

LINEAR TECHNOLOGY MATERIALS DECLARATION

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(Engineering Calculation)

QFN 4mm X 5mm Exp. Pad

(printed on: 2020-07-11 16:43:36)

TOTAL MASS (g) : 0.050025

| 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 | 0.002175 | 1000000 | 43478.0820312 | | |
| Die Coat | Dow Corning | Silicone | 69430-27-9 | 0.000000 | 0 | 0 | | |
| Lead Frame | Cu | Copper (Cu) | 7440-50-8 | 0.019997 | 975000 | 399738.5 | | |
| | | Iron (Fe) | 7439-89-6 | 0.000492 | 24000 | 9835.04199219 | | |
| | | Phosphorus (P) | 7723-14-0 | 0.000006 | 300 | 119.939544678 | | |
| | | Zinc (Zn) | 7440-66-6 | 0.000014 | 700 | 279.858917236 | | |
| | | 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: | | | | 0.020509 | 1000000 | 409973.34375 | | |
| Plating | PMI | Exter. Plating Pb | 7439-92-1 | 0.000000 | 0 | 0 | | |
| | | Exter. Plating Sn | 7440-31-5 | 0.000227 | 1000000 | 4541.87011719 | | |
| | | External Plating Total: | | | | 0.000227 | 1000000 | 4541.87011719 |
| | | Inter. Plating Ni | 7440-02-0 | 0.000000 | 0 | 0 | | |
| | | Inter. Plating Ag | 7440-22-4 | 0.000429 | 1000000 | 8575.67675781 | | |
| | | Internal Plating Total: | | | | 0.000429 | 1000000 | 8575.67675781 |
| Die Attach | ELECTRICALLY CONDUCTIVE ADHESIVE | Silver (Ag) | 7440-22-4 | 0.000957 | 750000 | 19130.3574219 | | |
| | | 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) | | 0.000319 | 250000 | 6376.78564453 | | |
| Die Attach Total: | | | | 0.001276 | 1000000 | 25507.1425781 | | |
| Encapsulation | MULTI-AROMATIC RESIN Br/Sb FREE | Resin (EP) | | 0.003244 | 130000 | 64847.3125 | | |
| | | Bromine (Br) | 40039-93-8 | 0.000000 | 0 | 0 | | |
| | | Silica (SiO2) | 60676-86-0 | 0.021457 | 860000 | 428923.75 | | |
| | | Antimony Trioxide (Sb2O3) | 1309-64-4 | 0.000000 | 0 | 0 | | |
| | | Metal Hydroxide | | 0.000000 | 0 | 0 | | |
| | | Carbon Black (C) | 1333-86-4 | 0.000250 | 10000 | 4997.48095703 | | |
| | | Encapsulation Total: | | | | 0.024951 | 1000000 | 498768.5625 |
| Bond Wire Estimated | AFW/TANAKA/ Kn | Gold (Au) | 7440-57-5 | 0.000458 | 1000000 | 9155.38378906 | | |
| | | | | | TOTAL MASS (g) : | 0.050025 | | |