

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

SOIC WIDE

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**TOTAL MASS (g) : 0.755994**

| 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  | 0.009889             | 1000000                       | 13080.7851562                   |                |                    |
| Die Coat                       | Dow Corning                      | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                    |
| Lead Frame                     | Cu                               | Copper (Cu)                    | 7440-50-8  | 0.185240             | 975000                        | 245028.265625                   |                |                    |
|                                |                                  | Iron (Fe)                      | 7439-89-6  | 0.004560             | 24000                         | 6031.79052734                   |                |                    |
|                                |                                  | Phosphorus (P)                 | 7723-14-0  | 0.000057             | 300                           | 75.3973846436                   |                |                    |
|                                |                                  | Zinc (Zn)                      | 7440-66-6  | 0.000133             | 700                           | 175.927230835                   |                |                    |
|                                |                                  | 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>0.189990</b>      | <b>1000000</b>                | <b>251311.390625</b>            |                |                    |
| Plating                        | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                    |
|                                |                                  | Exter. Plating Sn              | 7440-31-5  | 0.008359             | 1000000                       | 11057.4375                      |                |                    |
|                                |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.008359</b>                 | <b>1000000</b> | <b>11057.4375</b>  |
|                                |                                  | Inter. Plating Ni              | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                    |
|                                |                                  | Inter. Plating Ag              | 7440-22-4  | 0.001513             | 1000000                       | 2001.33764648                   |                |                    |
| <b>Internal Plating Total:</b> |                                  |                                |            | <b>0.001513</b>      | <b>1000000</b>                | <b>2001.33764648</b>            |                |                    |
| Die Attach                     | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.002146             | 750000                        | 2838.64550781                   |                |                    |
|                                |                                  | 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)                     |            | 0.000715             | 250000                        | 945.774169922                   |                |                    |
| <b>Die Attach Total:</b>       |                                  |                                |            | <b>0.002861</b>      | <b>1000000</b>                | <b>3784.41943359</b>            |                |                    |
| Encapsulation                  | MULTI-AROMATIC RESIN Br/Sb FREE  | Resin (EP)                     |            | 0.073286             | 135000                        | 96939.8671875                   |                |                    |
|                                |                                  | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                    |
|                                |                                  | Silica (SiO2)                  | 60676-86-0 | 0.466860             | 860000                        | 617544.3125                     |                |                    |
|                                |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                    |
|                                |                                  | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                    |
|                                |                                  | Carbon Black (C)               | 1333-86-4  | 0.002714             | 5000                          | 3589.97387695                   |                |                    |
|                                |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.542860</b>                 | <b>1000000</b> | <b>718074.0625</b> |
| Bond Wire Estimated            | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 0.000522             | 1000000                       | 690.481323242                   |                |                    |
|                                |                                  |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>0.755994</b>                 |                |                    |