

1752-2 1.1

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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.

ICP Web Site for information on IPC-1752 Standard http://www.ipc.org/IPC-175x

Declaration Class\* Matarials and Mfa

| Form Type* | Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg |
|------------|--|
| Distribute | Infomation   |

|                             | Infoliation            |                          |                                   |  |  |  |  |
|-----------------------------|------------------------|--------------------------|-----------------------------------|--|--|--|--|
| Supplier Information        |                        |                          |                                   |  |  |  |  |
| Company Name *              | Company Unique ID      | Unique ID Authority      | Response Date*                    |  |  |  |  |
| Fairchild Semiconductor     | 00-489-5751            | Dun & Bradstreet         | Sat, Mar 01, 2014 03:05 AM        |  |  |  |  |
| Contact Name *              | Title - Contact        | Phone - Contact *        | Email - Contact *                 |  |  |  |  |
| David Lancaster             | Product Ecology        | 801-562-7455             | david.lancaster@fairchildsemi.com |  |  |  |  |
| Authorized Representative * | Title - Representative | Phone - Representative * | Email - Representative *          |  |  |  |  |
| David Lancaster             | Product Ecology        | 801-562-7455             | david.lancaster@fairchildsemi.com |  |  |  |  |
|                             |                        |                          |                                   |  |  |  |  |

| Requester Item Number             | Mfr Item   | Mfr Item Number |                                  | Mfr Item Name |                 | Version                          |     | Manufacturing Site | Weight*  | UOM            | Unit Type |
|-----------------------------------|------------|-----------------|----------------------------------|---------------|-----------------|----------------------------------|-----|--------------------|----------|----------------|-----------|
| FQP2P40_F080                      | FQP2P4     | 40_F080         | TO-220-3<br>(93.5-5-1.5DA_AlBW)  |               |                 |                                  | INT | TERNAL SUZHOU      | 2.033009 | g              | Each      |
| Manufacturing Process Information |            |                 |                                  |               |                 |                                  |     |                    |          |                |           |
| Terminal Finish                   | Base Alloy | J-STD-          | 020 MSL Rating Peak Process Body |               | Process Body Te | Body Temperature Max Time at Pea |     | Temperature        | No Refl  | ow cycles      |           |
| Matte Tin (Sn)                    | CU Alloy   | Not             | t Applicable                     |               | С               |                                  |     | 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 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.

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 \* 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.

Exemption List Version EL-2011/534/EU

7(a)-Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85 % by weight or more lead).

**Declaration Signature** 

Tand Loncosto

Supplier Signature

DAVID LANCASTER - PRODUCT ECOLOGY MANAGER

## Homogeneous Material Composition Declaration for Electronic Products

Item/SubItem Name TO-220-3 (93.5-5-1.5DA\_AIBW)

| Component     | Material                            | Weight<br>(mg) | Jig<br>Level | Substance Category  | Substance         | Weight<br>(mg) | CAS        | PPM    |
|---------------|-------------------------------------|----------------|--------------|---|-------------------|----------------|------------|--------|
| Chip          | Other inorganic materials           | 2.810          | Supplier     |   | Silicon           | 2.810          | 7440-21-3  | 1382   |
| Die Attach    | Other Nonferrous metals & alloys    | 1.110          | А            | Lead/Lead Compounds                                       | Lead              | 1.038          | 7439-92-1  | 510    |
|               |                                     |                | Supplier     |   | Silver            | 0.017          | 7440-22-4  | 8      |
|               |                                     |                | Supplier     |   | Tin               | 0.056          | 7440-31-5  | 27     |
| Encapsulation | Thermoplastics                      | 518.400        | В            | Antimony/Antimony Compounds                               | Antimony Trioxide | 12.900         | 1309-64-4  | 6345   |
|               |                                     |                | В            | Brominated Flame Retardants (other than<br>PBCs or PBDEs) | Bromine Resin     | 15.500         | 6386-73-8  | 7624   |
|               |                                     |                | Supplier     |   | Carbon Black      | 5.184          | 1333-86-4  | 2550   |
|               |                                     |                | Supplier     |   | Epoxy Resin       | 104.000        | 29690-82-2 | 51156  |
|               |                                     |                | Supplier     |   | Silica, vitreous  | 380.816        | 60676-86-0 | 187316 |
| Lead Frame    | Copper & its alloys                 | 1494.949       | Supplier     |   | Copper            | 1490.000       | 7440-50-8  | 732904 |
|               |                                     |                | Supplier     |   | Iron              | 1.500          | 7439-89-6  | 738    |
|               |                                     |                | Supplier     |   | Phosphorus        | 0.449          | 7723-14-0  | 221    |
|               |                                     |                | Supplier     |   | Silver            | 3.000          | 7440-22-4  | 1476   |
| Plating       | Other Nonferrous metals<br>& alloys | 13.300         | Supplier     |   | Tin               | 13.300         | 7440-31-5  | 6542   |
| Wire Bond     | Aluminum & its alloys               | 2.440          | Supplier     |   | Aluminum          | 2.440          | 7429-90-5  | 1200   |