

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc3417aefe-2#pbf

(Engineering Calculation)

TSSOP Exp. Pad

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**TOTAL MASS (g) : 0.075545**

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	0.002391	1000000	31649.8027344		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.026547	975000	351404.125		
		Iron (Fe)	7439-89-6	0.000653	24000	8643.79882812		
		Phosphorus (P)	7723-14-0	0.000008	300	105.896446228		
		Zinc (Zn)	7440-66-6	0.000019	700	251.504074097		
		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>360405.3125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002940	1000000	38910.3710938		
		<b>External Plating Total:</b>				<b>0.002940</b>	<b>1000000</b>	<b>38910.3710938</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001123	1000000	14865.2148438		
<b>Internal Plating Total:</b>				<b>0.001123</b>	<b>1000000</b>	<b>14865.2148438</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000820	750000	10854.3867188		
		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)		0.000273	250000	3613.71655273		
<b>Die Attach Total:</b>				<b>0.001093</b>	<b>1000000</b>	<b>14468.1035156</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006015	150000	79620.890625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.032882	820000	435260.90625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.001002	25000	13263.5302734		
		Carbon Black (C)	1333-86-4	0.000201	5000	2660.6484375		
		<b>Encapsulation Total:</b>				<b>0.040100</b>	<b>1000000</b>	<b>530805.9375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000672	1000000	8895.30175781		
					<b>TOTAL MASS (g) :</b>	<b>0.075545</b>		