

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 3mm X 3mm Exp. Pad

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**TOTAL MASS (g) : 0.021295**

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	0.000766	1000000	35971.5625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.007293	975000	342481.1875		
		Iron (Fe)	7439-89-6	0.000180	24000	8452.84765625		
		Phosphorus (P)	7723-14-0	0.000002	300	93.9205245972		
		Zinc (Zn)	7440-66-6	0.000005	700	234.801300049		
		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>351262.78125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000345	1000000	16182.4501953		
		<b>External Plating Total:</b>				<b>0.000345</b>	<b>1000000</b>	<b>16182.4501953</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000169	1000000	7936.28466797		
		<b>Internal Plating Total:</b>				<b>0.000169</b>	<b>1000000</b>	<b>7936.28466797</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000481	750000	22587.8867188		
		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)		0.000160	250000	7513.64160156		
<b>Die Attach Total:</b>				<b>0.000641</b>	<b>1000000</b>	<b>30101.5292969</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001538	130000	72224.8828125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.010174	860000	477773.6875		
		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	5541.31103516		
		<b>Encapsulation Total:</b>				<b>0.011830</b>	<b>1000000</b>	<b>555539.875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000064	1000000	3005.45678711		
					<b>TOTAL MASS (g) :</b>	<b>0.021295</b>		