| IPC<br>ASSOCIATION<br>ELECTRONIC | © Copyright 2005.             | Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions. |                                           |             | nder both   | 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. |                                              |               |                    |                                                 |                                 |                |           |  |
|----------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------|--------------------|-------------------------------------------------|---------------------------------|----------------|-----------|--|
| 752-21.1                         |                               | IPC Web Site for Information on IPC-1752 Standard Form Type http://www.ipc.org/IPC-175x Distribute                                                                  |                                           |             |             | e * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi                                                                                                                                                                                               |                                              |               |                    | Materials and                                   | ials and Mfg Information        |                |           |  |
| upplier                          | r Information                 |                                                                                                                                                                     |                                           |             |             |                                                                                                                                                                                                                                                                 |                                              |               |                    |                                                 |                                 |                |           |  |
| ompany                           | name*                         | Company unique ID                                                                                                                                                   |                                           |             | J           | Unique ID Authority                                                                                                                                                                                                                                             |                                              |               |                    | Response Date*                                  |                                 |                |           |  |
| nsemi                            |                               |                                                                                                                                                                     |                                           |             |             |                                                                                                                                                                                                                                                                 |                                              |               |                    |                                                 | 2024-05-01                      |                |           |  |
| ontact N                         | ame                           | Title - Conta                                                                                                                                                       | Title - Contact                           |             |             | Phone - Contact*                                                                                                                                                                                                                                                |                                              |               |                    | Email - Contact*                                |                                 |                |           |  |
| ?roduct-H                        | Env-Stewards                  |                                                                                                                                                                     | Product Enviro Compliance                 |             |             | 1                                                                                                                                                                                                                                                               | NA                                           |               |                    |                                                 | Product-Env-Stewards@onsemi.com |                |           |  |
| uthorize                         | d Representative*             | Title - Representative                                                                                                                                              |                                           |             | F           | Phone - Representative*                                                                                                                                                                                                                                         |                                              |               | Emai               | Email - Representative*                         |                                 |                |           |  |
| roduct-I                         | Env-Stewards                  | Product Enviro Compliance                                                                                                                                           |                                           |             | ]           | NA                                                                                                                                                                                                                                                              |                                              |               |                    | Product-Env-Stewards@onsemi.com                 |                                 |                |           |  |
|                                  | Requester Item Number Mf      |                                                                                                                                                                     | fr Item Number Mfr Item Name              |             |             |                                                                                                                                                                                                                                                                 | Effective Date                               | Version       | Manufacturing Site |                                                 | Weight*                         | UOM            | Unit Type |  |
|                                  |                               | FSBB30CH60CT SPM3V_V4 INV 6                                                                                                                                         |                                           | 500V 30A LC |             | 2024-05-01 CPA                                                                                                                                                                                                                                                  |                                              |               | 17342.395          | mg                                              | Each                            |                |           |  |
| lanufa                           | cturing Process Informa       |                                                                                                                                                                     | Farminal Daga                             | Aller       | -STD-020 MS | Dating                                                                                                                                                                                                                                                          | Dools Duo oo                                 | as Pody Tompo | May Time o         | t Dook Town                                     | Numb o                          | a of Doflow Cv | olog      |  |
|                                  |                               |                                                                                                                                                                     | Terminal Base Alloy J-STD-02  CU Alloy NA |             |             | L Kanng                                                                                                                                                                                                                                                         | Peak Process Body Temperature Max Time at Pe |               | 1                  | k Temperature Number of Reflow Cycles seconds 3 |                                 |                |           |  |
| omments                          | ` /                           |                                                                                                                                                                     | CO Alloy                                  |             | (F1         |                                                                                                                                                                                                                                                                 | U                                            |               | 30                 | sec                                             | Johns 3                         |                |           |  |
| minents                          | )                             |                                                                                                                                                                     |                                           |             |             |                                                                                                                                                                                                                                                                 |                                              |               |                    |                                                 |                                 |                |           |  |
|                                  | information regarding materia | • • • • • • • • • • • • • • • • • • • •                                                                                                                             | 1 6 4                                     |             |             |                                                                                                                                                                                                                                                                 |                                              |               |                    |                                                 |                                 |                |           |  |

