

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1643al-lign#pbf

(Engineering Calculation)

SSOP

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**TOTAL MASS (g) : 0.08326**

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	0.003849	1000000	46228.640625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.029933	975000	359512.0625		
		Iron (Fe)	7439-89-6	0.000737	24000	8851.78222656		
		Phosphorus (P)	7723-14-0	0.000009	300	108.095031738		
		Zinc (Zn)	7440-66-6	0.000021	700	252.221740723		
		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>0.030700</b>	<b>1000000</b>	<b>368724.125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002272	1000000	27288.953125		
		<b>External Plating Total:</b>				<b>0.002272</b>	<b>1000000</b>	<b>27288.953125</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000246	1000000	2954.59765625		
<b>Internal Plating Total:</b>				<b>0.000246</b>	<b>1000000</b>	<b>2954.59765625</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001096	750000	13163.5722656		
		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)		0.000365	250000	4383.85400391		
<b>Die Attach Total:</b>				<b>0.001461</b>	<b>1000000</b>	<b>17547.4257812</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006623	150000	79545.9296875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.036203	820000	434818.28125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.001104	25000	13259.65625		
		Carbon Black (C)	1333-86-4	0.000221	5000	2654.33325195		
		<b>Encapsulation Total:</b>				<b>0.044151</b>	<b>1000000</b>	<b>530278.1875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000581	1000000	6978.13476562		
					<b>TOTAL MASS (g) :</b>	<b>0.08326</b>		