

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 5mm X 6mm Exp. Pad

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**TOTAL MASS (g) : 0.067396**

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	0.000807	1000000	11973.9775391		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.025794	975000	382722.15625		
		Iron (Fe)	7439-89-6	0.000635	24000	9421.90332031		
		Phosphorus (P)	7723-14-0	0.000008	300	118.701141357		
		Zinc (Zn)	7440-66-6	0.000019	700	281.915222168		
		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>0.026456</b>	<b>1000000</b>	<b>392544.6875</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001276	1000000	18935.0820312		
		<b>External Plating Total:</b>				<b>0.001276</b>	<b>1000000</b>	<b>18935.0820312</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000573	1000000	8501.96972656		
<b>Internal Plating Total:</b>				<b>0.000573</b>	<b>1000000</b>	<b>8501.96972656</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000499	750000	7403.984375		
		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)		0.000166	250000	2463.04882812		
<b>Die Attach Total:</b>				<b>0.000665</b>	<b>1000000</b>	<b>9867.03320312</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.004876	130000	72348.3515625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.032257	860000	478617.875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000375	10000	5564.11621094		
		<b>Encapsulation Total:</b>				<b>0.037508</b>	<b>1000000</b>	<b>556530.3125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000111	1000000	1646.97839355		
					<b>TOTAL MASS (g) :</b>	<b>0.067396</b>		