

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 4mm X 6mm Exp. Pad

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**TOTAL MASS (g) : 0.061276**

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	0.003680	1000000	60056.4804688		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.023576	975000	384753.125		
		Iron (Fe)	7439-89-6	0.000580	24000	9465.42382812		
		Phosphorus (P)	7723-14-0	0.000007	300	114.237869263		
		Zinc (Zn)	7440-66-6	0.000017	700	277.434814453		
		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>0.024180</b>	<b>1000000</b>	<b>394610.25</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000273	1000000	4449.55859375		
		<b>External Plating Total:</b>				<b>0.000273</b>	<b>1000000</b>	<b>4449.55859375</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000647	1000000	10558.8427734		
<b>Internal Plating Total:</b>				<b>0.000647</b>	<b>1000000</b>	<b>10558.8427734</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001451	750000	23679.8789062		
		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)		0.000484	250000	7898.73193359		
<b>Die Attach Total:</b>				<b>0.001935</b>	<b>1000000</b>	<b>31578.6113281</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003892	130000	63516.2578125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.025748	860000	420199.5		
		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	4879.58935547		
		<b>Encapsulation Total:</b>				<b>0.029939</b>	<b>1000000</b>	<b>488595.375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000622	1000000	10150.8505859		
					<b>TOTAL MASS (g) :</b>	<b>0.061276</b>		