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PART INFORMATION

Mfg Item Number

Mfg Item Name

MWCT1012CFM

QFN 32 5\*5\*1 P0.5

SUPPLIER Freescale Semiconductor Inc Company Name Company Unique ID 14-141-7928 Response Date 2018-01-30 Response Document ID 00CSK10957D010A1.8 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

DECLARATION

EU RoHS
Pb Free
HalogenFree
Plating Indicator
EU RoHS Exemption(s)

eppanlst@freescale.com

www.freescale.com

MANUFACTURING Mfg Item Number MWCT1012CFM Mfg Item Name QFN 32 5\*5\*1 P0.5 Version ALL Weight 0.062300 UoM Unit Volume EACH J-STD-020 MSL Rating 3 Peak Processing Temperature 260 C Max Time at Peak Temperature 40 seconds Number of Processing Cycles



| 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 identified below. If a homogeneous material within the part(s) contains a RoHS restricted substance in excess 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 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 Su |  |  |  |  |  |  |  |
| 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  |  |  |  |  |  |  |  |
|                                       | 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  |  |  |  |  |  |  |  |



| lomogeneous Material        | Weight | SubstanceClass                           | Substance   | CAS        | Exemption | SubstanceWeight | UoM | SubPart<br>PPM | SubPart% | ARTICLEPPM | ARTICLE% |
|-----------------------------|--------|--|---|------------|-----------|-----------------|-----|----------------|----------|------------|----------|
| poxy Die Attach             | 0.0015 |  |   |            |           |                 | g   |                |          |            |          |
| oxy Die Attach              |        | Solvents, additives, and other materials | Proprietary Material-Other acrylates                                | -          |           | 0.00013238      | g   | 88252          | 8.8252   | 2124       | 0.2124   |
| oxy Die Attach              |        | Solvents, additives, and other materials | 1,1'-(methylenedi-p-phenylene)bismaleimide                          | 13676-54-5 |           | 0.00004964      | g   | 33094          | 3.3094   | 796        | 0.0796   |
| oxy Die Attach              |        | Metals                                   | Palladium, metal  | 7440-05-3  |           | 0.00000248      | g   | 1655           | 0.1655   | 39         | 0.0039   |
| oxy Die Attach              |        | Plastics/polymers                        | Proprietary Material-Other polymers                                 | -          |           | 0.00002482      | g   | 16547          | 1.6547   | 398        | 0.0398   |
| oxy Die Attach              |        | Metals                                   | Silver, metal   | 7440-22-4  |           | 0.00124104      | g   | 827358         | 82.7358  | 19920      | 1.992    |
| oxy Die Attach              |        | Plastics/polymers                        | Proprietary Material-Other Methacrylate compounds                   | -          |           | 0.00004964      | g   | 33094          | 3.3094   | 796        | 0.0796   |
| nding Wire, Copper          | 0.0004 |  |   |            |           |                 | g   |                |          |            |          |
| nding Wire, Copper          |        | Metals                                   | Copper, metal   | 7440-50-8  |           | 0.000388        | g   | 970000         | 97       | 6227       | 0.6227   |
| nding Wire, Copper          |        | Solvents, additives, and other materials | Other miscellaneous substances (less than 5%).                      | -          |           | 0.000012        | g   | 30000          | 3        | 192        | 0.0192   |
| e Encapsulant, Halogen-free | 0.0349 |  |   |            |           |                 | g   |                |          |            |          |
| e Encapsulant, Halogen-free |        | Plastics/polymers                        | 4,4'-dihydroxy-3,3',5,5'-tetramethylbiphenyl digycidyl ether        | 85954-11-6 |           | 0.00053955      | g   | 15460          | 1.546    | 8660       | 0.866    |
| Encapsulant, Halogen-free   |        | Solvents, additives, and other materials | Carbon Black  | 1333-86-4  |           | 0.00006348      | g   | 1819           | 0.1819   | 1018       | 0.1018   |
| Encapsulant, Halogen-free   |        | Metals                                   | Magnesium dihydroxide   | 1309-42-8  |           | 0.00125186      | g   | 35870          | 3.587    | 20094      | 2.0094   |
| e Encapsulant, Halogen-free |        | Solvents, additives, and other materials | Proprietary Material-Other organic phosphorous compounds            | -          |           | 0.00002768      | g   | 793            | 0.0793   | 444        | 0.0444   |
| e Encapsulant, Halogen-free |        | Plastics/polymers                        | 1,3,5-Triazine-2,4,6-triamine, polymer with formaldehyde and phenol | 25917-04-8 |           | 0.00011032      | g   | 3161           | 0.3161   | 1770       | 0.177    |
| e Encapsulant, Halogen-free |        | Plastics/polymers                        | Phenol p-xylylene dimethyl ether copolymer                          | 26834-02-6 |           | 0.00126851      | g   | 36347          | 3.6347   | 20361      | 2.0361   |
| e Encapsulant, Halogen-free |        | Glass                                    | Silica, vitreous  | 60676-86-0 |           | 0.02979784      | g   | 853806         | 85.3806  | 478311     | 47.8311  |
| Encapsulant, Halogen-free   |        | Metals                                   | Zinc Hydroxide  | 20427-58-1 |           | 0.00058185      | g   | 16672          | 1.6672   | 9339       | 0.9339   |
| e Encapsulant, Halogen-free |        | Plastics/polymers                        | Proprietary Material-Other Non-halogenated Epoxy resins             | -          |           | 0.00125891      | g   | 36072          | 3.6072   | 20207      | 2.0207   |
| pper Lead Frame             | 0.0218 |  |   |            |           |                 | g   |                |          |            |          |
| pper Lead Frame             |        | Metals                                   | Copper, metal   | 7440-50-8  |           | 0.02113556      | g   | 969521         | 96.9521  | 339254     | 33.9254  |
| pper Lead Frame             |        | Metals                                   | Gold, metal   | 7440-57-5  |           | 0.00000218      | g   | 100            | 0.01     | 34         | 0.0034   |
| pper Lead Frame             |        | Solvents, additives, and other materials | Phosphorus, elemental (not containing red allotrope)                | 7723-14-0  |           | 0.00000654      | g   | 300            | 0.03     | 104        | 0.0104   |
| pper Lead Frame             |        | Metals                                   | Iron, metal   | 7439-89-6  |           | 0.00049887      | g   | 22884          | 2.2884   | 8007       | 0.8007   |
| pper Lead Frame             |        | Nickel (external applications only)      | Nickel  | 7440-02-0  |           | 0.00011327      | g   | 5196           | 0.5196   | 1818       | 0.1818   |
| pper Lead Frame             |        | Metals                                   | Palladium, metal  | 7440-05-3  |           | 0.00001308      | g   | 600            | 0.06     | 209        | 0.0209   |
| pper Lead Frame             |        | Metals                                   | Zinc, metal   | 7440-66-6  |           | 0.0000305       | g   | 1399           | 0.1399   | 489        | 0.0489   |
| icon Semiconductor Die      | 0.0037 |  |   |            |           |                 | g   |                |          |            |          |
| icon Semiconductor Die      |        | Solvents, additives, and other materials | Other miscellaneous substances (less than 5%).                      | -          |           | 0.000074        | g   | 20000          | 2        | 1187       | 0.1187   |
| icon Semiconductor Die      |        | Glass                                    | Silicon, doped  |            |           | 0.003626        | _   | 980000         | 98       | 58202      | 5.8202   |



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