PART INFORMATION

Mfg Item Number

Mfg Item Name

SOP 8 W/M-PORT

SUPPLIER
Company Name Freescale Semiconductor Inc

Company Unique ID 14-141-7928
Response Date 2016-09-17

Response Document ID 0894K50010S293A1.10 Contact Name Freescale Semiconductor Inc Contact Title Product Technical Support **Contact Phone** 1-800-521-6274 Contact Email support@freescale.com **Authorized Representative** Daniel Binyon Representative Title **EPP Customer Response** Representative Phone 512-895-3406 Representative Email eppanlst@freescale.com

URL for Additional Information www.freescale.com

DECLARATION

EU RoHS Yes
Pb Free Yes
HalogenFree No

Plating Indicator
EU RoHS Exemption(s)

MANUFACTURING

 Mfg Item Number
 MPVZ5010GW6U

 Mfg Item Name
 SOP 8 W/M-PORT

 Version
 ALL

 Weight
 1.270600

 UoM
 g

 Unit Volume
 EACH

 J-STD-020 MSL Rating

 Peak Processing Temperature
 245 C

Max Time at Peak Temperature

Max Time at Peak Temperature

30 seconds

Number of Processing Cycles

3

| RoHS | |
|---------------------------------------|--|
| RoHS Directive | 2011/65/EU |
| RoHS Definition | RoHS Definition: Quantity limit of 0.1% by mass (1000 PPM) of homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material of Cadmium |
| RoHS Legal Definition | 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(s) identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a RoHS restricted substance) in excess of the 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 suppliers have provided certifications regarding their contributions to the part(s), 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(s), 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 Suppliers liability and the Companys 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 Suppliers Standard Terms and Co |
| RoHS Declaration | 1 - Item(s) do not contain RoHS restricted substances per the definition above |
| Supplier Acceptance | Accepted |
| Signature | Daniel Binyon |
| Exemption List Version | 2012/51/EU |
| List of Freescale Accepted Exemptions | 6(a) : Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35% lead by weight |
| Exemptions | 6(b): Lead as an alloying element in aluminium containing up to 0.4% lead by weight |
| | 6(c): Copper alloy containing up to 4% lead by weight |
| | 7(a): Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead) |
| | 7(b): Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signaling, transmission, and network management for telecommunications |
| | 7(c)-I : Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound |
| | 7(c)-II: Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher |
| | 7(c)-III: Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC |
| | 7(c)-IV: Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors |
| | 15: Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages |

