

LINEAR TECHNOLOGY MATERIALS DECLARATION

1t3689emse#trpbf

(Engineering Calculation)

MSOP-Exposed

(printed on: 2020-07-11 18:38:30)

TOTAL MASS (g) : 0.036184

| 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 | 0.001489 | 1000000 | 41150.7617188 | | |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 | | |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.013845 | 975000 | 382627.4375 | | |
| | | Iron (Fe) | 7439-89-6 | 0.000341 | 24000 | 9424.04882812 | | |
| | | Phosphorus (P) | 7723-14-0 | 0.000004 | 300 | 110.546028137 | | |
| | | Zinc (Zn) | 7440-66-6 | 0.000010 | 700 | 276.36505127 | | |
| | | 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 | 392438.375 | | |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Exter. Plating Sn | 7440-31-5 | 0.000710 | 1000000 | 19622.609375 | | |
| | | External Plating Total: | | | | 0.000710 | 1000000 | 19622.609375 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 | | |
| | | Inter. Plating Ag | 7440-22-4 | 0.000086 | 1000000 | 2376.73974609 | | |
| Internal Plating Total: | | | | 0.000086 | 1000000 | 2376.73974609 | | |
| Die Attach | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag) | 7440-22-4 | 0.000569 | 750000 | 15725.1728516 | | |
| | | 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) | | 0.000190 | 250000 | 5250.93652344 | | |
| Die Attach Total: | | | | 0.000759 | 1000000 | 20976.109375 | | |
| Encapsulation | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP) | | 0.002439 | 130000 | 67405.4375 | | |
| | | Bromine (Br) | 40039-93-8 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.015571 | 830000 | 430328.03125 | | |
| | | Antimony Trioxide (Sb2O3) | 1309-64-4 | 0.000000 | 0 | 0 | | |
| | | Metal Hydroxide | | 0.000657 | 35000 | 18157.1835938 | | |
| | | Carbon Black (C) | 1333-86-4 | 0.000094 | 5000 | 2597.83154297 | | |
| | | Encapsulation Total: | | | | 0.018761 | 1000000 | 518488.46875 |
| Bond Wire Estimated | AFW/TANAKA/ Kn | Gold (Au) | 7440-57-5 | 0.000179 | 1000000 | 4946.93457031 | | |
| | | | | | TOTAL MASS (g) : | 0.036184 | | |