| Contact Name   | IPC<br>SSOCIATION CONNECTING<br>LECTRONICS INDUSTRIES® | Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions. |          |                                       | This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with low level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility. |                  |          |                         |        |     |            |                         |                                 |               |      |           |
|--|--|---|----------|---------------------------------------|---|------------------|----------|-------------------------|--------|-----|------------|-------------------------|---------------------------------|---------------|------|-----------|
| Company name* Company unique ID  Unique ID Authority  Description of the Contact  | 52-21.1  |   |          |                                       |   | *                |          |                         |        |     |            | als and Mf              | g Informatio                    | on            |      |           |
| nsemi ontact Name Title - Contact Phone - Contact* Product-Env-Stewards Product-Env-Stew | upplier Informa  | ntion   |          |                                       |   |                  |          |                         |        |     |            |                         |                                 |               |      |           |
| Title - Contact NAME  Product Enviro Compliance  NA  Product Env-Stewards  Title - Representative  Title - Representative  Phone - Representative  Phone - Representative  Phone - Representative  NA  Product Env-Stewards © onsemi.com  NA  NA  NA  NA  NA  NA  NA  NA  NA  N   | Company name*  |   |          | Company unique ID                     |   |                  | τ        | Unique ID Authority     |        |     |            |                         | Response Date*                  |               |      |           |
| Product-Env-Stewards Uthorized Representative* Title - Representative Product Enviro Compliance Product-Env-Stewards Product-Env-Stewar | semi   |   |          |                                       |   |                  |          |                         |        |     |            |                         | 2025-07-                        | 17            |      |           |
| Title - Representative* Product-Env-Stewards Product Enviro Compliance Requester Item Number Product Enviro Compliance Requester Item Number Requester Ite | ontact Name  |   |          | Title - Contact                       |   |                  | I        | Phone - Contact*        |        |     |            |                         | Email - Contact*                |               |      |           |
| Product-Env-Stewards  Requester Item Number  Mfr Item Number  Mfr Item Name  Effective Date  Version  Manufacturing Site  Weight*  UOM  Terminal Plating / Grid Array Material  Terminal Base Alloy  Matte Tin (Sn) - annealed  Product-Env-Stewards@onsemi.com  NA  Product-Env-Stewards@onsemi.com  Manufacturing Site  Weight*  UOM  Version  Manufacturing Site  Weight*  UOM  Product-Env-Stewards@onsemi.com  Manufacturing Site  Weight*  Wought*  Wo | Product-Env-Stewards                                   |   |          | Product Enviro Compliance             |   |                  |          | NA                      |        |     |            |                         | Product-Env-Stewards@onsemi.com |               |      |           |
| Requester Item Number  | Authorized Representative*                             |   |          | Title - Representative                |   |                  | I        | Phone - Representative* |        |     |            | Email - Representative* |                                 |               |      |           |
| FCH47N60F-F133 SF1 600V 73mOhm F TO247 2025-07-17 CPA 5456.725 mg I  Institute of the control of | Product-Env-Stewards                                   |   |          | Product Enviro Compliance             |   |                  |          | NA                      |        |     |            |                         | Product-Env-Stewards@onsemi.com |               |      |           |
| Terminal Plating / Grid Array Material   Terminal Base Alloy   J-STD-020 MSL Rating   Peak Process Body Temperature   Max Time at Peak Temperature   Number of Reflow Cycles   | Requester  | Item Number   | Mfr Item | Number                                | Mfr Item Name   |                  |          | Effective Date          | Versio | n   | Manufactur | ing Site                | V                               | Veight*       | UOM  | Unit Type |
| Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles  Matte Tin (Sn) - annealed CU Alloy NA 0 C 30 seconds 3   |  |   | FCH47N   | 60F-F133                              | SF1 600V 73mOh  | nm F TO247       |          | 2025-07-17              |        |     | CPA        |                         | 5                               | 456.725       | mg   | Each      |
| Matte Tin (Sn) - annealed CU Alloy NA 0 C 30 seconds 3   |  |   |          | . 10                                  |   | ( GTTD .020 ) (G | I D d    |                         | D 1    | T   | 14 Ti      | . D. 1.                 |                                 |               | SD C | 1         |
| Patter III (bi) dimensed to the seconds to   |  |   |          | · · · · · · · · · · · · · · · · · · · |   |                  | L Rating |                         |        | '   |            |                         | r of Reflow Cyc                 | cles          |      |           |
| omments  | •  | (Sn) - annealed   | C        | U Alloy                               |   | NA               |          | U                       |        | IC. | 30         |                         | second                          | 1S   <b>5</b> |      |           |
