

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1657lcn#pbf

(Engineering Calculation)

SSOP

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**TOTAL MASS (g) : 0.174411**

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	0.005951	1000000	34120.5664062		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.063999	975000	366943.71875		
		Iron (Fe)	7439-89-6	0.001575	24000	9030.39746094		
		Phosphorus (P)	7723-14-0	0.000020	300	114.671707153		
		Zinc (Zn)	7440-66-6	0.000046	700	263.744934082		
		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>0.065640</b>	<b>1000000</b>	<b>376352.5625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003749	1000000	21494.8183594		
		<b>External Plating Total:</b>				<b>0.003749</b>	<b>1000000</b>	<b>21494.8183594</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000525	1000000	3010.13208008		
		<b>Internal Plating Total:</b>				<b>0.000525</b>	<b>1000000</b>	<b>3010.13208008</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001496	750000	8577.44335938		
		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)		0.000499	250000	2861.05932617		
<b>Die Attach Total:</b>				<b>0.001995</b>	<b>1000000</b>	<b>11438.5029297</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.009848	103000	56464.34375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.085571	895000	490628.625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000191	2000	1095.11474609		
		<b>Encapsulation Total:</b>				<b>0.095610</b>	<b>1000000</b>	<b>548188.0625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000941	1000000	5395.30371094		
					<b>TOTAL MASS (g) :</b>	<b>0.174411</b>		