| RoHS Material Composition Declaration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              |                                                      | Declaration Type *        | Detailed   |  |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------|---------------------------|------------|--|--|--|--|--|--|
| Directive 2015/863/EU amending RoHS Directive 2011/65/EU  RoHS Definition: Quantity limit of 0.01% by mass (100 PPM) in homogeneous material for Cadmium and quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Bis(2-ethylhexyl) phthalate (DEHP), Benzyl-butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              |                                                      |                           |            |  |  |  |  |  |  |
| Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2011/65/EU and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalentchromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a "RoHS restricted substance") in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance inexcess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, supplier certifies that it gathered the information it provides in this form using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on informationprovided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, itssuppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies of Supplier's Standard Terms and/Conditions of Sale applicable to such part shall apply. |                                              |                                                      |                           |            |  |  |  |  |  |  |
| RoHS Declaration * 4 - Item(s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ) does not contain RoHS restricted substance | s per the definition above except for selected exemp | tions Supplier Acceptance | * Accepted |  |  |  |  |  |  |
| Exemption: 7a: Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                              |                                                      |                           |            |  |  |  |  |  |  |
| Exemption List Version                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EL-2011/534/EU                               |                                                      |                           |            |  |  |  |  |  |  |
| Declaration Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              |                                                      |                           |            |  |  |  |  |  |  |
| Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                      |                           |            |  |  |  |  |  |  |
| Supplier Digital Signature Ra                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | astislav Drska                               | -En                                                  |                           |            |  |  |  |  |  |  |

## **Homogeneous Material Composition Declaration for Electronic Products**

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

| Homogeneous Material | Weight  | Unit of Measure | Level    | Substance                  | CAS          | Exempt | Weight    | Unit of Measure |
|----------------------|---------|-----------------|----------|----------------------------|--------------|--------|-----------|-----------------|
| Die                  | 67.7    | mg              | Supplier | Silicon (Si)               | 7440-21-3    |        | 67.7      | mg              |
| Die Attach           | 31.399  | mg              | Supplier | Silver (Ag)                | 7440-22-4    |        | 0.942     | mg              |
|                      |         |                 | Supplier | Tin (Sn)                   | 7440-31-5    |        | 30.3      | mg              |
|                      |         |                 | Supplier | Copper (Cu)                | 7440-50-8    |        | 0.157     | mg              |
| Die Attach Epoxy     | 0.495   | mg              | Supplier | Poly(oxypropylene)diamine  | 9046-10-0    |        | 0.0148    | mg              |
|                      |         |                 | Supplier | Miscellaneous              | Trade Secret |        | 0.0247    | mg              |
|                      |         |                 | Supplier | Silver (Ag)                | 7440-22-4    |        | 0.4208    | mg              |
|                      |         |                 | Supplier | Phenolic Resin (Novolac)   | 9003-35-4    |        | 0.0346    | mg              |
| Die Attach Solder    | 9.701   | mg              | Supplier | Silver (Ag)                | 7440-22-4    |        | 0.2425    | mg              |
|                      |         |                 | A        | Lead (Pb)                  | 7439-92-1    | 7a     | 8.9734    | mg              |
|                      |         |                 | Supplier | Tin (Sn)                   | 7440-31-5    |        | 0.4851    | mg              |
| Heat Sink            | 2720.0  | mg              | Supplier | Aluminum Trioxide (Al2O3)  | 1344-28-1    |        | 979.2     | mg              |
|                      |         |                 | Supplier | Copper (Cu)                | 7440-50-8    |        | 1740.7999 | mg              |
| Lead Frame           | 4318.38 | mg              | Supplier | Silver (Ag)                | 7440-22-4    |        | 1.47      | mg              |
|                      |         |                 | Supplier | Iron (Fe)                  | 7439-89-6    |        | 5.18      | mg              |
|                      |         |                 | Supplier | Copper (Cu)                | 7440-50-8    |        | 4309.998  | mg              |
|                      |         |                 | Supplier | Phosphorus (P)             | 7723-14-0    |        | 1.73      | mg              |
| Mold Compound-Black  | 10122.0 | mg              | Supplier | Ortho Cresol Novolac Resin | 29690-82-2   |        | 606.0001  | mg              |
|                      |         |                 | Supplier | Carbon Black (C)           | 1333-86-4    |        | 101.22    | mg              |
|                      |         |                 | Supplier | Silica (SiO2)              | 14464-46-1   |        | 8808.7822 | mg              |
|                      |         |                 | Supplier | Phenolic Resin (Novolac)   | 9003-35-4    |        | 605.9981  | mg              |
| Plating              | 53.3    | mg              | Supplier | Tin (Sn)                   | 7440-31-5    |        | 53.3      | mg              |
| Wire Bond - Al       | 18.3    | mg              | Supplier | Aluminum (Al)              | 7429-90-5    |        | 18.3      | mg              |
| Wire Bond - Cu       | 1.12    | mg              | Supplier | Palladium (Pd)             | 7440-05-3    |        | 0.0224    | mg              |
|                      |         |                 | Supplier | Copper (Cu)                | 7440-50-8    |        | 1.0976    | mg              |