

LINEAR TECHNOLOGY MATERIALS DECLARATION

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(Engineering Calculation)

MSOP-Exposed

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TOTAL MASS (g) : 0.038361

| 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 | 0.003157 | 1000000 | 82297.0703125 | | |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 | | |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.013845 | 975000 | 360913.21875 | | |
| | | Iron (Fe) | 7439-89-6 | 0.000341 | 24000 | 8889.23046875 | | |
| | | Phosphorus (P) | 7723-14-0 | 0.000004 | 300 | 104.272506714 | | |
| | | Zinc (Zn) | 7440-66-6 | 0.000010 | 700 | 260.681274414 | | |
| | | 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: | | | | 0.014200 | 1000000 | 370167.375 | | |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Exter. Plating Sn | 7440-31-5 | 0.000710 | 1000000 | 18509.0195312 | | |
| | | External Plating Total: | | | | 0.000710 | 1000000 | 18509.0195312 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 | | |
| | | Inter. Plating Ag | 7440-22-4 | 0.000086 | 1000000 | 2241.85864258 | | |
| Internal Plating Total: | | | | 0.000086 | 1000000 | 2241.85864258 | | |
| Die Attach | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag) | 7440-22-4 | 0.000952 | 750000 | 24816.8554688 | | |
| | | 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) | | 0.000317 | 250000 | 8263.59570312 | | |
| Die Attach Total: | | | | 0.001269 | 1000000 | 33080.453125 | | |
| Encapsulation | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP) | | 0.001932 | 103000 | 50363.6171875 | | |
| | | Bromine (Br) | 40039-93-8 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.016790 | 895000 | 437683.84375 | | |
| | | Antimony Trioxide (Sb2O3) | 1309-64-4 | 0.000000 | 0 | 0 | | |
| | | Metal Hydroxide | | 0.000000 | 0 | 0 | | |
| | | Carbon Black (C) | 1333-86-4 | 0.000038 | 2000 | 990.588684082 | | |
| | | Encapsulation Total: | | | | 0.018760 | 1000000 | 489038.03125 |
| Bond Wire Estimated | AFW/TANAKA/ Kn | Gold (Au) | 7440-57-5 | 0.000179 | 1000000 | 4666.19433594 | | |
| | | | | | TOTAL MASS (g) : | 0.038361 | | |