

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 7mm X 11mm Exp. Pad

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**TOTAL MASS (g) : 0.111937**

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	0.003572	1000000	31910.9257812		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.050710	975000	453024.34375		
		Iron (Fe)	7439-89-6	0.001248	24000	11149.1699219		
		Phosphorus (P)	7723-14-0	0.000016	300	142.938079834		
		Zinc (Zn)	7440-66-6	0.000036	700	321.610687256		
		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>464638.09375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002530	1000000	22598.3535156		
		<b>External Plating Total:</b>				<b>0.002530</b>	<b>1000000</b>	<b>22598.3535156</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000125	1000000	1116.70373535		
		<b>Internal Plating Total:</b>				<b>0.000125</b>	<b>1000000</b>	<b>1116.70373535</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001361	750000	12158.6708984		
		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)		0.000454	250000	4055.86791992		
<b>Die Attach Total:</b>				<b>0.001815</b>	<b>1000000</b>	<b>16214.5380859</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006715	130000	59989.3242188		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.044422	860000	396849.71875		
		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	4618.68652344		
		<b>Encapsulation Total:</b>				<b>0.051654</b>	<b>1000000</b>	<b>461457.6875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000231	1000000	2063.66845703		
					<b>TOTAL MASS (g) :</b>	<b>0.111937</b>		