|  | omments  |   |          |                                       |   |                  |          |                         |        |     |            |                         |                                 |               |      |           |
| or more information regarding material composition please refer to page 3  |  |   | •.•      |                                       |   |                  |          |                         |        |     |            |                         |                                 |               |      |           |

| 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). |   |  |   |  |  |  |  |  |  |  |  |
| cadmium, hexavalentchromium, polybrominal contains a RoHS restricted substance inexcess encompass all such components. Supplier certi as of the date that Supplier completes this for Company acknowledges that Supplier may ha independently verified information provided by certification in this paragraph. If the Company  | ted biphenyls and/or polybrominated dipheny<br>of an applicable quantity limit, please indicate<br>fies that it gathered the information it provident.<br>Supplier acknowledges that Company will<br>we relied on information provided by others in<br>the supplier agrees that, at a minimum<br>and the Supplier enter into a written agreements<br>ource of the Supplier's liability and the Com- | 2011/65/EU and implemented by the laws of the End ethers (each a "RoHS restricted substance") in except the below which, if any, RoHS exemption you believe in this form using appropriate methods to ensure rely on this certification in determining the compliant completing this form, and that Supplier may not have its suppliers have provided certifications regarding ent with respect to the identified part, the terms and capany's remedies for issues that arise regarding information in the provided certification in | sess of the applicable quantity limit identified ab<br>we may apply. If the part is an assembly with low<br>its accuracy and that such information is true an-<br>nce of its products with European Union member<br>ave independently verified such information. Ho<br>their contributions to the part, and those certification<br>conditions of that agreement, including any warr | bove. If a homogeneous material within the part ver level components, the declaration shall d correct to the best of its knowledge and belief, er state laws that implement the RoHS Directive. It is involved in situations where Supplier has not ations are at least as comprehensive as the ranty rights and/or remedies provided as part of |  |  |  |  |  |  |  |
| 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 temper  | erature 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 f<br>Requester) and click on Submit Form to ha   |   | Accepted" on the Supplier Acceptance drop-dow  | n. This will display the signature area. Digita   | lly sign the declaration (if required by the   |  |  |  |  |  |  |  |
| 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).

| <b>Homogeneous Material</b> | Weight | Unit of Measure | Level    | Substance                 | CAS              | Exempt | Weight    | Unit of Measure |
|-----------------------------|--------|-----------------|----------|---------------------------|------------------|--------|-----------|-----------------|
| Die                         | 32.0   | mg              | Supplier | Silicon (Si)              | 7440-21-3        |        | 32        | mg              |
| Die Attach Solder           | 35.025 | mg              | Supplier | Silver (Ag)               | 7440-22-4        |        | 0.8756    | mg              |
|                             |        |                 | A        | Lead (Pb)                 | 7439-92-1        | 7a     | 32.3981   | mg              |
|                             |        |                 | Supplier | Tin (Sn)                  | 7440-31-5        |        | 1.7512    | mg              |
| Lead Frame                  | 3643.9 | mg              | Supplier | Zinc (Zn)                 | 7440-66-6        |        | 1.4576    | mg              |
|                             |        |                 | В        | Nickel (Ni)               | 7440-02-0        |        | 119.1555  | mg              |
|                             |        |                 | Supplier | Iron (Fe)                 | 7439-89-6        |        | 2.1863    | mg              |
|                             |        |                 | Supplier | Copper (Cu)               | 7440-50-8        |        | 3520.0071 | mg              |
|                             |        |                 | Supplier | Phosphorus (P)            | 7723-14-0        |        | 1.0932    | mg              |
| Mold Compound-Black         | 1739.8 | mg              | Supplier | Brominated Epoxy Resin-2  | 68541-56-0       |        | 43.495    | mg              |
|                             |        |                 | Supplier | Other Epoxy resins        | Proprietary Data |        | 52.194    | mg              |
|                             |        |                 | В        | Antimony Trioxide (Sb2O3) | 1309-64-4        |        | 34.796    | mg              |
|                             |        |                 | Supplier | Carbon Black (C)          | 1333-86-4        |        | 8.699     | mg              |
|                             |        |                 | Supplier | Fused Silica (SiO2)       | 60676-86-0       |        | 1513.6261 | mg              |
|                             |        |                 | Supplier | Phenolic Resin (Novolac)  | 9003-35-4        |        | 86.99     | mg              |
| Wire Bond - Al              | 6.0    | mg              | Supplier | Aluminum (Al)             | 7429-90-5        |        | 6         | mg              |