

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 4mm X 6mm Exp. Pad

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**TOTAL MASS (g) : 0.059478**

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	0.002256	1000000	37930.2148438		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.023576	975000	396384.1875		
		Iron (Fe)	7439-89-6	0.000580	24000	9751.56152344		
		Phosphorus (P)	7723-14-0	0.000007	300	117.691261292		
		Zinc (Zn)	7440-66-6	0.000017	700	285.821655273		
		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>406539.25</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000273	1000000	4584.06787109		
		<b>External Plating Total:</b>				<b>0.000273</b>	<b>1000000</b>	<b>4584.06787109</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000647	1000000	10878.0351562		
<b>Internal Plating Total:</b>				<b>0.000647</b>	<b>1000000</b>	<b>10878.0351562</b>		
Die Attach	95Sn/5Sb	Silver (Ag)	7440-22-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.001659	950000	27892.828125		
		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	0.000087	50000	1462.73413086		
		Resin (EP)		0.000000	0	0		
<b>Die Attach Total:</b>				<b>0.001746</b>	<b>1000000</b>	<b>29355.5625</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003892	130000	65436.3398438		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.025748	860000	432902.0625		
		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	5027.09814453		
		<b>Encapsulation Total:</b>				<b>0.029939</b>	<b>1000000</b>	<b>503365.53125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000437	1000000	7347.29736328		
					<b>TOTAL MASS (g) :</b>	<b>0.059478</b>		