

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t3845aife#pbf

(Engineering Calculation)

TSSOP Exp. Pad

(printed on: 2020-07-11 16:53:00)

**TOTAL MASS (g) : 0.063211**

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	0.006421	1000000	101580.171875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.018525	975000	293065.375		
		Iron (Fe)	7439-89-6	0.000456	24000	7213.91650391		
		Phosphorus (P)	7723-14-0	0.000006	300	94.9199523926		
		Zinc (Zn)	7440-66-6	0.000013	700	205.659896851		
		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>0.019000</b>	<b>1000000</b>	<b>300579.84375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002537	1000000	40137.78125		
		<b>External Plating Total:</b>				<b>0.002537</b>	<b>1000000</b>	<b>40137.78125</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000250	1000000	3954.99829102		
		<b>Internal Plating Total:</b>				<b>0.000250</b>	<b>1000000</b>	<b>3954.99829102</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001549	750000	24505.1679688		
		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)		0.000516	250000	8163.11523438		
<b>Die Attach Total:</b>				<b>0.002065</b>	<b>1000000</b>	<b>32668.28125</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.004875	150000	77122.4609375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.026650	820000	421602.78125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000813	25000	12861.6533203		
		Carbon Black (C)	1333-86-4	0.000163	5000	2578.65869141		
		<b>Encapsulation Total:</b>				<b>0.032501</b>	<b>1000000</b>	<b>514165.59375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000437	1000000	6913.33642578		
					<b>TOTAL MASS (g) :</b>	<b>0.063211</b>		