

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1tc3112mpdhd#trpbf

(Engineering Calculation)

DFN 5mm X 4mm Exp. Pad

(printed on: 2020-07-11 18:50:20)

**TOTAL MASS (g) : 0.054838**

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	0.003500	1000000	63824.6679688		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.023117	975000	421552.8125		
		Iron (Fe)	7439-89-6	0.000569	24000	10376.0673828		
		Phosphorus (P)	7723-14-0	0.000007	300	127.649330139		
		Zinc (Zn)	7440-66-6	0.000017	700	310.005523682		
		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>432366.53125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001124	1000000	20491.9648438		
		<b>External Plating Total:</b>				<b>0.001124</b>	<b>1000000</b>	<b>20491.9648438</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000522	1000000	9518.99316406		
<b>Internal Plating Total:</b>				<b>0.000522</b>	<b>1000000</b>	<b>9518.99316406</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001421	750000	25912.8144531		
		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)		0.000474	250000	8643.68261719		
<b>Die Attach Total:</b>				<b>0.001895</b>	<b>1000000</b>	<b>34556.4960938</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003117	130000	56840.421875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.020623	860000	376073.1875		
		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	4376.54833984		
		<b>Encapsulation Total:</b>				<b>0.023980</b>	<b>1000000</b>	<b>437290.125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000107	1000000	1951.21130371		
					<b>TOTAL MASS (g) :</b>	<b>0.054838</b>		