| Homogeneous Material | Weight | SubstanceClass | Substance | CAS | Exemption | SubstanceWeight | UoM | SubPart PPM | SubPart% | ARTICLEPPM | ARTICLE% |
|--|--------|--|--|-------------|-----------|-----------------|--------|----------------|----------|-------------|------------------|
| Non-Conductive Epoxy/Adhesive | 0.0028 | | | | | | g | | | | |
| Non-Conductive Epoxy/Adhesive | | Solvents, additives, and other materials | Silicone gum | 67762-94-1 | | 0.00002891 | g | 10324 | 1.0324 | 22 | 0.0022 |
| Non-Conductive Epoxy/Adhesive | | Solvents, additives, and other materials | Siloxanes and Silicones, di-Me, Me vinyl, vinyl group- terminated | 68083-18-1 | | 0.00034415 | g | 122911 | 12.2911 | 270 | 0.027 |
| Non-Conductive Epoxy/Adhesive | | Solvents, additives, and other materials | Siloxanes and silicones, di-Me, vinyl group-terminated | 68083-19-2 | | 0.00110128 | g | 393313 | 39.3313 | 866 | 0.0866 |
| Non-Conductive Epoxy/Adhesive | | Solvents, additives, and other materials | Proprietary Material-Other siloxanes and silicones | | | 0.00061947 | g | 221239 | 22.1239 | 487 | 0.0487 |
| Non-Conductive Epoxy/Adhesive | | Glass | D4 and HMDZ treated Silicon Dioxide | 68937-51-9 | | 0.00041298 | g | 147493 | 14.7493 | 325 | 0.0325 |
| Non-Conductive Epoxy/Adhesive | | Glass | Silica, crystalline - quartz (SiO2) | 14808-60-7 | | 0.00026155 | g | 93412 | 9.3412 | 205 | 0.0205 |
| Non-Conductive Epoxy/Adhesive | | Metals | Titanium (IV) Oxide | 13463-67-7 | | 0.00003166 | g | 11308 | 1.1308 | 24 | 0.0024 |
| Port | 0.2535 | | | | | | g | | | | |
| Port | | Antimony/Antimony Compounds | Antimony (metallic) | 7440-36-0 | | 0.007605 | g | 30000 | 3 | 5985 | 0.5985 |
| Port | | Antimony/Antimony Compounds | Antimony trioxide | 1309-64-4 | | 0.007605 | g | 30000 | 3 | 5985 | 0.5985 |
| Port | | Solvents, additives, and other materials | Carbon Black | 1333-86-4 | | 0.00139425 | g | 5500 | 0.55 | 1097 | 0.1097 |
| Port | | Plastics/polymers | Polybutylene terephthalate (PBT) | 30965-26-5 | | 0.18619575 | g | 734500 | 73.45 | 146541 | 14.6541 |
| Port | | Glass | Fibrous-glass-wool | 65997-17-3 | | 0.0507 | g | 200000 | 20 | 39902 | 3.9902 |
| Copper Lead Frame | 0.7485 | | | | | | g | | | | |
| Copper Lead Frame | | Metals | Copper, metal | 7440-50-8 | | 0.41448411 | g | 553753 | 55.3753 | 326233 | 32.6233 |
| Copper Lead Frame | | Plastics/polymers | Proprietary Material-Other Epoxy resins | - | | 0.01577239 | g | 21072 | 2.1072 | 12413 | 1.2413 |
| Copper Lead Frame | | Metals | Gold, metal | 7440-57-5 | | 0.00058907 | g | 787 | 0.0787 | 463 | 0.0463 |
| Copper Lead Frame | | Solvents, additives, and other materials | Phosphorus, elemental (not containing red allotrope) | 7723-14-0 | | 0.00034656 | q | 463 | 0.0463 | 272 | 0.0272 |
| Copper Lead Frame | | Metals | Iron, metal | 7439-89-6 | | 0.00990415 | q | 13232 | 1.3232 | 7794 | 0.7794 |
| Copper Lead Frame | | Nickel (external applications only) | Nickel | 7440-02-0 | | 0.00619983 | a | 8283 | 0.8283 | 4879 | 0.4879 |
| Copper Lead Frame | | Metals | Palladium, metal | 7440-05-3 | | 0.00030389 | a | 406 | 0.0406 | 239 | 0.0239 |
| Copper Lead Frame | | Plastics/polymers | Polyphenylene Sulfide (PPS) | 26125-40-6 | | 0.09485516 | a | | 12.6727 | 74653 | 7.4653 |
| Copper Lead Frame | | Glass | Fibrous-glass-wool | 65997-17-3 | | 0.20551939 | g G | 274575 | 27.4575 | 161749 | 16.1749 |
| Copper Lead Frame | | Metals | Zinc, metal | 7440-66-6 | | 0.00052545 | g g | | 0.0702 | 413 | 0.0413 |
| Bonding Agent | 0.0212 | metals | Zirio, motal | 1410 00 0 | | 0.00002040 | g G | 702 | 0.0702 | 410 | 0.0410 |
| Bonding Agent | 0.0212 | Metals | Proprietary Material-Other aluminum compounds | _ | | 0.00954 | g g | 450000 | 45 | 7508 | 0.7508 |
