# 100% Material Declaration Data Sheet FGG456



## Average Weight: 1.6871 g

| Component | Substance Description | CAS# or Description | % of Component | Use in Product | Component Weight/ Substance Weight (in grams) | Component % of Total |
|---|---|---|---|---|---|---|
| **Silicon Die** | | | | | **0.0604** | **3.58%** |
| | Silicon | 7440-21-3 | 100.00 | | 0.0604 | |
| **Die Attach Material** | | | | | **0.0062** | **0.37%** |
| | Silver | 7440-22-4 | 78.00 | | 0.0048 | |
| | Resin | Trade Secret | 22.00 | | 0.0014 | |
| **Mold Compound** | | | | | **0.7340** | **43.51%** |
| | Epoxy Resins | Trade Secret | 12.00 | | 0.0881 | |
| | SiO2 | 60676-86-0 | 88.00 | Filler | 0.6459 | |
| **Laminate** | | | | | **0.3777** | **22.39%** |
| | Laminate | Trade Secret | 61.63 | | 0.2328 | |
| | Solder Mask | Trade Secret | 17.52 | | 0.0662 | |
| | Copper | 7440-50-8 | 16.17 | Metal Layer | 0.0611 | |
| | Nickel | 7440-02-0 | 3.94 | Metal Layer | 0.0149 | |
| | Gold | 7440-57-5 | 0.74 | Metal Layer | 0.0028 | |
| **Bond Wire** | | | | | **0.0263** | **1.55%** |
| | Gold | 7440-57-5 | 99.00 | | 0.026058410 | |
| | Silver | 7440-22-4 | 0.0025 | | 0.000000658 | |
| | Copper | 7440-50-8 | 0.0005 | | 0.000000132 | |
| | Iron | 7439-89-6 | 0.0005 | | 0.000000132 | |
| | Calcium | 7440-70-2 | 0.0020 | | 0.000000526 | |
| | Palladium | 7440-05-3 | 0.9900 | | 0.000260584 | |
| | Magnesium | 7439-95-4 | 0.0005 | | 0.000000132 | |
| **Solder Balls** | | | | | **0.4825** | **28.60%** |
| | Tin | 7440-31-5 | 95.50 | | 0.4608 | |
| | Silver | 7440-22-4 | 4.00 | | 0.0193 | |
| | Copper | 7440-50-8 | 0.50 | | 0.0024 | |



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## Revision History

The following table shows the revision history for this document.

| Date | Revision | Revision |
|---|---|---|
| 3/21/06 | 1.0 | Initial release. |
| 7/05/06 | 1.1 | 100% Material Declaration. |
| 7/21/06 | 1.2 | Corrected % of Component (Laminate), Component % of Total (Bond Wire & Solder Balls) sections. |
| 9/27/06 | 1.3 | Updated component descriptions. |