| ASSOCIATION CONNECTING                    | © Copyright 2005. IPC,<br>international and Pan-Ar | Bannockb                  | urn, Illinois. A                 | ll rights reserved untions. | nder both               | This docum<br>level parts,  | ent is a declara                              | tion of the s<br>encompasse | ubstances<br>es all lower | within the manufactu<br>r level materials for w | rer listed i<br>hich the r      | tem. Note: if<br>nanufacturer | f the item is an as<br>has engineering | ssembly with lower responsibility. |  |
|---|--|---------------------------|----------------------------------|-----------------------------|-------------------------|---|---|-----------------------------|---------------------------|---|---------------------------------|-------------------------------|--|------------------------------------|--|
| 1752-21.1                                 |  |                           |                                  |                             | Form Type<br>Distribute | * Declaration Class *<br>Class 6 - RoHS Yes/No, Homogeneous Materia |   |                             |                           | ials and M                                      | als and Mfg Information         |                               |  |                                    |  |
| Supplier Inform                           | ation  |                           |                                  |                             |                         |   |   |                             |                           |   |                                 |                               |  |                                    |  |
| Company name*                             |  |                           | Company unique ID                |                             |                         | Unique ID Authority   |   |                             |                           | Response Date*                                  |                                 |                               |  |                                    |  |
| onsemi                                    |  |                           |                                  |                             |                         |   |   |                             |                           |   | 2024-05                         | 2024-05-17                    |  |                                    |  |
| Contact Name                              |  |                           | Title - Contact                  |                             |                         |   | Phone - Contact*                              |                             |                           |   | Email -                         | Email - Contact*              |  |                                    |  |
| Product-Env-Stewards                      |  |                           | Product Enviro Compliance        |                             |                         |   | NA  |                             |                           |   | Product-Env-Stewards@onsemi.com |                               |  |                                    |  |
| Authorized Representative*                |  |                           | Title - Representative           |                             |                         |   | Phone - Representative*                       |                             |                           |   | Email -                         | Email - Representative*       |  |                                    |  |
| Product-Env-Stewar                        | rds  | Product Enviro Compliance |                                  |                             |                         | NA  |   |                             |                           | Product-Env-Stewards@onsemi.com                 |                                 |                               |  |                                    |  |
| Requester                                 | er Item Number Mfr Item Number                     |                           | Number                           | Imber Mfr Item Name         |                         |   | Effective Dat                                 | e Version                   | N                         | Manufacturing Site                              |                                 | Weight*                       | UOM                                    | Unit Type                          |  |
|   |  | NJD1718T4G BIP            |                                  | BIPOLAR DPAK 50V            |                         | 2024-05-17  |   | N                           | MY1                       |   | 350.99                          | mg                            | Each                                   |                                    |  |
| Manufacturing I                           | Proccess Information                               | n                         |                                  |                             |                         |   |   |                             |                           |   |                                 |                               |  |                                    |  |
| Terminal Plating / Grid Array Material Te |  |                           | erminal Base Alloy J-STD-020 MSL |                             |                         | L Rating  | Peak Process Body Temperature Max Time at Pea |                             |                           | k Temperature Number of Reflow Cycles           |                                 |                               |  |                                    |  |
| Matte Tin (Sn) - annealed CU              |  |                           | U Alloy                          | Alloy 1                     |                         |   | 260 C 30                                      |                             |                           | seconds 3                                       |                                 |                               |  |                                    |  |
