

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t1965hq#trpbf

(Engineering Calculation)

DDPAK

(printed on: 2020-07-11 18:44:48)

**TOTAL MASS (g) : 1.39588**

| 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  | 0.002147             | 1000000                       | 1538.09765625                   |                |                      |
| Die Coat                       | Dow Corning                     | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame                     | Cu                              | Copper (Cu)                    | 7440-50-8  | 0.852419             | 998500                        | 610667.75                       |                |                      |
|                                |                                 | Iron (Fe)                      | 7439-89-6  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Phosphorus (P)                 | 7723-14-0  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Zinc (Zn)                      | 7440-66-6  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | 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  | 0.001281             | 1500                          | 917.700500488                   |                |                      |
| <b>Lead Frame Total:</b>       |                                 |                                |            | <b>0.853700</b>      | <b>1000000</b>                | <b>611585.4375</b>              |                |                      |
| Plating                        | PMI                             | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Exter. Plating Sn              | 7440-31-5  | 0.009978             | 1000000                       | 7148.33398438                   |                |                      |
|                                |                                 | <b>External Plating Total:</b> |            |                      |                               | <b>0.009978</b>                 | <b>1000000</b> | <b>7148.33398438</b> |
|                                |                                 | Inter. Plating Ni              | 7440-02-0  | 0.004000             | 740740.75                     | 2865.57543945                   |                |                      |
|                                |                                 | Inter. Plating Ag              | 7440-22-4  | 0.001400             | 259259.265625                 | 1002.95129395                   |                |                      |
| <b>Internal Plating Total:</b> |                                 |                                |            | <b>0.005400</b>      | <b>1000000</b>                | <b>3868.52685547</b>            |                |                      |
| Die Attach                     | 95Pb / 5 Sn                     | Silver (Ag)                    | 7440-22-4  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Tin (Sn)                       | 7440-31-5  | 0.000063             | 50000                         | 45.1328125                      |                |                      |
|                                |                                 | Lead (Pb)                      | 7439-92-1  | 0.001204             | 950000                        | 862.538146973                   |                |                      |
|                                |                                 | 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)                     |            | 0.000000             | 0                             | 0                               |                |                      |
| <b>Die Attach Total:</b>       |                                 |                                |            | <b>0.001267</b>      | <b>1000000</b>                | <b>907.671020508</b>            |                |                      |
| Encapsulation                  | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP)                     |            | 0.053704             | 103000                        | 38473.2148438                   |                |                      |
|                                |                                 | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Silica (SiO2)                  | 60676-86-0 | 0.466653             | 895000                        | 334307.34375                    |                |                      |
|                                |                                 | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                 | Carbon Black (C)               | 1333-86-4  | 0.001043             | 2000                          | 747.198791504                   |                |                      |
|                                |                                 | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.521400</b>                 | <b>1000000</b> | <b>373527.75</b>     |
| Bond Wire Estimated            | AFW/TANAKA/ Kn                  | Gold (Au)                      | 7440-57-5  | 0.001988             | 1000000                       | 1424.19091797                   |                |                      |
|                                |                                 |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>1.39588</b>                  |                |                      |