



Device Material Content

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Assembly: ASEM
Size (mm): 19 x 19

Package Code:

FTN324

Lead pitch (mm): 1.0

Package: 324 ftBGA
Total Device Weight 1.14 Grams

Products:

MSL: 3

October, 2020

LA-MXO

Reflow max (°C): 260

| | % of Total Pkg. Wt. | Weight (g) | % of Total Pkg. Wt. | Weight (g) | Substance | CAS # | % of Subst. | Notes / Assumptions: |
|----------------------|---------------------|------------|---------------------|------------|--------------------------------|-------------|-------------|---|
| Die | 0.87% | 0.0099 | 0.87% | 0.0099 | Silicon chip | 7440-21-3 | 100.00% | Die size: 4.08 x 3.85 mm |
| Mold Compound | 45.91% | 0.5233 | 40.40% | 0.4605 | Silica Fused | 60676-86-0 | 88.00% | Mold Compound: Sumitomo G770 |
| | | | 2.30% | 0.0262 | Epoxy Resin | - | 5.00% | |
| | | | 2.30% | 0.0262 | Phenol Resin | - | 5.00% | |
| | | | 0.80% | 0.0092 | Metal Hydroxide | - | 1.75% | |
| | | | 0.11% | 0.0013 | Carbon Black | 1333-86-4 | 0.25% | |
| D/A Epoxy | 0.14% | 0.0016 | 0.11% | 0.00128 | Silver | 7440-22-4 | 80.00% | Die attach epoxy: Henkel (Ablebond) 2100A |
| | | | 0.03% | 0.00032 | Esters & resins | - | 20.00% | |
| Wire | 0.83% | 0.0095 | 0.82% | 0.0093 | Gold (Au) | 7440-57-5 | 98.50% | 0.8 mil diameter; 1 wire per solder ball |
| Solder Balls | 29.04% | 0.3311 | 28.03% | 0.3195 | Tin (Sn) | 7440-31-5 | 96.50% | SAC305 |
| | | | 0.87% | 0.0099 | Silver (Ag) | 7440-22-4 | 3.00% | |
| | | | 0.15% | 0.0017 | Copper (Cu) | 7440-50-8 | 0.50% | |
| Substrate | 13.69% | 0.1560 | 4.38% | 0.0499 | BT Resins | - | 32.00% | BT Resin CCL-HL832NX-A |
| | | | 9.31% | 0.1061 | Glass fiber | 65997-17-3 | 68.00% | |
| Foil | 6.22% | 0.0710 | 5.10% | 0.0582 | Copper | 7440-50-8 | 82.00% | |
| | | | 0.94% | 0.0107 | Nickel plating | 7440-02-0 | 15.10% | |
| | | | 0.18% | 0.0021 | Gold plating | 7440-57-5 | 2.91% | |
| Solder Mask | 3.29% | 0.0375 | 1.85% | 0.0211 | Quartz | 14808-60-7 | 56.20% | Solder mask PSR4000 AUS 308 |
| | | | 0.53% | 0.0060 | 3-methoxy-3-methylbutylacetate | 103429-90-9 | 16.00% | |
| | | | 0.72% | 0.0082 | Barium Sulfate | 7727-43-7 | 22.00% | |
| | | | 0.10% | 0.0011 | Talc | 14807-96-6 | 3.00% | |
| | | | 0.02% | 0.0002 | Naphthalene | 91-20-3 | 0.50% | |
| | | | 0.08% | 0.0009 | Trade secret ingredients | - | 2.30% | |
| | | | | | | | | |

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