| ASSOCIATION CONNECTING<br>ASSOCIATION CONNECTING<br>ELECTRONICS INDUSTRIES*<br>Material Composition Declaration<br>© Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both<br>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 lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility. |   |                     |              |                                 |                    |                                 |          |                  |           |
|--|--|---------------------------|---------------------------|---|---|---------------------|--------------|---------------------------------|--------------------|---------------------------------|----------|------------------|-----------|
|  |  |                           |                           | Form Type <sup>3</sup><br>Distribute  | <ul> <li>Declaration Class *<br/>Class 6 - RoHS Yes/No, Homogeneous Material</li> </ul> |                     |              |                                 | als and M          | als and Mfg Information         |          |                  |           |
| Supplier Information   |  |                           |                           |   |   |                     |              |                                 |                    |                                 |          |                  |           |
| Company name* Compan   |  |                           | mpany unique ID           |   |   | Unique ID Authority |              |                                 |                    | Response Date*                  |          |                  |           |
| onsemi   |  |                           |                           |   |   |                     |              |                                 |                    | 2022-02-10                      |          |                  |           |
| Contact Name Title - Contact   |  |                           | ct                        | Phone - C   |   | Phone - Contact     | Contact*     |                                 |                    | Email - Contact*                |          |                  |           |
| Product-Env-Stewards Product Envi  |  |                           | nviro Compliance          |   | NA  |                     |              | Product-Env-Stewards@onsemi.com |                    |                                 |          |                  |           |
| Authorized Representative* Title - Represe   |  |                           | sentative                 |   | Phone - Representative*   |                     |              | Email - Representative*         |                    |                                 |          |                  |           |
| Product-Env-Stewards Pro   |  |                           | Product Enviro Compliance |   |   | NA                  |              |                                 |                    | Product-Env-Stewards@onsemi.com |          |                  |           |
| Requester Item Number  | Mfr Item   | Number                    | Mfr Item Name             |   |   | Effective Date      | Version      | Manuf                           | Manufacturing Site |                                 | Weight*  | UOM              | Unit Type |
|  | MC1409   | MC14099BDWG LOG CMOS LATC |                           | CH ADD 8BIT   | 1   | 2022-02-10          | PH1          |                                 | 2                  | 422.01                          | mg       | Each             |           |
| Anufacturing Proccess Inform   | ation  |                           |                           |   |   | •                   |              | •                               |                    | ŀ                               |          | ·                |           |
| Terminal Plating / Grid Array M  | Terminal Plating / Grid Array Material Terminal Base Alloy |                           | Alloy J                   | -STD-020 MSL  | Rating  | Peak Proce          | ss Body Temp | perature Ma                     | ax Time at Peak    | Temperat                        | ure Numb | er of Reflow Cyc | cles      |
| Matte Tin (Sn) - annealed CU Alloy 3   |  |                           |                           |   | 260   | C                   | 30           |                                 | secon              | ds 3                            |          |                  |           |
| omments  |  |                           |                           |   |   |                     |              |                                 |                    |                                 |          |                  |           |
| ITENTION: MSL 3 Rated item requir  | es Bake and D  | ry Pack (after            | electrical test)          |   |   |                     |              |                                 |                    |                                 |          |                  |           |
| or more information regarding materia  | l composition  | please refer to           | page 3                    |   |   |                     |              |                                 |                    |                                 |          |                  |           |

