

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1290din#pbf

(Engineering Calculation)

PDIP

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**TOTAL MASS (g) : 1.366315**

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	0.008788	1000000	6431.89648438		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.386100	975000	282584.8125		
		Iron (Fe)	7439-89-6	0.009504	24000	6955.93359375		
		Phosphorus (P)	7723-14-0	0.000119	300	87.0955505371		
		Zinc (Zn)	7440-66-6	0.000277	700	202.735031128		
		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>0.396000</b>	<b>1000000</b>	<b>289830.5625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.031039	1000000	22716.9394531		
		<b>External Plating Total:</b>				<b>0.031039</b>	<b>1000000</b>	<b>22716.9394531</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.003168	1000000	2318.64453125		
<b>Internal Plating Total:</b>				<b>0.003168</b>	<b>1000000</b>	<b>2318.64453125</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001955	750000	1430.85546875		
		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)		0.000652	250000	477.195800781		
<b>Die Attach Total:</b>				<b>0.002607</b>	<b>1000000</b>	<b>1908.05126953</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.124740	135000	91296.625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.794640	860000	581593.3125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.004620	5000	3381.35668945		
		<b>Encapsulation Total:</b>				<b>0.924000</b>	<b>1000000</b>	<b>676271.375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000714	1000000	522.573303223		
					<b>TOTAL MASS (g) :</b>	<b>1.366315</b>		