

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc2912hddb-2#trpbf

(Engineering Calculation)

DFN 3mm X 2mm Exp. Pad

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**TOTAL MASS (g) : 0.013798**

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	0.000583	1000000	42253.7070312		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.004212	975000	305270.34375		
		Iron (Fe)	7439-89-6	0.000104	24000	7537.5390625		
		Phosphorus (P)	7723-14-0	0.000001	300	72.4763412476		
		Zinc (Zn)	7440-66-6	0.000003	700	217.429031372		
		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>0.004320</b>	<b>1000000</b>	<b>313097.78125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000185	1000000	13379.6035156		
		<b>External Plating Total:</b>				<b>0.000185</b>	<b>1000000</b>	<b>13379.6035156</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000103	1000000	7465.0625		
<b>Internal Plating Total:</b>				<b>0.000103</b>	<b>1000000</b>	<b>7465.0625</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000468	750000	33918.9296875		
		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)		0.000156	250000	11306.3085938		
<b>Die Attach Total:</b>				<b>0.000624</b>	<b>1000000</b>	<b>45225.234375</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001034	130000	74940.53125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.006837	860000	495520.75		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000080	10000	5798.10693359		
		<b>Encapsulation Total:</b>				<b>0.007951</b>	<b>1000000</b>	<b>576259.375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000032	1000000	2319.24291992		
					<b>TOTAL MASS (g) :</b>	<b>0.013798</b>		