| | Material Composit © Copyright 2005. IPC, I nternational and Pan-Am | Bannockbi | urn, Illinois. A | Ill rights reserved untions. | under both | This docum level parts, t | ent is a decla the declaratio | ration of n encom | the substance passes all low | s within the manufa er level materials f | acturer liste or which the | d item. Note: | if the item is an a r has engineering | ssembly with lower responsibility. | |
|---|--|--------------|---------------------------|--------------------------------------|-------------------------|---|---|----------------------|------------------------------|---|---------------------------------|--------------------------|--|------------------------------------|--|
| | | | | | Form Type Distribute | e * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater | | | | | aterials and | ials and Mfg Information | | | |
| Supplier Informati | on | | | | | | | | | | | | | | |
| Company name* | | | Company unique ID | | | Unique ID Authority | | | | | Response Date* | | | | |
| onsemi | | | | | | | | | | | 2024- | 2024-05-09 | | | |
| Contact Name | | | Title - Contact | | | | Phone - Contact* | | | | Emai | Email - Contact* | | | |
| Product-Env-Stewards | | | Product Enviro Compliance | | | NA | | | | Prod | Product-Env-Stewards@onsemi.com | | | | |
| Authorized Representative* | | | Title - Representative | | | Phone - Representative* | | | Emai | Email - Representative* | | | | | |
| Product-Env-Stewards | | | Product Enviro Compliance | | | NA | | | | Prod | Product-Env-Stewards@onsemi.com | | | | |
| Requester Ite | Requester Item Number Mfr Item | | n Number Mfr Item Name | | | | Effective D | ate Ver | rsion | Manufacturing Sit | e | Weight* | UOM | Unit Type | |
| | | MC100EP52DTG | | BBG ECL FLIP FLOP DIFF | | | 2024-05-09 | | | PH8 | | 22.7 | mg | Each | |
| Manufacturing Pro | occess Information | | | | | | | · | | | | | | | |
| Terminal Plating / Grid Array Material Term | | | erminal Base A | minal Base Alloy J-STD-020 MSL Ratin | | L Rating | Peak Process Body Temperature Max Time at | | eak Tempe | ak Temperature Number of Reflow Cycles | | | | | |
| Matte Tin (Sn) - annealed CU All | | | U Alloy | lloy 3 | | | 260 C 30 | | sec | seconds 3 | | | | | |
| Comments | | | | | | | | | | | | | | | |
| ATTENTION: MSL 3 I | Rated item requires Ba | ke and Di | ry Pack (after | electrical test) | | | | | | | | | | | |
| For more information r | egarding material com | position p | olease 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), Dibutyl phthalate (DBP), Dibutyl phthalate (DBP), Dibutyl phthalate (DBP). | | | | | | | | | | |
| cadmium, hexavalentchromium, polybrominate contains a RoHS restricted substance inexcess encompass all such components. Supplier certif as of the date that Supplier completes this form Company acknowledges that Supplier may hav independently verified information provided by certification in this paragraph. If the Company a | ed biphenyls and/or polybrominated dip of an applicable quantity limit, please ir ies that it gathered the information it pro- .Supplier acknowledges that Company e relied on informationprovided by othe y others, Supplier agrees that, at a minin and the Supplier enter into a written agre pource of the Supplier's liability and the | henyl ethers (each a " ndicate below which, i ovides in this form us will rely on this certifiers in completing this num, itssuppliers have eement with respect to Company's remedies | RoHS restricted substance") in exce if any, RoHS exemption you believe ing appropriate methods to ensure if ication in determining the complian form, and that Supplier may not have e provided certifications regarding the to the identified part, the terms and cc for issues that arise regarding inform | ce of its products with European Union membe | ove. If a homogeneous material within the part er level components, the declaration shall l correct to the best of its knowledge and belief, r state laws that implement the RoHS Directive. wever, in situations where Supplier has not tions are at least as comprehensive as the anty rights and/or remedies provided as part of | | | | | | |
| RoHS Declaration * 1 - Item(s) | does not contain RoHS restricted substa | ances per the definitio | 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 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.

| Homogeneous Material | Weight | Unit of Measure | Level | Substance | CAS | Exempt | Weight | Unit of Measure |
|----------------------|--------|-----------------|----------|----------------------------|------------------|--------|--------|-----------------|
| Die | 1.0 | mg | Supplier | Silicon (Si) | 7440-21-3 | | 1 | mg |
| Die Attach | 0.66 | mg | | Resin | proprietary data | | 0.0528 | mg |
| | | | Supplier | Silver (Ag) | 7440-22-4 | | 0.5577 | mg |
| | | | Supplier | Formaldehyde Polymer | 9003-36-5 | | 0.0495 | mg |
| Lead Frame | 10.38 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 0.218 | mg |
| | | | Supplier | Zinc (Zn) | 7440-66-6 | | 0.0125 | mg |
| | | | Supplier | Iron (Fe) | 7439-89-6 | | 0.2439 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 9.9025 | mg |
| | | | Supplier | Phosphorus (P) | 7723-14-0 | | 0.0031 | mg |
| Mold Compound-Black | 9.5 | mg | | Epoxy resin | proprietary data | | 0.475 | mg |
| | | | Supplier | Phenolic Resin | Proprietary Data | | 0.475 | mg |
| | | | Supplier | Ortho Cresol Novolac Resin | 29690-82-2 | | 0.19 | mg |
| | | | Supplier | Carbon Black (C) | 1333-86-4 | | 0.0475 | mg |
| | | | Supplier | Fused Silica (SiO2) | 60676-86-0 | | 8.3125 | mg |
| Plating | 1.06 | mg | Supplier | Tin (Sn) | 7440-31-5 | | 1.06 | mg |
| Wire Bond - Au | 0.1 | mg | Supplier | Gold (Au) | 7440-57-5 | | 0.1 | 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 sigma range of distribution unless otherwise noted).