | Other Nonferrous metals & alloys | 0.070 | Supplier | | Tin | 0.070 | 7440-31-5 | 26859 |
| Wire Bond | Precious metals | 0.010 | Supplier | | Gold | 0.010 | 7440-57-5 | 3837 |