

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t3009idc-3.3#trpbf

(Engineering Calculation)

DFN 2mm X 2mm Exp. Pad

(printed on: 2020-07-11 18:44:26)

**TOTAL MASS (g) : 0.009146**

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	0.000309	1000000	33784.0585938		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.002935	975000	320893.90625		
		Iron (Fe)	7439-89-6	0.000072	24000	7872.01416016		
		Phosphorus (P)	7723-14-0	0.000001	300	109.333526611		
		Zinc (Zn)	7440-66-6	0.000002	700	218.667053223		
		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>0.003010</b>	<b>1000000</b>	<b>329093.9375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000136	1000000	14904.8720703		
		<b>External Plating Total:</b>				<b>0.000136</b>	<b>1000000</b>	<b>14904.8720703</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000072	1000000	7872.01416016		
<b>Internal Plating Total:</b>				<b>0.000072</b>	<b>1000000</b>	<b>7872.01416016</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000289	750000	31597.3867188		
		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)		0.000096	250000	10496.0195312		
<b>Die Attach Total:</b>				<b>0.000385</b>	<b>1000000</b>	<b>42093.40625</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.000677	130000	74018.7890625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.004481	860000	489923.5		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000052	10000	5685.34326172		
		<b>Encapsulation Total:</b>				<b>0.005210</b>	<b>1000000</b>	<b>569627.6875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000024	1000000	2624.00488281		
					<b>TOTAL MASS (g) :</b>	<b>0.009146</b>		