| Bonding Agent | | Solvents, additives, and other materials | Other guanidine compounds | _ | | 0.00053 | g | 25000 | 2.5 | 417 | 0.0417 |
| Bonding Agent | | Solvents, additives, and other materials | Carbon Black | 1333-86-4 | | 0.00053 | g | | 2.5 | 417 | 0.0417 |
| Bonding Agent | | Plastics/polymers | Other phenolic resins | - | | 0.0106 | g | 500000 | 50 | 8342 | 0.8342 |
| Silicon Semiconductor Die | 0.0106 | T lastics/polymers | Other prictions results | - | | 0.0100 | g | 300000 | | 0042 | 0.0042 |
| Silicon Semiconductor Die | 0.0100 | Solvents, additives, and other materials | Other miscellaneous substances (less than 5%). | _ | | 0.000212 | g | 20000 | 2 | 166 | 0.0166 |
| Silicon Semiconductor Die | | Glass | Silicon, doped | - | | 0.010388 | g | | 98 | 8175 | 0.8175 |
| Gel Die Encapsulant | 0.0186 | Oldos | Sincori, doped | 1- | | 0.010300 | 9 | 300000 | | 0170 | 0.0173 |
| Gel Die Encapsulant | 0.0100 | Solvents, additives, and other materials | Fluorosilicone monomer (fluorosilicone rubber) | 2374-14-3 | | 0.014508 | g | 780000 | 78 | 11418 | 1.1418 |
| Gel Die Encapsulant | | Plastics/polymers | Oxetane, 2,2,3,3-tetrafluoro-homopolymer, fluorinated | 113114-19-5 | | 0.004092 | g | 220000 | 22 | 3220 | 0.322 |
| Gel Die Encapsulant Gel Die Encapsulant | 0.0186 | Tables/polymers | Oxerand, 2,2,5,5-tetrandoro-nomopolymer, indofinated | 113114-13-3 | | 0.004082 | 9 | 22000 | LL | <u>0220</u> | U.ULZ |
| Gel Die Encapsulant Gel Die Encapsulant | 0.0100 | Solvents, additives, and other materials | Fluorosilicone monomer (fluorosilicone rubber) | 2374-14-3 | | 0.014508 | 9 | 780000 | 78 | 11418 | 1.1418 |
| Gel Die Encapsulant Gel Die Encapsulant | | Plastics/polymers | Oxetane, 2,2,3,3-tetrafluoro-homopolymer, fluorinated | 113114-19-5 | | 0.004092 | 9 | | 22 | 3220 | 0.322 |
| Bonding Wire | 0.001 | т павиоз/рогуппета | Oxerand, 2,2,5,5-terraindoro-floritopolymer, indoffnated | 113114-13-3 | | 0.004032 | 9 | 220000 | LL | 0220 | 0.022 |
| Bonding Wire | 0.001 | Metals | Gold, metal | 7440-57-5 | | 0.001 | 9 | 1000000 | 100 | 787 | 0.0787 |
| Cap/Cover | 0.1958 | Wetals | Golu, metal | 7440-07-0 | | 0.001 | 9 | 1000000 | 100 | 101 | 0.0787 |
| | 0.1900 | Metals | Chromium motel | 7440-47-3 | | 0.03608007 | 9 | 184270 | 18.427 | 28396 | 2.8396 |
| Cap/Cover | | Metals Metals | Chromium, metal | | | | 9 | | | 28396 | |
| Cap/Cover | | | Copper, metal | 7440-50-8 | | 0.00049028 | 9 | 2504 | 0.2504 | 385 | 0.0385 0.0007 |
| Cap/Cover | | Solvents, additives, and other materials | Sulfur | 7704-34-9 | | 0.00000979 | 9 | | 0.005 | 1 | |
| Cap/Cover | | Solvents, additives, and other materials | Phosphorus, elemental (not containing red allotrope) | 7723-14-0 | | 0.00003427 | 9 | 175 | 0.0175 | 26 | 0.0026 |
| Cap/Cover | | Solvents, additives, and other materials | Silicon | 7440-21-3 | | 0.00098037 | g | | 0.5007 | 771 | 0.0771 |
| Cap/Cover | | Metals | Iron, metal | 7439-89-6 | | 0.13918971 | g | 710877 | 71.0877 | 109546 | 10.9546 |
| Cap/Cover | | Metals | Manganese, metal | 7439-96-5 | | 0.00225503 | g | 11517 | 1.1517 | 1774 | 0.1774 |
| Cap/Cover | | Nickel (external applications only) | Nickel | 7440-02-0 | | 0.01647128 | g | 84123 | 8.4123 | 12963 | 1.2963 |
| Cap/Cover | | Metals | Titanium, metal | 7440-32-6 | | 0.000196 | g | | 0.1001 | 154 | 0.0154 |
| Cap/Cover | | Solvents, additives, and other materials | Carbon | 7440-44-0 | | 0.0000932 | g | 476 | 0.0476 | 73 | 0.0073 |

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http://www.NXP.com/files/abstract/corporate/ehs_epp/IPC-1752-2_v1.1_MCD_Template.pdf

LINKS TO BLANK IPC1752 FORMS Blank IPC1752 v1.1 Form IPC1752 XML LINKS

http://www.freescale.com/mcds/MPVZ5010GW6U_IPC1752_v11.xml

http://www.freescale.com/mcds/MPVZ5010GW6U_IPC1752A.xml