



Device Material Content

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Package: 132 csBGA
Total Device Weight 0.124 Grams

Package Code:

MN132

Products:

LC4kZC

Assembly: ASEM

Size (mm): 8 x 8

Lead pitch (mm): 0.5

MSL: 3

Reflow max (°C): 260

| | % of Total Pkg. Wt. | Weight (g) | % of Total Pkg. Wt. | Weight (g) | Substance | CAS # | % of Subst. | Notes / Assumptions: |
|----------------------|---------------------|------------|---------------------|------------|---|-------------|-------------|---|
| Die | 6.93% | 0.0086 | 6.93% | 0.0086 | Silicon chip | 7440-21-3 | 100.00% | Die size: 4.71 x 2.90 mm |
| Mold Compound | 55.08% | 0.0683 | 48.47% | 0.0601 | Silica Fused | 60676-86-0 | 88.00% | Mold Compound: Sumitomo G770 |
| | | | 2.75% | 0.0034 | Epoxy Resin | - | 5.00% | |
| | | | 2.75% | 0.0034 | Phenol Resin | - | 5.00% | |
| | | | 0.96% | 0.0012 | Metal Hydroxide | - | 1.75% | |
| | | | 0.14% | 0.0002 | Carbon Black | 1333-86-4 | 0.25% | |
| D/A Epoxy | 1.12% | 0.0014 | 0.90% | 0.00111 | Silver | 7440-22-4 | 80.00% | Die attach epoxy: Henkel (Ablebond) 2100A |
| | | | 0.22% | 0.00028 | Esters & resins | - | 20.00% | |
| Wire | 3.12% | 0.0039 | 3.08% | 0.0038 | Gold (Au) | 7440-57-5 | 98.50% | 0.8 mil diameter; 1 wire per solder ball |
| Solder Balls | 11.20% | 0.0139 | 10.81% | 0.0134 | Tin (Sn) | 7440-31-5 | 96.50% | SAC305 |
| | | | 0.34% | 0.0004 | Silver (Ag) | 7440-22-4 | 3.00% | |
| | | | 0.06% | 0.0001 | Copper (Cu) | 7440-50-8 | 0.50% | |
| Substrate | 14.66% | 0.0182 | 4.69% | 0.0058 | BT Resins | - | 32.00% | BT Resin CCL-HL832NX-A |
| | | | 9.97% | 0.0124 | Glass fiber | 65997-17-3 | 68.00% | |
| Foil | 5.48% | 0.0068 | 4.63% | 0.0057 | Copper | 7440-50-8 | 84.56% | |
| | | | 0.81% | 0.0010 | Nickel plating | 7440-02-0 | 14.70% | |
| | | | 0.04% | 0.0001 | Gold plating | 7440-57-5 | 0.74% | |
| Solder Mask | 2.42% | 0.0030 | 1.36% | 0.00168 | Quartz | 14808-60-7 | 56.20% | Solder mask PSR4000 AUS 308 |
| | | | 0.39% | 0.00048 | 3-methoxy-3-methylbutylacetate | 103429-90-9 | 16.00% | |
| | | | 0.53% | 0.00066 | Barium Sulfate | 7727-43-7 | 22.00% | |
| | | | 0.07% | 0.00009 | Talc (containing no asbestiform fibers) | 14807-96-6 | 3.00% | |
| | | | 0.01% | 0.00001 | Naphthalene | 91-20-3 | 0.50% | |
| | | | 0.06% | 0.00007 | Trade secret ingredients | - | 2.30% | |
| | | | | | | | | |

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