

LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC2296IUP#TRPBF

(Engineering Calculation)

QFN 9mm X 9mm Exp. Pad

(printed on: 2014-01-19 23:35:34)

TOTAL MASS (g): 0.224304

| 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 | 0.000263 | 1000000 | 23463.621994 |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.104491 | 975000 | 465844.90625 |
| | | Iron (Fe) | 7439-89-6 | 0.002572 | 24000 | 11466.5673828 |
| | | Phosphorus (P) | 7723-14-0 | 0.000032 | 300 | 142.663160596 |
| | | Zinc (Zn) | 7440-66-6 | 0.000075 | 700 | 334.367248535 |
| | | 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: | | 0.107170 | 1000000 |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 |
| | | Exter. Plating Sn | 7440-31-5 | 0.003192 | 1000000 | 14231.8828125 |
| | | | External Plating Total: | 0.003192 | 1000000 | 14231.8828125 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 |
| | | Inter. Plating Ag | 7440-22-4 | 0.002279 | 1000000 | 10160.3056641 |
| | | | Internal Plating Total: | 0.002279 | 1000000 | 10160.3056641 |
| Die Attach | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag) | 7440-22-4 | 0.001823 | 750000 | 8127.35302734 |
| | | 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) | | 0.000608 | 250000 | 2710.60375977 |
| | | | Die Attach Total: | 0.002431 | 1000000 | 10837.9506547 |
| | | Encapsulation | MULTIAROMATIC RESIN BzSb FREE | Resin (EP) | 0.013460 | 130000 |
| Bromine (Br) | 40039-03-8 | | | 0.000000 | 0 | 0 |
| Silica (SiO2) | 60676-86-0 | | | 0.089044 | 860000 | 396978.625 |
| Antimony Trioxide (Sb2O3) | 1309-64-4 | | | 0.000000 | 0 | 0 |
| Metal Hydroxide | | | | 0.000000 | 0 | 0 |
| Carbon Black (C) | 1333-86-4 | | | 0.001035 | 10000 | 4614.26757812 |
| | Encapsulation Total: | | | 0.103539 | 1000000 | 461600.625 |
| Bond Wire Estimated | AFW/TANAKA/Kn | Gold (Au) | 7440-57-5 | 0.000430 | 1000000 | 1917.03881836 |

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