

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t1158isw#pbf

(Engineering Calculation)

SOIC WIDE

(printed on: 2020-07-11 16:53:51)

**TOTAL MASS (g) : 0.250481**

| 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  | 0.005475             | 1000000                       | 21857.9140625                   |                |                      |
| Die Coat                       | Dow Corning                      | Silicone                       | 69430-27-9 | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame                     | Cu                               | Copper (Cu)                    | 7440-50-8  | 0.138021             | 975000                        | 551023.0625                     |                |                      |
|                                |                                  | Iron (Fe)                      | 7439-89-6  | 0.003397             | 24000                         | 13561.8867188                   |                |                      |
|                                |                                  | Phosphorus (P)                 | 7723-14-0  | 0.000042             | 300                           | 167.677139282                   |                |                      |
|                                |                                  | Zinc (Zn)                      | 7440-66-6  | 0.000099             | 700                           | 395.238983154                   |                |                      |
|                                |                                  | 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>0.141559</b>      | <b>1000000</b>                | <b>565147.8125</b>              |                |                      |
| Plating                        | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Exter. Plating Sn              | 7440-31-5  | 0.004771             | 1000000                       | 19048.7949219                   |                |                      |
|                                |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.004771</b>                 | <b>1000000</b> | <b>19048.7949219</b> |
|                                |                                  | Inter. Plating Ni              | 7440-02-0  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Inter. Plating Ag              | 7440-22-4  | 0.001132             | 1000000                       | 4519.29833984                   |                |                      |
| <b>Internal Plating Total:</b> |                                  |                                |            | <b>0.001132</b>      | <b>1000000</b>                | <b>4519.29833984</b>            |                |                      |
| Die Attach                     | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.001380             | 750000                        | 5509.39208984                   |                |                      |
|                                |                                  | 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)                     |            | 0.000460             | 250000                        | 1836.46398926                   |                |                      |
| <b>Die Attach Total:</b>       |                                  |                                |            | <b>0.001840</b>      | <b>1000000</b>                | <b>7345.85595703</b>            |                |                      |
| Encapsulation                  | MULTI-AROMATIC RESIN Br/Sb FREE  | Resin (EP)                     |            | 0.009816             | 103000                        | 39188.546875                    |                |                      |
|                                |                                  | Bromine (Br)                   | 40039-93-8 | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Silica (SiO2)                  | 60676-86-0 | 0.085294             | 895000                        | 340520.34375                    |                |                      |
|                                |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Metal Hydroxide                |            | 0.000000             | 0                             | 0                               |                |                      |
|                                |                                  | Carbon Black (C)               | 1333-86-4  | 0.000191             | 2000                          | 762.531738281                   |                |                      |
|                                |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.095301</b>                 | <b>1000000</b> | <b>380471.4375</b>   |
| Bond Wire Estimated            | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 0.000403             | 1000000                       | 1608.90209961                   |                |                      |
|                                |                                  |                                |            |                      | <b>TOTAL MASS (g) :</b>       | <b>0.250481</b>                 |                |                      |