

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t5554iuh#trpbf

(Engineering Calculation)

QFN 5mm X 5mm Exp. Pad

(printed on: 2020-07-11 18:33:38)

**TOTAL MASS (g) : 0.063908**

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	0.001665	1000000	26052.9648438		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.028382	975000	444105.28125		
		Iron (Fe)	7439-89-6	0.000699	24000	10937.5517578		
		Phosphorus (P)	7723-14-0	0.000009	300	140.826843262		
		Zinc (Zn)	7440-66-6	0.000020	700	312.948547363		
		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		
<b>Lead Frame Total:</b>				<b>0.029110</b>	<b>1000000</b>	<b>455496.59375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001398	1000000	21879.4199219		
		<b>External Plating Total:</b>				<b>0.001398</b>	<b>1000000</b>	<b>21879.4199219</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000635	1000000	9936.11523438		
<b>Internal Plating Total:</b>				<b>0.000635</b>	<b>1000000</b>	<b>9936.11523438</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000797	750000	12471		
		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)		0.000266	250000	4162.21533203		
<b>Die Attach Total:</b>				<b>0.001063</b>	<b>1000000</b>	<b>16633.2148438</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003888	130000	60837.1953125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.025723	860000	402498.75		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000299	10000	4678.58105469		
		<b>Encapsulation Total:</b>				<b>0.029910</b>	<b>1000000</b>	<b>468014.53125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000127	1000000	1987.2232666		
					<b>TOTAL MASS (g) :</b>	<b>0.063908</b>		