

# LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC6652BHMS8-4.09#PBF

(Engineering Calculation)

MSOP

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TOTAL MASS (g):

0.02714403

| 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  | 0.001907             | 1000000                       | 70254.87                        |                |                 |
| Die Coat                 | Dow Corning                      | Silicone                       | 67762-90-7 | 0                    | 0                             | 0                               |                |                 |
| Lead Frame               | Cu                               | Copper (Cu)                    | 7440-50-8  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Iron (Fe)                      | 7439-89-6  | 0.006206             | 580000                        | 228632.3                        |                |                 |
|                          |                                  | Phosphorus (P)                 | 7723-14-0  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Zinc (Zn)                      | 7440-66-6  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Nickel (Ni)                    | 7440-02-0  | 0.004494             | 420000                        | 165561.3                        |                |                 |
|                          |                                  | Silicon (Si)                   | 7440-21-3  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Magnesium (Mg)                 | 7439-95-4  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Tin (Sn)                       | 7440-31-5  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | <b>Lead Frame Total:</b>       |            |                      |                               | <b>0.0107</b>                   | <b>1000000</b> | <b>394193.6</b> |
| Plating                  | PMI                              | Exter. Plating Pb              | 7439-92-1  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Exter. Plating Sn              | 7440-31-5  | 0.000710025          | 1000000                       | 26157.69                        |                |                 |
|                          |                                  | <b>External Plating Total:</b> |            |                      |                               | <b>0.000710025</b>              | <b>1000000</b> | <b>26157.69</b> |
|                          |                                  | Inter. Plating Ni              | 7440-02-0  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Inter. Plating Ag              | 7440-22-4  | 8.6E-05              | 1000000                       | 3168.285                        |                |                 |
|                          |                                  | <b>Internal Plating Total:</b> |            |                      |                               | <b>8.6E-05</b>                  | <b>1000000</b> | <b>3168.285</b> |
| Die Attach               | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag)                    | 7440-22-4  | 0.000668             | 750000                        | 24609.47                        |                |                 |
|                          |                                  | Tin (Sn)                       | 7440-31-5  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Lead (Pb)                      | 7439-92-1  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Silica (SiO2)                  | 60676-86-0 | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Metal Oxide                    |            | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Resin (EP)                     |            | 0.000223             | 250000                        | 8215.436                        |                |                 |
| <b>Die Attach Total:</b> |                                  |                                |            | <b>0.000891</b>      | <b>1000000</b>                | <b>32824.9</b>                  |                |                 |
| Encapsulation            | MULTI-AROMATIC RESIN Br/Sb FREE  | Resin (EP)                     |            | 0.001659             | 130000                        | 61118.42                        |                |                 |
|                          |                                  | Bromine (Br)                   | 40039-93-8 | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Silica (SiO2)                  | 60676-86-0 | 0.010591             | 830000                        | 390177.9                        |                |                 |
|                          |                                  | Antimony Trioxide (Sb2O3)      | 1309-64-4  | 0                    | 0                             | 0                               |                |                 |
|                          |                                  | Metal Hydroxid                 |            | 0.000447             | 35000                         | 16467.71                        |                |                 |
|                          |                                  | Carbon Black (C)               | 1333-86-4  | 6.4E-05              | 5000                          | 2357.793                        |                |                 |
|                          |                                  | <b>Encapsulation Total:</b>    |            |                      |                               | <b>0.012761</b>                 | <b>1000000</b> | <b>470121.9</b> |
| Bond Wire Estimated      | AFW/TANAKA/ Kn                   | Gold (Au)                      | 7440-57-5  | 8.9E-05              | 1000000                       | 3278.806                        |                |                 |