

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

DFN 5mm X 4mm Exp. Pad

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**TOTAL MASS (g) : 0.055224**

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	0.003808	1000000	68955.859375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.023117	975000	418606.25		
		Iron (Fe)	7439-89-6	0.000569	24000	10303.5410156		
		Phosphorus (P)	7723-14-0	0.000007	300	126.757087708		
		Zinc (Zn)	7440-66-6	0.000017	700	307.838653564		
		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>0.023710</b>	<b>1000000</b>	<b>429344.375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001124	1000000	20348.7304688		
		<b>External Plating Total:</b>				<b>0.001124</b>	<b>1000000</b>	<b>20348.7304688</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000522	1000000	9452.45800781		
<b>Internal Plating Total:</b>				<b>0.000522</b>	<b>1000000</b>	<b>9452.45800781</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001480	750000	26800.0722656		
		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)		0.000493	250000	8927.32226562		
<b>Die Attach Total:</b>				<b>0.001973</b>	<b>1000000</b>	<b>35727.390625</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003117	130000	56443.125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.020623	860000	373444.53125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000240	10000	4345.95751953		
		<b>Encapsulation Total:</b>				<b>0.023980</b>	<b>1000000</b>	<b>434233.5625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000107	1000000	1937.57275391		
					<b>TOTAL MASS (g) :</b>	<b>0.055224</b>		