

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc2470idd#pbf

(Engineering Calculation)

DFN 3mm X 3mm Exp. Pad

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**TOTAL MASS (g) : 0.022539**

| 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  | 0.000946             | 1000000                       | 41970.9960938                   |                |                      |
| Die Coat                 | Dow Corning                      | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame               | Cu                               | Copper (Cu)                    | 7440-50-8  | 0.009350             | 975000                        | 414829.59375                    |                |                      |
|                          |                                  | Iron (Fe)                      | 7439-89-6  | 0.000230             | 24000                         | 10204.3642578                   |                |                      |
|                          |                                  | Phosphorus (P)                 | 7723-14-0  | 0.000003             | 300                           | 133.100418091                   |                |                      |
|                          |                                  | Zinc (Zn)                      | 7440-66-6  | 0.000007             | 700                           | 310.567626953                   |                |                      |
|                          |                                  | 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>0.009590</b>      | <b>1000000</b>                | <b>425477.625</b>               |                |                      |
| Plating                  | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Exter. Plating Sn              | 7440-31-5  | 0.000437             | 1000000                       | 19404.9472656                   |                |                      |
|                          |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.000437</b>                 | <b>1000000</b> | <b>19404.9472656</b> |
|                          |                                  | Inter. Plating Ni              | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Inter. Plating Ag              | 7440-22-4  | 0.000218             | 1000000                       | 9671.96289062                   |                |                      |
|                          |                                  | <b>Internal Plating Total:</b> |            |                      |                               | <b>0.000218</b>                 | <b>1000000</b> | <b>9671.96289062</b> |
| Die Attach               | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.000585             | 750000                        | 25954.578125                    |                |                      |
|                          |                                  | 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)                     |            | 0.000195             | 250000                        | 8651.52636719                   |                |                      |
| <b>Die Attach Total:</b> |                                  |                                |            | <b>0.000780</b>      | <b>1000000</b>                | <b>34606.1054688</b>            |                |                      |
| Encapsulation            | MULTI-AROMATIC RESIN Br/Sb FREE  | Resin (EP)                     |            | 0.001368             | 130000                        | 60693.7851562                   |                |                      |
|                          |                                  | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Silica (SiO2)                  | 60676-86-0 | 0.009047             | 860000                        | 401386.4375                     |                |                      |
|                          |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Carbon Black (C)               | 1333-86-4  | 0.000105             | 10000                         | 4658.51416016                   |                |                      |
|                          |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.010520</b>                 | <b>1000000</b> | <b>466738.75</b>     |
| Bond Wire Estimated      | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 0.000048             | 1000000                       | 2129.60668945                   |                |                      |
|                          |                                  |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>0.022539</b>                 |                |                      |