MICROCHIP

| Semiconductor Device Type: | V3X | TQFP 64 14x14x1mm Matte Tin | | | |
|---|---|---|---|---|---|
| **Basic Substance** | **CAS Number** | **"Contained In" Sub-Component** | **% Total Weight** | **mg/part** | **ppm** |
| Silicon | 7440-21-3 | Die | 10.54 | 56.92 | 105400 |
| Copper | 7440-50-8 | Lead Frame | 30.36 | 163.97 | 303647 |
| Silver | 7440-22-4 | Lead Frame | 1.25 | 6.73 | 12465 |
| Nickel | 7440-02-0 | Lead Frame | 1.23 | 6.64 | 12299 |
| Silicon | 7440-21-3 | Lead Frame | 0.32 | 1.73 | 3199 |
| Magnesium | 7739-95-4 | Lead Frame | 0.08 | 0.43 | 789 |
| Silver | 7440-22-4 | Die Attach Epoxy | 1.19 | 6.41 | 11876 |
| Isobornyl Methacrylate | 7534-94-3 | Die Attach Epoxy | 0.08 | 0.44 | 816 |
| Lauryl Acrylate | 2156-97-0 | Die Attach Epoxy | 0.08 | 0.44 | 816 |
| 1,6-Hexanediol Diacrylate | 13048-33-4 | Die Attach Epoxy | 0.01 | 0.04 | 82 |
| N-Methyl-2-Pyrroliodone | 872-50-4 | Die Attach Epoxy | 0.00 | 0.01 | 10 |
| Silica | 60676-86-0 | Mold Compound | 45.81 | 247.38 | 458109 |
| Epoxy Resin | Trade Secret | Mold Compound | 4.29 | 23.15 | 42864 |
| Phenol Resin | Trade Secret | Mold Compound | 3.21 | 17.36 | 32148 |
| Carbon Black | 1333-86-4 | Mold Compound | 0.27 | 1.45 | 2679 |
| Gold | 7440-57-5 | Bond Wire | 0.34 | 1.84 | 3400 |
| Tin | 7440-31-5 | Lead Finish Plating | 0.94 | 5.08 | 9400 |
| | | **TOTALS:** | **100.00** | **540.00** | **1,000,000** |

**540.00 mg Total Mass**

**Package Homogeneous Materials**

| **56.92** | **(mg) Total** | **Die** | **% of Total Weight** | **10.54** |
|---|---|---|---|---|
| | Silicon | 7440-21-3 | 100.00 | |
| | | **Total** | **100.00** | |
| **179.50** | **(mg) Total** | **Lead Frame** | **% of Total Weight** | **33.24** |
| | Copper | 7440-50-8 | 91.35 | |
| | Silver | 7440-22-4 | 3.75 | |
| | Nickel | 7440-02-0 | 3.70 | |
| | Silicon | 7440-21-3 | 0.96 | |
| | Magnesium | 7739-95-4 | 0.24 | |
| | | **Total** | **100.00** | |
| **7.34** | **(mg) Total** | **Die Attach Epoxy** | **% of Total Weight** | **1.36** |
| | Silver | 7440-22-4 | 87.33 | |
| | Isobornyl Methacrylate | 7534-94-3 | 6.00 | |
| | Lauryl Acrylate | 2156-97-0 | 6.00 | |
| | 1,6-Hexanediol Diacrylate | 13048-33-4 | 0.60 | |
| | N-Methyl-2-Pyrroliodone | 872-50-4 | 0.08 | |
| | | **Total** | **100.00** | |
| **289.33** | **(mg) Total** | **Mold Compound** | **% of Total Weight** | **53.58** |
| | Silica | 60676-86-0 | 85.50 | |
| | Epoxy Resin | Trade Secret | 8.00 | |
| | Phenol Resin | Trade Secret | 6.00 | |
| | Carbon Black | 1333-86-4 | 0.50 | |
| | | **Total** | **100.00** | |
| **1.84** | **(mg) Total** | **Bond Wire** | **% of Total Weight** | **0.34** |
| | Gold | 7440-57-5 | 100.00 | |
| | | **Total** | **100.00** | |
| **5.08** | **(mg) Total** | **Lead Finish Plating** | **% of Total Weight** | **0.94** |
| | Tin | 7440-31-5 | 100.00 | |
| 540.00 | | **Total** | **100.00** | 100.00 |

**The information contained in this Material Content Declaration (MCD) consists of package-level information and is not part number specific. This information is considered to be sufficiently representative of all part numbers for the package type.**

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