# 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 Infomation**

**Supplier Information**

| | | | |
|---|---|---|---|
| **Company Name *** **Fairchild Semiconductor** | Company Unique ID 00-489-5751 | Unique ID Authority Dun & Bradstreet | **Response Date*** **Sat, May 19, 2012 01:59 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 |
|---|---|---|---|---|---|---|---|---|
| 74ACT244MTC | 74ACT244MTC | TSSOP-20 (NiPdAu) (G) | | | INTERNAL PENANG | **0.074** | 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 |
|---|---|---|---|---|---|
| Nickel/Palladium/Gold (Ni/Pd/Au) | CU Alloy | 1 | 260 C | 30 seconds | 3 |

* Required Field

| RoHS Material Composition Declaration | Declaration Type * Custom |
|---|---|

| | |
|---|---|
| **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 |

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 *** | **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-2006/690/EC
0

**Declaration Signature**

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

**Homogeneous Material Composition Declaration for Electronic Products**

Item/SubItem Name TSSOP-20 (NiPdAu) (G)

| Component | Material | Weight (mg) | Jig Level | Substance Category | Substance | Weight (mg) | CAS | PPM |
|---|---|---|---|---|---|---|---|---|
| Chip | Other inorganic materials | 1.250 | Supplier | | Silicon | 1.250 | 7440-21-3 | 16984 |
| Die Attach | Other Organic Materials | 0.136 | Supplier | | Resin | 0.027 | 54208-63-8 | 370 |
| | | | Supplier | | Silver | 0.109 | 7440-22-4 | 1481 |
| Encapsulation | Thermoplastics | 40.867 | Supplier | | Carbon Black | 0.409 | 1333-86-4 | 5553 |
| | | | Supplier | | Epoxy Resin | 8.173 | 29690-82-2 | 111057 |
| | | | Supplier | | Silica, vitreous | 32.285 | 60676-86-0 | 438674 |
| Lead Frame | Copper & its alloys | 30.624 | Supplier | | Copper | 29.400 | 7440-50-8 | 399475 |
| | | | Supplier | | Magnesium | 0.046 | 7439-95-4 | 624 |
| | | | B | Nickel (external applications only) | Nickel | 0.979 | 7440-02-0 | 13302 |
| | | | Supplier | | Silicon | 0.199 | 7440-21-3 | 2704 |
| Plating | Precious metals | 0.223 | Supplier | | Gold | 0.004 | 7440-57-5 | 58 |
| | | | B | Nickel (external applications only) | Nickel | 0.213 | 7440-02-0 | 2894 |
| | | | Supplier | | Palladium | 0.006 | 7440-05-3 | 85 |
| Wire Bond | Precious metals | 0.496 | Supplier | | Gold | 0.496 | 7440-57-5 | 6739 |