

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1445cdhd#pbf

(Engineering Calculation)

DFN 5mm X 4mm Exp. Pad

(printed on: 2020-07-11 21:37:49)

**TOTAL MASS (g) : 0.052987**

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	0.002240	1000000	42274.7304688		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.023117	975000	436279.03125		
		Iron (Fe)	7439-89-6	0.000569	24000	10738.5380859		
		Phosphorus (P)	7723-14-0	0.000007	300	132.108551025		
		Zinc (Zn)	7440-66-6	0.000017	700	320.83505249		
		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>447470.5</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001124	1000000	21207.8144531		
		<b>External Plating Total:</b>				<b>0.001124</b>	<b>1000000</b>	<b>21207.8144531</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000522	1000000	9851.52246094		
<b>Internal Plating Total:</b>				<b>0.000522</b>	<b>1000000</b>	<b>9851.52246094</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000978	750000	18457.4492188		
		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)		0.000326	250000	6152.48339844		
<b>Die Attach Total:</b>				<b>0.001304</b>	<b>1000000</b>	<b>24609.9335938</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003117	130000	58826.0429688		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.020623	860000	389210.65625		
		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	4529.4354688		
		<b>Encapsulation Total:</b>				<b>0.023980</b>	<b>1000000</b>	<b>452566.09375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000107	1000000	2019.37341309		
					<b>TOTAL MASS (g) :</b>	<b>0.052987</b>		