

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t3020idd-1.2#pbf

(Engineering Calculation)

DFN 3mm X 3mm Exp. Pad

(printed on: 2020-07-11 20:24:43)

**TOTAL MASS (g) : 0.022898**

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	0.001210	1000000	52842.1757812		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.009350	975000	408325.90625		
		Iron (Fe)	7439-89-6	0.000230	24000	10044.3808594		
		Phosphorus (P)	7723-14-0	0.000003	300	131.013656616		
		Zinc (Zn)	7440-66-6	0.000007	700	305.698547363		
		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>0.009590</b>	<b>1000000</b>	<b>418807</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000437	1000000	19100.7167969		
		<b>External Plating Total:</b>				<b>0.000437</b>	<b>1000000</b>	<b>19100.7167969</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000218	1000000	9520.32617188		
<b>Internal Plating Total:</b>				<b>0.000218</b>	<b>1000000</b>	<b>9520.32617188</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000668	750000	29172.375		
		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)		0.000223	250000	9738.68164062		
<b>Die Attach Total:</b>				<b>0.000891</b>	<b>1000000</b>	<b>38911.0546875</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001368	130000	59742.2304688		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.009047	860000	395093.5		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000105	10000	4585.47802734		
		<b>Encapsulation Total:</b>				<b>0.010520</b>	<b>1000000</b>	<b>459421.21875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000032	1000000	1397.47900391		
					<b>TOTAL MASS (g) :</b>	<b>0.022898</b>		