



**Statement of Materials, Construction**

| LEAD-FREE -- 144L LQFP -- TABLE OF MATERIAL DECLARATION |                     |                  |                          |                                       |             |                       |                                   |                                  |
|---|---------------------|------------------|--------------------------|---------------------------------------|-------------|-----------------------|-----------------------------------|----------------------------------|
| No.   | Component Name      | Material Name    | Component Weight (grams) | Materials Analysis (Element/Compound) | CAS Number  | Material Mass (grams) | Material Weight % (of Total Pkg.) | Material Weight % (of Component) |
| 1   | Leadframe           | Copper Alloy     | 0.19057                  | Cu                                    | 7440-50-8   | 0.18920               | 14.11                             | 99.28                            |
|   |                     |                  |                          | Cr                                    | 7440-47-3   | 0.00042               | 0.03                              | 0.22                             |
|   |                     |                  |                          | Sn                                    | 7440-31-5   | 0.00048               | 0.04                              | 0.25                             |
|   |                     |                  |                          | Zn                                    | 7440-66-6   | 0.00048               | 0.04                              | 0.25                             |
| 2   | Die                 | Silicon Chip     | 0.01810                  | Si                                    | 7440-21-3   | 0.01810               | 1.35                              | 99.99                            |
| 3   | Die Attach Material | Conductive Epoxy | 0.00201                  | Silver (Ag)                           | 7440-22-4   | 0.00153               | 0.11                              | 76.00                            |
|   |                     |                  |                          | Functionalized Urethane               | Proprietary | 0.00016               | 0.01                              | 8.00                             |
|   |                     |                  |                          | Diester Resin                         | Proprietary | 0.00021               | 0.02                              | 10.50                            |
|   |                     |                  |                          | Epoxy Resin                           | Proprietary | 0.00011               | 0.01                              | 5.50                             |
| 4   | Wire                | Gold             | 0.01408                  | Au                                    | 7440-57-5   | 0.01408               | 1.05                              | 99.99                            |
| 5   | Lead Finish         | Tin              | 0.00738                  | Sn                                    | 7440-31-5   | 0.00738               | 0.55                              | 100                              |
| 6   | Encapsulation       | Epoxy Resin      | 1.10896                  | Fused Silica                          | 60676-86-0  | 0.96479               | 71.94                             | 87.00                            |
|   |                     |                  |                          | Epoxy Resin                           | Proprietary | 0.08317               | 6.20                              | 7.50                             |
|   |                     |                  |                          | Phenol Resin                          | Proprietary | 0.06099               | 4.55                              | 5.50                             |
| Total Package Weight =                                  |                     |                  | 1.34110                  |                                       |             |                       |                                   |                                  |

**Note:** Component Weight based on assembly of generic parts.

**Conclusion:**

The analysis table above shows that this package meets the following RoHS requirements for EACH PACKAGE COMPONENT (mold compound, lead frame, etc.)

|                                      | Maximum Allowable Limit (ppm) | Maximum Allowable Limit (wt %) |
|--------------------------------------|-------------------------------|--------------------------------|
| Lead                                 | 1000 ppm                      | 0.10%                          |
| Mercury                              | 1000 ppm                      | 0.10%                          |
| Cadmium                              | 100 ppm                       | 0.01%                          |
| Hexavalent Chromium                  | 1000 ppm                      | 0.10%                          |
| Polybrominated Biphenyls (PBB)       | 1000 ppm                      | 0.10%                          |
| Polybrominated Biphenylethers (PBDE) | 1000 ppm                      | 0.10%                          |