

LINEAR TECHNOLOGY MATERIALS DECLARATION

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(Engineering Calculation)

TSSOP Exp. Pad

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TOTAL MASS (g) : 0.094244

| 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 | 0.002640 | 1000000 | 28012.2890625 | | |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 | | |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.030596 | 975000 | 324645.4375 | | |
| | | Iron (Fe) | 7439-89-6 | 0.000753 | 24000 | 7989.86865234 | | |
| | | Phosphorus (P) | 7723-14-0 | 0.000009 | 300 | 95.4964447021 | | |
| | | Zinc (Zn) | 7440-66-6 | 0.000022 | 700 | 233.435745239 | | |
| | | 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 | | |
| Lead Frame Total: | | | | 0.031380 | 1000000 | 332964.28125 | | |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Exter. Plating Sn | 7440-31-5 | 0.002480 | 1000000 | 26318.328125 | | |
| | | External Plating Total: | | | | 0.002480 | 1000000 | 26318.328125 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 | | |
| | | Inter. Plating Ag | 7440-22-4 | 0.000806 | 1000000 | 8552.23632812 | | |
| Internal Plating Total: | | | | 0.000806 | 1000000 | 8552.23632812 | | |
| Die Attach | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag) | 7440-22-4 | 0.000841 | 750000 | 8923.61132812 | | |
| | | 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) | | 0.000280 | 250000 | 2971.00024414 | | |
| Die Attach Total: | | | | 0.001121 | 1000000 | 11894.6123047 | | |
| Encapsulation | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP) | | 0.007460 | 135000 | 79155.9375 | | |
| | | Bromine (Br) | 40039-93-8 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.047524 | 860000 | 504263.625 | | |
| | | Antimony Trioxide (Sb2O3) | 1309-64-4 | 0.000000 | 0 | 0 | | |
| | | Metal Hydroxide | | 0.000000 | 0 | 0 | | |
| | | Carbon Black (C) | 1333-86-4 | 0.000276 | 5000 | 2928.55761719 | | |
| | | Encapsulation Total: | | | | 0.055260 | 1000000 | 586348.125 |
| Bond Wire Estimated | AFW/TANAKA/ Kn | Gold (Au) | 7440-57-5 | 0.000557 | 1000000 | 5910.16845703 | | |
| | | | | | TOTAL MASS (g) : | 0.094244 | | |