| RoHS Material Composition Declaration  |   |  |   | Declaration Type *                              | Detailed  |  |  |  |  |  |  |
|--|---|--|---|---|---|--|--|--|--|--|--|
| Directive 2015/863/EU amending RoHS<br>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, polybrominate<br>contains a RoHS restricted substance inexcess<br>encompass all such components. Supplier certif<br>as of the date that Supplier completes this form<br>Company acknowledges that Supplier may hav<br>independently verified information provided by<br>certification in this paragraph. If the Company a | ed biphenyls and/or polybrominated dip<br>of an applicable quantity limit, please ir<br>ies that it gathered the information it pro-<br>.Supplier acknowledges that Company<br>e relied on informationprovided by othe<br>y others, Supplier agrees that, at a minin<br>and the Supplier enter into a written agre<br>pource of the Supplier's liability and the  | henyl ethers (each a "<br>ndicate below which, i<br>ovides in this form us<br>will rely on this certifiers<br>in completing this<br>num, itssuppliers have<br>eement with respect to<br>Company's remedies | RoHS restricted substance") in exce<br>if any, RoHS exemption you believe<br>ing appropriate methods to ensure if<br>ication in determining the complian<br>form, and that Supplier may not have<br>e provided certifications regarding the<br>to the identified part, the terms and co<br>for issues that arise regarding inform | ce of its products with European Union membe    | ove. If a homogeneous material within the part<br>er level components, the declaration shall<br>l correct to the best of its knowledge and belief,<br>r state laws that implement the RoHS Directive.<br>wever, in situations where Supplier has not<br>tions are at least as comprehensive as the<br>anty rights and/or remedies provided as part of |  |  |  |  |  |  |
| RoHS Declaration * 1 - Item(s)   | does not contain RoHS restricted substa   | on above   | Supplier Acceptance   | * Accepted                                      |   |  |  |  |  |  |  |
| Exemption: If the declared item does not con applicable exemptions.  | ntain RoHS restricted substances per  | the definition above   | except for defined RoHS exempti   | ons, then select the corresponding response i   | n the RoHS Declaration above and choose all   |  |  |  |  |  |  |
| Exemption List Version   | EL-2011/534/EU  |  |   |   |   |  |  |  |  |  |  |
| Declaration Signature  |   |  |   |   |   |  |  |  |  |  |  |
| Instructions: Complete all of the required fin<br>Requester) and click on Submit Form to have  | elds on all pages of this form. Select the form returned to the Requester   | he "Accepted" on th  | e Supplier Acceptance drop-down   | . This will display the signature area. Digital | lly sign the declaration (if required by the  |  |  |  |  |  |  |
| Supplier Digital Signature Ra  | stislav Drska   | Le   |   |   |   |  |  |  |  |  |  |

## 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.

| sigma range of distribution unless otherwise noted). |        |                 |          |                            |                  |        |          |                 |  |
|--|--------|-----------------|----------|----------------------------|------------------|--------|----------|-----------------|--|
| Homogeneous Material                                 | Weight | Unit of Measure | Level    | Substance                  | CAS              | Exempt | Weight   | Unit of Measure |  |
| Die  | 5.84   | mg              | Supplier | Silicon (Si)               | 7440-21-3        |        | 5.84     | mg              |  |
| Die Attach   | 16.72  | mg              | Supplier | Silver (Ag)                | 7440-22-4        |        | 12.54    | mg              |  |
|  |        |                 | Supplier | Epoxy resins               | 129915-35-1      |        | 4.18     | mg              |  |
| Lead Frame   | 261.87 | mg              | Supplier | Silver (Ag)                | 7440-22-4        |        | 2.8806   | mg              |  |
|  |        |                 | Supplier | Zinc (Zn)                  | 7440-66-6        |        | 0.5237   | mg              |  |
|  |        |                 | Supplier | Iron (Fe)                  | 7439-89-6        |        | 6.8086   | mg              |  |
|  |        |                 | Supplier | Copper (Cu)                | 7440-50-8        |        | 251.6571 | mg              |  |
| Mold Compound-Black                                  | 133.38 | mg              |          | Phenolic Resin             | proprietary data |        | 6.669    | mg              |  |
|  |        |                 | Supplier | Ortho Cresol Novolac Resin | 29690-82-2       |        | 2.6676   | mg              |  |
|  |        |                 | Supplier | Epoxy Phenol Resin         | Proprietary Data |        | 6.669    | mg              |  |
|  |        |                 | Supplier | Carbon Black (C)           | 1333-86-4        |        | 0.6669   | mg              |  |
|  |        |                 | Supplier | Fused Silica (SiO2)        | 60676-86-0       |        | 116.7075 | mg              |  |
| Plating  | 3.83   | mg              | Supplier | Tin (Sn)                   | 7440-31-5        |        | 3.83     | mg              |  |
| Wire Bond - Cu                                       | 0.37   | mg              | Supplier | Copper (Cu)                | 7440-50-8        |        | 0.37     | mg              |  |

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