

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1436aign#pbf

(Engineering Calculation)

SSOP

(printed on: 2020-07-11 19:43:22)

**TOTAL MASS (g) : 0.146697**

| 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  | 0.005123             | 1000000                       | 34922.421875                    |                |                      |
| Die Coat                       | Dow Corning                      | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame                     | Cu                               | Copper (Cu)                    | 7440-50-8  | 0.058949             | 975000                        | 401843                          |                |                      |
|                                |                                  | Iron (Fe)                      | 7439-89-6  | 0.001451             | 24000                         | 9891.16308594                   |                |                      |
|                                |                                  | Phosphorus (P)                 | 7723-14-0  | 0.000018             | 300                           | 122.70224762                    |                |                      |
|                                |                                  | Zinc (Zn)                      | 7440-66-6  | 0.000042             | 700                           | 286.305206299                   |                |                      |
|                                |                                  | 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>0.060460</b>      | <b>1000000</b>                | <b>412143.15625</b>             |                |                      |
| Plating                        | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Exter. Plating Sn              | 7440-31-5  | 0.003400             | 1000000                       | 23174.3613281                   |                |                      |
|                                |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.003400</b>                 | <b>1000000</b> | <b>23174.3613281</b> |
|                                |                                  | Inter. Plating Ni              | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Inter. Plating Ag              | 7440-22-4  | 0.000484             | 1000000                       | 3299.32666016                   |                |                      |
| <b>Internal Plating Total:</b> |                                  |                                |            | <b>0.000484</b>      | <b>1000000</b>                | <b>3299.32666016</b>            |                |                      |
| Die Attach                     | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.001330             | 750000                        | 9066.33105469                   |                |                      |
|                                |                                  | 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)                     |            | 0.000443             | 250000                        | 3019.83837891                   |                |                      |
| <b>Die Attach Total:</b>       |                                  |                                |            | <b>0.001773</b>      | <b>1000000</b>                | <b>12086.1699219</b>            |                |                      |
| Encapsulation                  | MULTI-AROMATIC RESIN Br/Sb Free  | Resin (EP)                     |            | 0.007726             | 103000                        | 52666.5273438                   |                |                      |
|                                |                                  | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Silica (SiO2)                  | 60676-86-0 | 0.067134             | 895000                        | 457638.4375                     |                |                      |
|                                |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Carbon Black (C)               | 1333-86-4  | 0.000150             | 2000                          | 1022.51861572                   |                |                      |
|                                |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.075010</b>                 | <b>1000000</b> | <b>511327.5</b>      |
| Bond Wire Estimated            | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 0.000447             | 1000000                       | 3047.10546875                   |                |                      |
|                                |                                  |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>0.146697</b>                 |                |                      |