| IPC ASSOCIATION ELECTRONIC | Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under linternational and Pan-American copyright conventions. | | | | nder both | 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. | | | | | | | | | |
|----------------------------------|---|------------------------|-------------------------------|---------------------|--|---|----------------------------|---------------------------------|-----------------------------|-------------------------|---------------------------------|------------|----------------|-----------|--|
| 1752-21.1 | 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 Mater | | | | ials and Mfg Information | | | | | | |
| Supplie | r Information | | | | | | | | | | | | | | |
| Company | name* | Company unique ID | | | 1 | Unique ID Authority | | | | | Response Date* | | | | |
| onsemi | | | | | | | | | | | | 2025-05-14 | | | |
| Contact N | lame | Title - Contact | | |] | Phone - Contact* | | | | Email - Contact* | | | | | |
| Product-l | Env-Stewards | | Product Enviro Compliance | | | | NA | | | | Product-Env-Stewards@onsemi.com | | | | |
| Authorize | ed Representative* | Title - Representative | | |] | Phone - Representative* | | | | Email - Representative* | | | | | |
| Product-Env-Stewards | | | Product Enviro Compliance | | | | NA | | | | Product-Env-Stewards@onsemi.com | | | | |
| | Requester Item Number Mfr Item | | Number Mfr Item Name | | | | Effective Dat | Date Version Manufacturing Site | | ring Site | V | Veight* | UOM | Unit Type | |
| | | FNA250 | 12A | IPM SPM34 1200V 50A | | | 2025-05-14 CPA | | | 49614.715 | | mg | Each | | |
| Manufa | cturing Proccess Informat | ion | | | | | | | | | | , | | | |
| | Terminal Plating / Grid Array Material To | | Cerminal Base Alloy J-STD-020 | | -STD-020 MSI | L Rating | Peak Process Body Temperat | | ture Max Time at Peak Tempe | | Temperatu | ıre Numbe | r of Reflow Cy | cles | |
| | Matte Tin (Sn) - annealed | | CU Alloy NA | | NA | | 0 C | | 30 seco | | second | ls 3 | | | |
| Comments | 3 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| or more | information regarding material | composition | please 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), Diisobutyl phthalate (DIBP). | | | | | | | | | | | |
| cadmium, hexavalentchromium, polybrominal contains a RoHS restricted substance inexcess encompass all such components. Supplier certi as of the date that Supplier completes this for Company acknowledges that Supplier may ha independently verified information provided by certification in this paragraph. If the Company | ted biphenyls and/or polybrominated dipheny of an applicable quantity limit, please indicate fies that it gathered the information it provident. Supplier acknowledges that Company will we relied on information provided by others in the supplier agrees that, at a minimum and the Supplier enter into a written agreements ource of the Supplier's liability and the Com- | 2011/65/EU and implemented by the laws of the End ethers (each a "RoHS restricted substance") in except the below which, if any, RoHS exemption you believe in this form using appropriate methods to ensure rely on this certification in determining the compliant completing this form, and that Supplier may not have its suppliers have provided certifications regarding ent with respect to the identified part, the terms and capany's remedies for issues that arise regarding information in the content of the content is the content of | sess of the applicable quantity limit identified ab we may apply. If the part is an assembly with low its accuracy and that such information is true an- nce of its products with European Union member ave independently verified such information. Ho their contributions to the part, and those certification conditions of that agreement, including any warr | bove. If a homogeneous material within the part ver level components, the declaration shall d correct to the best of its knowledge and belief, er state laws that implement the RoHS Directive. It is involved in situations where Supplier has not ations are at least as comprehensive as the ranty rights and/or remedies provided as part of | | | | | | | |
| RoHS Declaration * 4 - Item(s |) does not contain RoHS restricted substance | s per the definition above except for selected exemp | tions Supplier Acceptance | * Accepted | | | | | | | |
| Exemption: 7a: Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead). | | | | | | | | | | | |
| Exemption List Version | EL-2011/534/EU | | | | | | | | | | |
| Declaration Signature | | | | | | | | | | | |
| Instructions: Complete all of the required f Requester) and click on Submit Form to ha | | Accepted" on the Supplier Acceptance drop-dow | n. This will display the signature area. Digita | lly sign the declaration (if required by the | | | | | | | |
| Supplier Digital Signature Ra | astislav Drska | -En | | | | | | | | | |

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 | 104.6 | mg | Supplier | Silicon (Si) | 7440-21-3 | | 104.6 | mg |
| Die Attach | 195.0 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 5.85 | mg |
| | | | Supplier | Tin (Sn) | 7440-31-5 | | 188.175 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 0.975 | mg |
| Die Attach Epoxy | 1.85 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 1.702 | mg |
| | | | Supplier | Phenolic Resin-2 | 54208-63-8 | | 0.148 | mg |
| Die Attach Solder | 1.7 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 0.0425 | mg |
| | | | A | Lead (Pb) | 7439-92-1 | 7a | 1.5725 | mg |
| | | | Supplier | Tin (Sn) | 7440-31-5 | | 0.085 | mg |
| Heat Sink | 6642.0 | mg | Supplier | Aluminum (Al) | 7429-90-5 | | 6642 | mg |
| Lead Frame | 11022.5 | mg | Supplier | Iron (Fe) | 7439-89-6 | | 16.5338 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 11000.4551 | mg |
| | | | Supplier | Phosphorus (P) | 7723-14-0 | | 5.5103 | mg |
| Mold Compound-Black | 31430.0 | mg | Supplier | Ortho Cresol Novolac Resin | 29690-82-2 | | 1571.5 | mg |
| | | | Supplier | Carbon Black (C) | 1333-86-4 | | 314.3 | mg |
| | | | Supplier | Fused Silica (SiO2) | 60676-86-0 | | 27972.6992 | mg |
| | | | Supplier | Phenolic Resin (Novolac) | 9003-35-4 | | 1571.5 | mg |
| Plating | 106.6 | mg | Supplier | Tin (Sn) | 7440-31-5 | | 106.6 | mg |
| Thermistor | 10.0 | mg | Supplier | Silver (Ag) | 7440-22-4 | | 0.8 | mg |
| | | | Supplier | Tin (Sn) | 7440-31-5 | | 0.17 | mg |
| | | | Supplier | Nickel Oxide (NiO) | 1313-99-1 | | 2.6 | mg |
| | | | Supplier | Palladium (Pd) | 7440-05-3 | | 0.35 | mg |
| | | | В | Nickel (Ni) | 7440-02-0 | | 0.08 | mg |
| | | | Supplier | Cobalt Oxide (Co3O4) | 1308-06-1 | | 1.7 | mg |
| | | | Supplier | Manganese Tetraoxide (Mn3O4) | 1317-35-7 | | 4.3 | mg |
| Wire Bond - Al | 100.0 | mg | Supplier | Aluminum (Al) | 7429-90-5 | | 100 | mg |
| Wire Bond - Cu | 0.463 | mg | Supplier | Palladium (Pd) | 7440-05-3 | | 0.0093 | mg |
| | | | Supplier | Copper (Cu) | 7440-50-8 | | 0.4537 | mg |