

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc3112mpfe#pbf

(Engineering Calculation)

TSSOP Exp. Pad

(printed on: 2020-07-11 17:49:47)

**TOTAL MASS (g) : 0.079207**

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	0.005250	1000000	66282.4375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.026547	975000	335161.875		
		Iron (Fe)	7439-89-6	0.000653	24000	8244.27246094		
		Phosphorus (P)	7723-14-0	0.000008	300	101.001808167		
		Zinc (Zn)	7440-66-6	0.000019	700	239.87928772		
		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>343747.03125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002940	1000000	37111.8945312		
		<b>External Plating Total:</b>				<b>0.002940</b>	<b>1000000</b>	<b>37111.8945312</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001123	1000000	14178.1289062		
		<b>Internal Plating Total:</b>				<b>0.001123</b>	<b>1000000</b>	<b>14178.1289062</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001421	750000	17940.4472656		
		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)		0.000474	250000	5984.35693359		
<b>Die Attach Total:</b>				<b>0.001895</b>	<b>1000000</b>	<b>23924.8027344</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006015	150000	75940.734375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.032882	820000	415142.6875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.001002	25000	12650.4755859		
		Carbon Black (C)	1333-86-4	0.000201	5000	2537.67041016		
		<b>Encapsulation Total:</b>				<b>0.040100</b>	<b>1000000</b>	<b>506271.53125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000672	1000000	8484.15234375		
					<b>TOTAL MASS (g) :</b>	<b>0.079207</b>		