

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc291lits8-1#trmpbf

(Engineering Calculation)

TSOT-23

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**TOTAL MASS (g) : 0.012305**

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	0.000684	1000000	55588.5585938		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.004582	975000	372378.3125		
		Iron (Fe)	7439-89-6	0.000113	24000	9183.48925781		
		Phosphorus (P)	7723-14-0	0.000001	300	81.269821167		
		Zinc (Zn)	7440-66-6	0.000003	700	243.809463501		
		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>0.004699</b>	<b>1000000</b>	<b>381886.90625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000663	1000000	53856.6914062		
		<b>External Plating Total:</b>				<b>0.000663</b>	<b>1000000</b>	<b>53856.6914062</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000080	1000000	6501.58544922		
<b>Internal Plating Total:</b>				<b>0.000080</b>	<b>1000000</b>	<b>6501.58544922</b>		
Die Attach	ELECTRICALLY INSULATING ADHESIVE	Silver (Ag)	7440-22-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.000011	100000	893.968017578		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000033	300000	2681.90405273		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000066	600000	5363.80810547		
<b>Die Attach Total:</b>				<b>0.000110</b>	<b>1000000</b>	<b>8939.68066406</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.000347	58000	28200.6269531		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.005322	890000	432517.96875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000299	50000	24299.6777344		
		Carbon Black (C)	1333-86-4	0.000012	2000	975.237854004		
		<b>Encapsulation Total:</b>				<b>0.005980</b>	<b>1000000</b>	<b>485993.5</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000089	1000000	7233.01367188		
					<b>TOTAL MASS (g) :</b>	<b>0.012305</b>		