

LINEAR TECHNOLOGY MATERIALS DECLARATION

ltc2163cuk#trpbf

(Engineering Calculation)

QFN 7mm X 7mm Exp. Pad

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TOTAL MASS (g) : 0.132729

| 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 | 0.005918 | 1000000 | 44587.0703125 | | |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 | | |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.057847 | 975000 | 435827.71875 | | |
| | | Iron (Fe) | 7439-89-6 | 0.001424 | 24000 | 10728.6240234 | | |
| | | Phosphorus (P) | 7723-14-0 | 0.000018 | 300 | 135.614624023 | | |
| | | Zinc (Zn) | 7440-66-6 | 0.000042 | 700 | 316.434112549 | | |
| | | 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: | | | | 0.059331 | 1000000 | 447008.375 | | |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Exter. Plating Sn | 7440-31-5 | 0.002894 | 1000000 | 21804.2832031 | | |
| | | External Plating Total: | | | | 0.002894 | 1000000 | 21804.2832031 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 | | |
| | | Inter. Plating Ag | 7440-22-4 | 0.001274 | 1000000 | 9598.50195312 | | |
| Internal Plating Total: | | | | 0.001274 | 1000000 | 9598.50195312 | | |
| Die Attach | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag) | 7440-22-4 | 0.001972 | 750000 | 14857.3359375 | | |
| | | 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) | | 0.000657 | 250000 | 4949.93359375 | | |
| Die Attach Total: | | | | 0.002629 | 1000000 | 19807.2675781 | | |
| Encapsulation | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP) | | 0.007847 | 130000 | 59120.4375 | | |
| | | Bromine (Br) | 40039-93-8 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.051910 | 860000 | 391097.53125 | | |
| | | Antimony Trioxide (Sb2O3) | 1309-64-4 | 0.000000 | 0 | 0 | | |
| | | Metal Hydroxide | | 0.000000 | 0 | 0 | | |
| | | Carbon Black (C) | 1333-86-4 | 0.000604 | 10000 | 4550.62353516 | | |
| | | Encapsulation Total: | | | | 0.060361 | 1000000 | 454768.5625 |
| Bond Wire Estimated | AFW/TANAKA/ Kn | Gold (Au) | 7440-57-5 | 0.000322 | 1000000 | 2425.99487305 | | |
| | | | | | TOTAL MASS (g) : | 0.132729 | | |