| Comments                                  |  |                           |                                  |                             |                         |   |   |                             |                           |   |                                 |                               |  |                                    |  |
| evel 1 - maximum ti                       | me at peak temperature o                           | during sol                | dering is 10-3                   | 0 seconds                   |                         |   |   |                             |                           |   |                                 |                               |  |                                    |  |
| For more informatio                       | n regarding material con                           | position                  | please refer to                  | page 3                      |                         |   |   |                             |                           |   |                                 |                               |  |                                    |  |

| RoHS Material Composition Declaration  |   |   |   | Declaration Type *  | Detailed  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|--|--|--|--|--|--|--|
| Directive 2015/863/EU amending RoHS<br>Directive 2011/65/EU  | (Pb), Mercury (Hg), Hexavalent Chro   | 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, polybromina<br>contains a RoHS restricted substance inexces<br>encompass all such components. Supplier cer<br>as of the date that Supplier completes this for<br>Company acknowledges that Supplier may h<br>independently verified information provided<br>certification in this paragraph. If the Company | ated biphenyls and/or polybrominated dip<br>s of an applicable quantity limit, please in<br>ifies that it gathered the information it pr<br>m.Supplier acknowledges that Company<br>ave relied on informationprovided by oth<br>by others, Supplier agrees that, at a minir<br>and the Supplier enter into a written agr<br>esource of the Supplier's liability and the | henyl ethers (each a "RoHS restricted substa<br>ndicate below which, if any, RoHS exemption<br>ovides in this form using appropriate methoo<br>will rely on this certification in determining<br>ers in completing this form, and that Supplie<br>num, itssuppliers have provided certification<br>eement with respect to the identified part, the<br>Company's remedies for issues that arise reg                                | nce") in exco<br>n you believe<br>ls to ensure i<br>the compliar<br>r may not ha<br>s regarding t<br>terms and co | e may apply. If the part is an assembly with low<br>s accuracy and that such information is true an<br>ce of its products with European Union member<br>de independently verified such information. Ho<br>neir contributions to the part, and those certifica | ove. If a homogeneous material within the part<br>er level components, the declaration shall<br>d correct to the best of its knowledge and belief,<br>er state laws that implement the RoHS Directive.<br>wever, in situations where Supplier has not<br>ations are at least as comprehensive as the<br>anty rights and/or remedies provided as part of |  |  |  |  |  |  |  |
| RoHS Declaration * 4 - Item(   | s) does not contain RoHS restricted subst   | ances per the definition above except for sele  | ected exempt  | ions Supplier Acceptance  | * Accepted  |  |  |  |  |  |  |  |
| Exemption: 7a: Lead in high melting temp   | erature type solders (i.e. lead based sol   | der alloys containing 85% by weight or m  | ore lead).  |   |   |  |  |  |  |  |  |  |
| Exemption List Version   | EL-2011/534/EU  |   |   |   |   |  |  |  |  |  |  |  |
| Declaration Signature  |   |   |   |   |   |  |  |  |  |  |  |  |
| Instructions: Complete all of the required<br>Requester) and click on Submit Form to h   |   |   | e drop-dowi   | a. This will display the signature area. Digita   | lly sign the declaration (if required by the  |  |  |  |  |  |  |  |
| Supplier Digital Signature   | astislav 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                  | 0.2    | mg              | Supplier | Silicon (Si)            | 7440-21-3        |        | 0.2      | mg              |
| Die Attach           | 1.4    | mg              | А        | Lead (Pb)               | 7439-92-1        | 7a     | 1.33     | mg              |
|                      |        |                 | Supplier | Tin (Sn)                | 7440-31-5        |        | 0.07     | mg              |
| Lead Frame           | 214.64 | mg              | В        | Nickel (Ni)             | 7440-02-0        |        | 0.4293   | mg              |
|                      |        |                 | Supplier | Copper (Cu)             | 7440-50-8        |        | 214.2107 | mg              |
| Mold Compound-Black  | 129.65 | mg              |          | Epoxy resin             | proprietary data |        | 9.0755   | mg              |
|                      |        |                 | Supplier | Phenolic Resin          | Proprietary Data |        | 3.8895   | mg              |
|                      |        |                 | Supplier | Silica Amorphous (SiO2) | 7631-86-9        |        | 12.965   | mg              |
|                      |        |                 | Supplier | Carbon Black (C)        | 1333-86-4        |        | 0.6482   | mg              |
|                      |        |                 | Supplier | Fused Silica (SiO2)     | 60676-86-0       |        | 103.0717 | mg              |
| Plating              | 3.73   | mg              | Supplier | Tin (Sn)                | 7440-31-5        |        | 3.73     | mg              |
| Wire Bond - Al       | 1.37   | mg              | Supplier | Aluminum (Al)           | 7429-90-5        |        | 1.37     | 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 signar range of distribution unless otherwise noted)