| Contact Name Title - Contact Product-Env-Stewards Authorized Representative* Product-Env-Stewards Product | ASSOCIATION CONNECTING | 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 Response Date* 2023-06-08 Contact Name Title - Contact Phone - Contact* Product-Env-Stewards | 752-21.1 | | | | | | | | | | | ials and Mf | g Informati | on | |
| Insemi In | Supplier Inform | ation | | | | · | | | | · | | | | | |
| Title - Contact Name Product-Env-Stewards Product- | Company name* | | | | ompany unique ID | | | Unique ID Authority | | | | Response Date* | | | |
| Product-Env-Stewards Authorized Representative* Title - Representative Product-Env-Stewards Product Enviro Compliance NA Product-Env-Stewards@onsemi.com Product-Env-Stewards Product-Env-Stewards@onsemi.com NA Product-Env-Stewards@onsemi.com NA Product-Env-Stewards@onsemi.com Product-Env-Stewards@onsemi.com NB Product-Env-Stewards@onsemi.com | nsemi | | | | | | | | | | | 2023-06-08 | | | |
| Authorized Representative* Product-Env-Stewards Requester Item Number Mfr Item Number Max Time at Peak Temperature Number of Reflow Cycles Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3 | Contact Name | | | Title - Contact | | | 1 | Phone - Contact* | | | | Email - Contact* | | | |
| Product Envi-Stewards Requester Item Number Mfr Item Number Mfr Item Number Mfr Item Name Effective Date Version Manufacturing Site Weight* UOM U Annufacturing Process Information Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Matte Tin (Sn) - annealed CU Alloy 1 Product-Env-Stewards@onsemi.com Manufacturing Site Weight* UOM U 44.91 mg E Max Time at Peak Temperature Number of Reflow Cycles Seconds 3 Comments | Product-Env-Stewa | rds | | Product Enviro Compliance | | | | NA | | | | Product-Env-Stewards@onsemi.com | | | |
| Requester Item Number Mfr Item Number Mfr Item Name Effective Date Version Manufacturing Site Weight* UOM UNB100LVEP56MNG BBG QFN 20 ECL 2.5V-5.0V 2023-06-08 MY1 44.91 mg E Manufacturing Proccess Information 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 1 260 C 30 seconds 3 | uthorized Represei | ntative* | Title - Representative | | | I | Phone - Representative* | | | | Email - Representative* | | | | |
| Manufacturing Proccess Information Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3 | Product-Env-Stewa | rds | | Product Enviro Compliance | | | | NA | | | | Product-Env-Stewards@onsemi.com | | | |
| Manufacturing Process Information 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 Comments | Requester | Requester Item Number Mfr Ite | | em Number Mfr Item Name | | | | Effective Date | Version | ı | Manufacturing 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 260 Comments | | | NB100LVEP56MNG BBG QFN 20 EC | | BBG QFN 20 ECL | 2.5V-5.0V | | 2023-06-08 MY1 | | MY1 | 4 | 4.91 | mg | Each | |
| Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3 comments | | | | arminal Paga | Alloy | STD 020 MSI | Dating | Dook Prov | page Pody ⁷ | Camparatus | May Time at Dook | Tomporati | uro Numb | or of Poflow Cur | alas |
| Comments | 2 | | | • | | 31D-020 M31 | L Kattiig | | | | | | | ei oi Keilow Cyc | les |
| | | i (Sii) - aimealeu | | U Alluy | 1 | | | 400 | | IC | 30 | second | 15 3 | | |
| ver 1 - maximum time at peak temperature during soldering is 10-50 seconds | | ima at naak tamparatuus | duning sold | loring is 10-2 | 0 seconds | | | | | | | | | | |
| or more information regarding material composition please refer to page 3 | | | | | | | | | | | | | | | |

| RoHS Material Composition Declaration | | | Declaration Type * | Detail | ed | | | | | |
|---|--|---|--|-----------------------|-------------------------------------|--|--|--|--|--|
| 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, the declaration shall encompass all such 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 information provided 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, its part of that agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's Itability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply. | | | | | | | | | | |
| RoHS Declaration * 1 - Item | (s) does not contain RoHS restricted substar | nces per the definition above | Supplier A | cceptance * | Accepted | | | | | |
| Exemption: 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 | | | | | | | | | |
| Declaration Signature | | | | | | | | | | |
| | | | | | | | | | | |
| | | e "Accepted" on the Supplier Acceptance | drop-down. This will display the signature a | rea. Digitally sign t | the declaration (if required by the | | | | | |

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 | 2.98 mg | | Supplier | Silicon (Si) | 7440-21-3 | | 2.98 | mg |
| Die Attach | 0.55 | mg | Supplier | Epoxized Condensate Of Para- Hydrobenzaldehyde And Alkyl Phenol | 129915-35-1 | | 0.11 | mg |
| | | | Supplier | Silver (Ag) | 7440-22-4 | | 0.44 | mg |
| Lead Frame | 16.85 | | Supplier | Silver (Ag) | 7440-22-4 | | 0.1685 | mg |
| | | | Supplier | Tin (Sn) | 7440-31-5 | | 0.0421 | mg |
| | | | Supplier | Zinc (Zn) | 7440-66-6 | | 0.0371 | mg |
| | | | Supplier | Chromium (Cr) | 7440-47-3 | | 0.0421 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 16.5602 | mg |
| Mold Compound-Black | 22.31 | mg | Supplier | Epoxy and Phenolic Resin | 40216-08-8 | | 1.7848 | mg |
| | | | Supplier | Carbon Black (C) | 1333-86-4 | | 0.1115 | mg |
| | | | Supplier | Aluminum Hydroxide (Al(OH)3) | 21645-51-2 | | 0.4462 | mg |
| | | | Supplier | Fused Silica (SiO2) | 60676-86-0 | | 19.2981 | mg |
| | | | Supplier | Phenolic Resin (Novolac) | 9003-35-4 | | 0.6693 | mg |
| Plating | 1.89 | mg | Supplier | Tin (Sn) | 7440-31-5 | | 1.89 | mg |
| Wire Bond - Au | 0.33 | mg | Supplier | Gold (Au) | 7440-57-5 | | 0.33 | mg |