| IPC ASSOCIATION COI ELECTRONICS INI | Material Compos © Copyright 2005. IPC | C, Bannockbur | kburn, Illinois. All rights reserved under both | | nder both This docu | 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. | | | | | | | | |
|---|--|--|---|-----------------|---------------------|---|--------------------------------|----------------------|-------------|---------------------------------|--------------|-----------|------|--|
| 752-21.1 | | IPC Web Site for Information on IPC-1752 Standard Form Type http://www.ipc.org/IPC-175x Distribute | | | | * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materia | | | | als and Mfg Information | | | | |
| upplier Ir | nformation | | | | | | | | | | | | | |
| Company name* | | | Company unique ID | | | Unique ID Authority | | | | Response Date* | | | | |
| nsemi | | | | | | | | | | | 2024-04-27 | | | |
| ontact Name | e | , | Title - Contact | | | Phone - Contact* | | | | Email - Contact* | | | | |
| Product-Env | -Stewards |] | Product Enviro Compliance | | | NA | | | | Product-Env-Stewards@onsemi.com | | | | |
| Authorized Representative* | | | Title - Representative | | | Phone - Rep | Phone - Representative* | | | Email - Representative* | | | | |
| Product-Env-Stewards | | | Product Enviro Compliance | | | NA | NA | | | Product-Env-Stewards@onsemi.com | | | | |
| Re | Requester Item Number Mfr Iter | | n Number Mfr Item Name | | | Effective D | ate Version Manufacturing Site | | Weigh | nt* U | OM | Unit Type | | |
| | | NXH80B1 NG | 20MNQ0S | 50kW GenII 1200 | V 80mohm SiC MOSFET | 2024-04-27 | | | CNG | 23895 | 5.3 m | g | Each | |
| lanufactu | uring Proccess Information | on | | | | | | | | | | | | |
| Tei | Terminal Plating / Grid Array Material | | Ferminal Base Alloy J-STD-020 MSL | | -STD-020 MSL Rating | Peak Process Body Temperature Max Time at P | | ire Max Time at Peak | Temperature | Number of R | eflow Cycles | | | |
| Matte Tin (Sn) - annealed | | CU | CU Alloy NA | | NA | 0 | C | | 30 | seconds | 3 | | | |
| | | | | | | | | | | | | | | |

| RoHS Material Composition Declaration | | | Declaration Type * | Detail | led | | | | | | |
|---|---|--|--|--------------------|--------------------------------------|--|--|--|--|--|--|
| Directive 2015/863/EU amending RoHS Directive 2011/65/EU | | nium (Cr6+), Polybrominated Biphenyls (Pl | aterial for Cadmium and quantity limit of 0.1% by BB), Polybrominated Diphenyl Ethers (PBDE), an | | | | | | | | |
| 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 provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written 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 exclusivesource of the Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply. | | | | | | | | | | | |
| RoHS Declaration * 1 - Item | (s) does not contain RoHS restricted substa | ances per the definition above | Supplier Ac | ceptance * | Accepted | | | | | | |
| Exemption: If the declared item does not applicable exemptions. | contain RoHS restricted substances per | the definition above except for defined Ro | oHS exemptions, then select the corresponding | response in the R | oHS Declaration above and choose all | | | | | | |
| Exemption List Version | EL-2011/534/EU | | | | | | | | | | |
| Declaration Signature | | | | | | | | | | | |
| Instructional Complete all of the required | fields on all neggs of this form. Calcut th | | a duan dawn. This will display the signature on | a Digitally sign | the declaration (if recurined by the | | | | | | |
| Instructions: Complete all of the required Requester) and click on Submit Form to | | | e drop-down. This will display the signature ar | ea. Digitally sign | 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 |
|----------------------|---------|-----------------|----------|---------------------------------|--------------|--------|-----------|-----------------|
| Cover | 10500.0 | mg | Supplier | Fiber Glass (SiO2) | 65997-17-3 | | 3150.0002 | mg |
| | | | Supplier | Poly(ButyleneTerephthalate) | 30965-26-5 | | 2940 | mg |
| | | | В | Antimony Trioxide (Sb2O3) | 1309-64-4 | | 367.5 | mg |
| | | | Supplier | PBT | 26062-94-2 | | 2940 | mg |
| | | | - | Carbonic Dichloride | 94334-64-2 | | 1102.5 | mg |
| DBC | 5800.0 | mg | Supplier | Magnesium Monoxide (MgO) | 1309-48-4 | | 43.5 | mg |
| | | | Supplier | Aluminum Trioxide (Al2O3) | 1344-28-1 | | 5568 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 116 | mg |
| | | | Supplier | Silica Crystalline (SiO2) | 14808-60-7 | | 72.5 | mg |
| Die | 102.0 | mg | Supplier | Silicon Carbide | 409-21-2 | | 102 | mg |
| | | | Supplier | Silicon (Si) | 7440-21-3 | | 0 | mg |
| Die Attach | 825.0 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 49.5 | mg |
| | | | Supplier | Tin (Sn) | 7440-31-5 | | 775.5 | mg |
| Glue | 150.0 | mg | Supplier | 2,3-epoxypropyl-trimethoxysilan | 2530-83-8 | | 15 | mg |
| | | | Supplier | Miscellaneous | Trade Secret | | 15 | mg |
| | | | Supplier | Silica Crystalline (SiO2) | 14808-60-7 | | 120 | mg |
| NTC | 9.3 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 0.0911 | mg |
| | | | Supplier | Tin (Sn) | 7440-31-5 | | 0.0186 | mg |
| | | | Supplier | Nickel Oxide (NiO) | 1313-99-1 | | 3.6427 | mg |
| | | | Supplier | Palladium (Pd) | 7440-05-3 | | 0.0929 | mg |
| | | | В | Nickel (Ni) | 7440-02-0 | | 0.0093 | mg |
| | | | Supplier | Cobalt Oxide (Co3O4) | 1308-06-1 | | 0.3717 | mg |
| | | | Supplier | Manganese Tetraoxide (Mn3O4) | 1317-35-7 | | 5.0737 | mg |
| Plating | 9.0 | mg | Supplier | Tin (Sn) | 7440-31-5 | | 9 | mg |
| Protection coat | 2810.0 | mg | Supplier | Toulene | 108-88-3 | | 1.405 | mg |
| | | | Supplier | Dimethyl Siloxane | 68083-19-2 | | 2808.595 | mg |
| Terminal | 2390.0 | mg | Supplier | Silicon (Si) | 7440-21-3 | | 6.453 | mg |
| | | | В | Nickel (Ni) | 7440-02-0 | | 32.265 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 2350.6846 | mg |
| | | | Supplier | Phosphorus (P) | 7723-14-0 | | 0.5975 | mg |
| Wire Bond - Al | 1300.0 | mg | Supplier | Aluminum (Al) | 7429-90-5 | | 1300 | mg |