

## LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC3634IUFDF#TRPBF

(Engineering Calculation)

QFN 4mm X 5mm Exp. Pad

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TOTAL MASS (g): 0.050387

| 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                     | 0.002374             | 1000000                       | 47115.1238125                   |                |                      |
| Die Coat                       | Dow Corning                      | Silicone                 | 69430-27-9                    | 0.000000             | 0                             | 0                               |                |                      |
| Lead Frame                     | Cu                               | Copper (Cu)              | 7440-50-8                     | 0.019997             | 975000                        | 39866.625                       |                |                      |
|                                |                                  | Iron (Fe)                | 7439-89-6                     | 0.000492             | 24000                         | 9764.38378906                   |                |                      |
|                                |                                  | Phosphorus (P)           | 7723-14-0                     | 0.000006             | 300                           | 119.077850342                   |                |                      |
|                                |                                  | Zinc (Zn)                | 7440-66-6                     | 0.000014             | 700                           | 277.848297119                   |                |                      |
|                                |                                  | 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>0.020599</b>                 | <b>1000000</b> | <b>407027.9375</b>   |
|                                |                                  | Plating                  | PMI                           | Exter. Plating Pb    | 7439-92-1                     | 0.000000                        | 0              | 0                    |
| Exter. Plating Sn              | 7440-31-5                        |                          |                               | 0.000227             | 1000000                       | 4509.23925781                   |                |                      |
| <b>External Plating Total:</b> |                                  |                          |                               |                      |                               | <b>0.000227</b>                 | <b>1000000</b> | <b>4509.23925781</b> |
| Inter. Plating Ni              | 7440-02-0                        |                          |                               | 0.000000             | 0                             | 0                               |                |                      |
| Inter. Plating Ag              | 7440-22-4                        |                          |                               | 0.000429             | 1000000                       | 8514.06640625                   |                |                      |
| <b>Internal Plating Total:</b> |                                  |                          |                               |                      |                               | <b>0.000429</b>                 | <b>1000000</b> | <b>8514.06640625</b> |
| Die Attach                     | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)              | 7440-22-4                     | 0.001070             | 750000                        | 21235.5488281                   |                |                      |
|                                |                                  | 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)               |                               | 0.000157             | 250000                        | 7085.13182594                   |                |                      |
|                                |                                  | <b>Die Attach Total:</b> |                               |                      |                               | <b>0.001427</b>                 | <b>1000000</b> | <b>28320.6816406</b> |
|                                |                                  | Encapsulation            | MULTIAROMATIC RESIN BOND FREE | Resin (EP)           |                               | 0.001244                        | 130000         | 64381.421875         |
|                                |                                  |                          |                               | Bromine (Br)         | 40093-93-8                    | 0.000000                        | 0              | 0                    |
| Silica (SiO2)                  | 60676-86-0                       |                          |                               | 0.021457             | 860000                        | 425842.1875                     |                |                      |
| Antimony Trioxide (Sb2O3)      | 1309-64-4                        |                          |                               | 0.000000             | 0                             | 0                               |                |                      |
| Metal Hydroxide                |                                  |                          |                               | 0.000000             | 0                             | 0                               |                |                      |
| Carbon Black (C)               | 1333-86-4                        |                          |                               | 0.000250             | 10000                         | 4961.57714844                   |                |                      |
| <b>Encapsulation Total:</b>    |                                  |                          |                               |                      |                               | <b>0.024951</b>                 | <b>1000000</b> | <b>495185.1875</b>   |
| Bond Wire Estimated            | AFW/TANAKA/Kn                    |                          |                               | Gold (Au)            | 7440-57-5                     | 0.000470                        | 1000000        | 9327.76464844        |

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