

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc2919hddb-3.3#trmpbf

(Engineering Calculation)

DFN 3mm X 2mm Exp. Pad

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**TOTAL MASS (g) : 0.014271**

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	0.000667	1000000	46739.4296875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.005090	975000	356677.21875		
		Iron (Fe)	7439-89-6	0.000125	24000	8759.26367188		
		Phosphorus (P)	7723-14-0	0.000002	300	140.148208618		
		Zinc (Zn)	7440-66-6	0.000004	700	280.296417236		
		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>0.005221</b>	<b>1000000</b>	<b>365856.90625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000185	1000000	12936.1357422		
		<b>External Plating Total:</b>				<b>0.000185</b>	<b>1000000</b>	<b>12936.1357422</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000103	1000000	7217.63330078		
<b>Internal Plating Total:</b>				<b>0.000103</b>	<b>1000000</b>	<b>7217.63330078</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000514	750000	36018.09375		
		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)		0.000171	250000	11982.6728516		
<b>Die Attach Total:</b>				<b>0.000685</b>	<b>1000000</b>	<b>48000.7617188</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.000958	130000	67131		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.006338	860000	444129.6875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000074	10000	5185.48388672		
		<b>Encapsulation Total:</b>				<b>0.007370</b>	<b>1000000</b>	<b>516446.1875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000040	1000000	2802.96435547		
					<b>TOTAL MASS (g) :</b>	<b>0.014271</b>		