

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t6656bidc-2.5#trpbf

(Engineering Calculation)

DFN 2mm X 2mm Exp. Pad

(printed on: 2020-07-11 17:24:14)

**TOTAL MASS (g) : 0.00911**

| 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  | 0.000567             | 1000000                       | 62237.078125                    |                |                      |
| Die Coat                 | Dow Corning                      | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame               | Cu                               | Copper (Cu)                    | 7440-50-8  | 0.002935             | 975000                        | 322161.9375                     |                |                      |
|                          |                                  | Iron (Fe)                      | 7439-89-6  | 0.000072             | 24000                         | 7903.12158203                   |                |                      |
|                          |                                  | Phosphorus (P)                 | 7723-14-0  | 0.000001             | 300                           | 109.765571594                   |                |                      |
|                          |                                  | Zinc (Zn)                      | 7440-66-6  | 0.000002             | 700                           | 219.531143188                   |                |                      |
|                          |                                  | 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>0.003010</b>      | <b>1000000</b>                | <b>330394.34375</b>             |                |                      |
| Plating                  | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Exter. Plating Sn              | 7440-31-5  | 0.000136             | 1000000                       | 14963.7695312                   |                |                      |
|                          |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.000136</b>                 | <b>1000000</b> | <b>14963.7695312</b> |
|                          |                                  | Inter. Plating Ni              | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Inter. Plating Ag              | 7440-22-4  | 0.000072             | 1000000                       | 7903.12158203                   |                |                      |
|                          |                                  | <b>Internal Plating Total:</b> |            |                      |                               | <b>0.000072</b>                 | <b>1000000</b> | <b>7903.12158203</b> |
| Die Attach               | ELECTRICALLY INSULATING ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Tin (Sn)                       | 7440-31-5  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Lead (Pb)                      | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Silica (SiO2)                  | 60676-86-0 | 0.000005             | 50000                         | 548.827819824                   |                |                      |
|                          |                                  | Indium (In)                    | 7440-74-6  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Metal Oxide                    |            | 0.000027             | 300000                        | 2963.67041016                   |                |                      |
|                          |                                  | Antimony (Sb)                  | 7440-36-0  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Resin (EP)                     |            | 0.000059             | 650000                        | 6476.16845703                   |                |                      |
| <b>Die Attach Total:</b> |                                  |                                |            | <b>0.000091</b>      | <b>1000000</b>                | <b>9988.66699219</b>            |                |                      |
| Encapsulation            | MULTI-AROMATIC RESIN Br/Sb FREE  | Resin (EP)                     |            | 0.000677             | 130000                        | 74311.2890625                   |                |                      |
|                          |                                  | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Silica (SiO2)                  | 60676-86-0 | 0.004481             | 860000                        | 491859.5                        |                |                      |
|                          |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                      |
|                          |                                  | Carbon Black (C)               | 1333-86-4  | 0.000052             | 10000                         | 5707.80957031                   |                |                      |
|                          |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.005210</b>                 | <b>1000000</b> | <b>571878.625</b>    |
| Bond Wire Estimated      | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 0.000024             | 1000000                       | 2634.3737793                    |                |                      |
|                          |                                  |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>0.00911</b>                  |                |                      |