

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 5mm X 8mm Exp. Pad

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**TOTAL MASS (g) : 0.115907**

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	0.006478	1000000	55889.8359375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.050710	975000	437507.5		
		Iron (Fe)	7439-89-6	0.001248	24000	10767.2910156		
		Phosphorus (P)	7723-14-0	0.000016	300	138.042205811		
		Zinc (Zn)	7440-66-6	0.000036	700	310.594970703		
		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>0.052010</b>	<b>1000000</b>	<b>448723.4375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002530	1000000	21824.3203125		
		<b>External Plating Total:</b>				<b>0.002530</b>	<b>1000000</b>	<b>21824.3203125</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000125	1000000	1078.45483398		
<b>Internal Plating Total:</b>				<b>0.000125</b>	<b>1000000</b>	<b>1078.45483398</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.002213	750000	19092.9648438		
		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)		0.000738	250000	6367.19628906		
<b>Die Attach Total:</b>				<b>0.002951</b>	<b>1000000</b>	<b>25460.1582031</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006715	130000	57934.5898438		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.044422	860000	383256.9375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000517	10000	4460.48828125		
		<b>Encapsulation Total:</b>				<b>0.051654</b>	<b>1000000</b>	<b>445652</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000159	1000000	1371.79443359		
					<b>TOTAL MASS (g) :</b>	<b>0.115907</b>		