

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1649cs#pbf

(Engineering Calculation)

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**TOTAL MASS (g) : 0.155996**

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	0.003263	1000000	20917.2421875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.051070	975000	327380.84375		
		Iron (Fe)	7439-89-6	0.001257	24000	8057.91455078		
		Phosphorus (P)	7723-14-0	0.000016	300	102.566932678		
		Zinc (Zn)	7440-66-6	0.000037	700	237.186050415		
		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>0.052380</b>	<b>1000000</b>	<b>335778.46875</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002954	1000000	18934.5214844		
		<b>External Plating Total:</b>				<b>0.002954</b>	<b>1000000</b>	<b>18934.5214844</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000419	1000000	2685.97167969		
<b>Internal Plating Total:</b>				<b>0.000419</b>	<b>1000000</b>	<b>2685.97167969</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000957	750000	6134.78466797		
		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)		0.000319	250000	2044.92822266		
<b>Die Attach Total:</b>				<b>0.001276</b>	<b>1000000</b>	<b>8179.71289062</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.012389	130000	79418.8515625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.079099	830000	507058.84375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.003336	35000	21385.2050781		
		Carbon Black (C)	1333-86-4	0.000477	5000	3057.77661133		
		<b>Encapsulation Total:</b>				<b>0.095301</b>	<b>1000000</b>	<b>610920.75</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000403	1000000	2583.40478516		
					<b>TOTAL MASS (g) :</b>	<b>0.155996</b>		