

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 3mm X 3mm Exp. Pad

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**TOTAL MASS (g) : 0.021677**

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	0.000993	1000000	45809.7734375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.007293	975000	336445.78125		
		Iron (Fe)	7439-89-6	0.000180	24000	8303.88671875		
		Phosphorus (P)	7723-14-0	0.000002	300	92.2653961182		
		Zinc (Zn)	7440-66-6	0.000005	700	230.663497925		
		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>0.007480</b>	<b>1000000</b>	<b>345072.59375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000345	1000000	15897.2744141		
		<b>External Plating Total:</b>				<b>0.000345</b>	<b>1000000</b>	<b>15897.2744141</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000169	1000000	7796.42675781		
<b>Internal Plating Total:</b>				<b>0.000169</b>	<b>1000000</b>	<b>7796.42675781</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000565	750000	26064.9746094		
		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)		0.000188	250000	8672.94824219		
<b>Die Attach Total:</b>				<b>0.000753</b>	<b>1000000</b>	<b>34737.921875</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001538	130000	70952.0859375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.010174	860000	469354.0625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000118	10000	5443.65869141		
		<b>Encapsulation Total:</b>				<b>0.011830</b>	<b>1000000</b>	<b>545749.8125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000107	1000000	4936.19873047		
					<b>TOTAL MASS (g) :</b>	<b>0.021677</b>		