

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc4317cdhc#trpbf

(Engineering Calculation)

DFN 5mm X 3mm Exp. Pad

(printed on: 2020-07-11 16:47:42)

**TOTAL MASS (g) : 0.037897**

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	0.000909	1000000	23986.0664062		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.017069	974800.0625	450405.03125		
		Iron (Fe)	7439-89-6	0.000411	23500	10845.1845703		
		Phosphorus (P)	7723-14-0	0.000015	850	395.809692383		
		Zinc (Zn)	7440-66-6	0.000015	850	395.809692383		
		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>0.017510</b>	<b>1000000</b>	<b>462041.84375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000817	1000000	21558.4882812		
		<b>External Plating Total:</b>				<b>0.000817</b>	<b>1000000</b>	<b>21558.4882812</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000391	1000000	10317.4394531		
<b>Internal Plating Total:</b>				<b>0.000391</b>	<b>1000000</b>	<b>10317.4394531</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000537	750000	14169.9863281		
		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)		0.000179	250000	4723.32861328		
<b>Die Attach Total:</b>				<b>0.000716</b>	<b>1000000</b>	<b>18893.3144531</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.002274	130000	60004.75		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.015041	860000	396891.5625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000175	10000	4617.77929688		
		<b>Encapsulation Total:</b>				<b>0.017490</b>	<b>1000000</b>	<b>461514.0625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000064	1000000	1688.78796387		
					<b>TOTAL MASS (g) :</b>	<b>0.037897</b>		