

Product / Package Information

| | |
|-----------------|-----------|
| Package | WLCSP |
| Body Size | |
| I/O Count | 16 |
| Terminal Finish | SnAgCu |
| MS Number | MS011072B |

Environmental Information

| | |
|----------------------------|-----|
| RoHS Compliant | Yes |
| High Temperature Compliant | Yes |
| Halogen Free Compliant | Yes |
| REACH SVHC Compliant | Yes |

Materials Declaration

Chip

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---------------------------|---------------|-----------|------------|----------------------------|---------|-----------------|--------|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Doped Silicon | 7440-21-3 | 2.83E-03 | 100.00 | 1000000 | 60.19 | 601919 |

Backside Coating

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---------------------------|-----------------|-------------|------------|----------------------------|---------|-----------------|-------|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Silica | Proprietary | 5.75 E-05 | 42.68 | 426800 | 1.22 | 12200 |
| Thermoplastic | Epoxy Resin | Proprietary | 3.78 E-05 | 28.05 | 280500 | 0.80 | 8018 |
| Thermoplastic | Acrylic polymer | Proprietary | 3.78 E-05 | 28.05 | 280500 | 0.80 | 8018 |
| Other organic materials | Carbon black | Proprietary | 1.64 E-04 | 1.22 | 12200 | 0.03 | 349 |
| Subtotal | | | 1.35 E-04 | 100.00 | 1000000 | 2.86 | 28584 |

Wafer Bumps

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|------------------|-----------|-----------|------------|----------------------------|---------|-----------------|--------|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Tin & its alloys | Tin | 7440-31-5 | 1.60E-03 | 95.50 | 955000 | 33.95 | 339512 |
| Tin & its alloys | Silver | 7440-22-4 | 6.53E-05 | 3.90 | 39000 | 1.39 | 13865 |
| Tin & its alloys | Copper | 7440-50-8 | 1.00E-05 | 0.60 | 6000 | 0.213 | 2133 |
| Subtotal | | | 1.67 E-03 | 100.00 | 1000000 | 35.55 | 355510 |

UBM

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---------------------------|-----------|-----------|------------|----------------------------|---------|-----------------|------|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Nickel & its alloys | Nickel | 7440-02-0 | 1.40 E-05 | 61.12 | 611158 | 0.30 | 2971 |
| Precious metals | Gold | 7440-57-5 | 7.58 E-06 | 33.10 | 331033 | 0.16 | 1609 |
| Copper & its alloys | Copper | 7440-50-8 | 9.70 E-07 | 4.23 | 42348 | 0.02 | 206 |
| Other inorganic materials | Titanium | 7440-32-6 | 3.54 E-07 | 1.55 | 15461 | 0.01 | 75 |
| Subtotal | | | 2.29 E-05 | 100.00 | 1000000 | 0.49 | 4861 |

Polyimide

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|-------------------------|-------------------------------------|-------------|------------|----------------------------|---------|-----------------|------|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other organic materials | Resin | Proprietary | 2.92 E-05 | 67.95 | 679500 | 0.62 | 6201 |
| Other organic materials | Tetraethylene Glycol Dimethacrylate | 109-17-1 | 6.26 E-06 | 14.56 | 145600 | 0.133 | 1329 |
| Other organic materials | Trifluoroacetic Anhydride | 407-25-0 | 2.51 E-06 | 5.83 | 58300 | 0.053 | 532 |
| Other organic materials | 4,4'-Oxydiphthalic Anhydride | 1823-59-2 | 2.51 E-06 | 5.83 | 58300 | 0.053 | 532 |
| Other organic materials | 2-Hydroxyethyl Methacrylate | 868-77-9 | 2.51 E-06 | 5.83 | 58300 | 0.053 | 532 |
| Subtotal | | | 4.30 E-05 | 100.0 | 1000000 | 0.91 | 9126 |

| Package Totals | Weight (g) | Percentage (%) | PPM |
|----------------|------------|----------------|---------|
| | 4.71 E-03 | 100 | 1000000 |

Note: The information provided in this declaration are true to the best of ADI's knowledge. ADI derived most of the information listed in this declaration from documents provided by third parties, and assumes no liability to any inaccuracy of such information.



ADI Proprietary