

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc3113efe#pbf

(Engineering Calculation)

TSSOP Exp. Pad

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**TOTAL MASS (g) : 0.079747**

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	0.005712	1000000	71626.078125		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.026547	975000	332888.1875		
		Iron (Fe)	7439-89-6	0.000653	24000	8188.34472656		
		Phosphorus (P)	7723-14-0	0.000008	300	100.316627502		
		Zinc (Zn)	7440-66-6	0.000019	700	238.251968384		
		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>0.027227</b>	<b>1000000</b>	<b>341415.0625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002940	1000000	36860.1328125		
		<b>External Plating Total:</b>				<b>0.002940</b>	<b>1000000</b>	<b>36860.1328125</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001123	1000000	14081.9472656		
		<b>Internal Plating Total:</b>				<b>0.001123</b>	<b>1000000</b>	<b>14081.9472656</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001480	750000	18558.5742188		
		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)		0.000493	250000	6182.01269531		
<b>Die Attach Total:</b>				<b>0.001973</b>	<b>1000000</b>	<b>24740.5859375</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006015	150000	75425.5625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.032882	820000	412326.4375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.001003	25000	12577.1962891		
		Carbon Black (C)	1333-86-4	0.000201	5000	2520.45532227		
		<b>Encapsulation Total:</b>				<b>0.040101</b>	<b>1000000</b>	<b>502849.625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000672	1000000	8426.5967969		
					<b>TOTAL MASS (g) :</b>	<b>0.079747</b>		