

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t112liz-5#trpbf

(Engineering Calculation)

TO-92

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**TOTAL MASS (g) : 0.204809**

| COMPONENT MATERIAL             | VENDOR/ INDUSTRY NAMES           | CONSTITUENT NAME               | CAS NUMBER | CONSTITUENT MASS (g) | CONSTITUENT (PPM) OF MATERIAL | CONSTITUENT (PPM) OF TOTAL PKG. |                |                      |
|--------------------------------|----------------------------------|--------------------------------|------------|----------------------|-------------------------------|---------------------------------|----------------|----------------------|
| Active Device                  | Linear Technology                | Silicon (Si)                   | 7440-21-3  | 0.001703             | 1000000                       | 8315.05664062                   |                |                      |
| Die Coat                       | Dow Corning                      | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame                     | Cu                               | Copper (Cu)                    | 7440-50-8  | 0.088433             | 975000                        | 431782.34375                    |                |                      |
|                                |                                  | Iron (Fe)                      | 7439-89-6  | 0.002177             | 24000                         | 10629.4052734                   |                |                      |
|                                |                                  | Phosphorus (P)                 | 7723-14-0  | 0.000027             | 300                           | 131.83001709                    |                |                      |
|                                |                                  | Zinc (Zn)                      | 7440-66-6  | 0.000063             | 700                           | 307.603363037                   |                |                      |
|                                |                                  | Nickel (Ni)                    | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Silicon (Si)                   | 7440-21-3  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Magnesium (Mg)                 | 7439-95-4  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Tin (Sn)                       | 7440-31-5  | 0.000000             | 0                             | 0                               |                |                      |
| <b>Lead Frame Total:</b>       |                                  |                                |            | <b>0.090700</b>      | <b>1000000</b>                | <b>442851.1875</b>              |                |                      |
| Plating                        | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Exter. Plating Sn              | 7440-31-5  | 0.005680             | 1000000                       | 27734.1054688                   |                |                      |
|                                |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.005680</b>                 | <b>1000000</b> | <b>27734.1054688</b> |
|                                |                                  | Inter. Plating Ni              | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Inter. Plating Ag              | 7440-22-4  | 0.000320             | 1000000                       | 1562.4296875                    |                |                      |
| <b>Internal Plating Total:</b> |                                  |                                |            | <b>0.000320</b>      | <b>1000000</b>                | <b>1562.4296875</b>             |                |                      |
| Die Attach                     | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.000617             | 750000                        | 3012.55981445                   |                |                      |
|                                |                                  | Tin (Sn)                       | 7440-31-5  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Lead (Pb)                      | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Silica (SiO2)                  | 60676-86-0 | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Indium (In)                    | 7440-74-6  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Metal Oxide                    |            | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Antimony (Sb)                  | 7440-36-0  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Resin (EP)                     |            | 0.000206             | 250000                        | 1005.81414795                   |                |                      |
| <b>Die Attach Total:</b>       |                                  |                                |            | <b>0.000823</b>      | <b>1000000</b>                | <b>4018.3737793</b>             |                |                      |
| Encapsulation                  | MULTI-AROMATIC RESIN Br/Sb FREE  | Resin (EP)                     |            | 0.014243             | 135000                        | 69542.7734375                   |                |                      |
|                                |                                  | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Silica (SiO2)                  | 60676-86-0 | 0.090730             | 860000                        | 442997.65625                    |                |                      |
|                                |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Carbon Black (C)               | 1333-86-4  | 0.000528             | 5000                          | 2578.0090332                    |                |                      |
|                                |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.105501</b>                 | <b>1000000</b> | <b>515118.46875</b>  |
| Bond Wire Estimated            | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 0.000082             | 1000000                       | 400.372650146                   |                |                      |
|                                |                                  |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>0.204809</b>                 |                |                      |