

LINEAR TECHNOLOGY MATERIALS DECLARATION

ltc2963hudc-1#pbf

(Engineering Calculation)

QFN 3mm X 4mm Exp. Pad

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TOTAL MASS (g) : 0.160603

| 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 | 0.001540 | 1000000 | 9588.875 | | |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 | | |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.013133 | 975000 | 81773.1796875 | | |
| | | Iron (Fe) | 7439-89-6 | 0.000323 | 24000 | 2011.17321777 | | |
| | | Phosphorus (P) | 7723-14-0 | 0.000004 | 300 | 24.906167984 | | |
| | | Zinc (Zn) | 7440-66-6 | 0.000009 | 700 | 56.0388832092 | | |
| | | 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: | | | | 0.013469 | 1000000 | 83865.296875 | | |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Exter. Plating Sn | 7440-31-5 | 0.000626 | 1000000 | 3896.37548828 | | |
| | | External Plating Total: | | | | 0.000626 | 1000000 | 3896.37548828 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 | | |
| | | Inter. Plating Ag | 7440-22-4 | 0.000302 | 1000000 | 1880.41577148 | | |
| | | Internal Plating Total: | | | | 0.000302 | 1000000 | 1880.41577148 |
| Die Attach | ELECTRICALLY INSULATING ADHESIVE | Silver (Ag) | 7440-22-4 | 0.000000 | 0 | 0 | | |
| | | Tin (Sn) | 7440-31-5 | 0.000000 | 0 | 0 | | |
| | | Lead (Pb) | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.000008 | 50000 | 49.812335968 | | |
| | | Indium (In) | 7440-74-6 | 0.000000 | 0 | 0 | | |
| | | Metal Oxide | | 0.000050 | 300000 | 311.32711792 | | |
| | | Antimony (Sb) | 7440-36-0 | 0.000000 | 0 | 0 | | |
| | | Resin (EP) | | 0.000109 | 650000 | 678.693115234 | | |
| Die Attach Total: | | | | 0.000167 | 1000000 | 1039.8326416 | | |
| Encapsulation | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP) | | 0.018759 | 130000 | 116803.703125 | | |
| | | Bromine (Br) | 40039-93-8 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.124098 | 860000 | 772701.4375 | | |
| | | Antimony Trioxide (Sb2O3) | 1309-64-4 | 0.000000 | 0 | 0 | | |
| | | Metal Hydroxide | | 0.000000 | 0 | 0 | | |
| | | Carbon Black (C) | 1333-86-4 | 0.001443 | 10000 | 8984.90136719 | | |
| | | Encapsulation Total: | | | | 0.144300 | 1000000 | 898490.0625 |
| Bond Wire Estimated | AFW/TANAKA/ Kn | Gold (Au) | 7440-57-5 | 0.000199 | 1000000 | 1239.08190918 | | |
| | | | | | TOTAL MASS (g) : | 0.160603 | | |