

## LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC3441EDE#TRPBF

(Engineering Calculation)

DFN 4mm X 3mm Exp. Pad

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TOTAL MASS (g): 0.03276

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	0.002641	1000000	80617.815625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.012783	975000	390201.4375		
		Iron (Fe)	7439-89-6	0.000315	24000	9615.43359375		
		Phosphorus (P)	7723-14-0	0.000004	300	122.100738525		
		Zinc (Zn)	7440-66-6	0.000009	700	274.72668457		
		Nickel (Ni)	7440-02-0	0.000000	0	0		
		Silicon (Si)	7440-21-3	0.000000	0	0		
		Magnesium (Mg)	7439-96-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		<b>Lead Frame Total:</b>				<b>0.013111</b>	<b>1000000</b>	<b>400215.71875</b>
		Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0
Exter. Plating Sn	7440-31-5			0.000607	1000000	18523.7402344		
<b>External Plating Total:</b>						<b>0.000607</b>	<b>1000000</b>	<b>18523.7402344</b>
Inter. Plating Ni	7440-02-0			0.000000	0	0		
Inter. Plating Ag	7440-22-4			0.000295	1000000	9084.9296875		
<b>Internal Plating Total:</b>						<b>0.000295</b>	<b>1000000</b>	<b>9084.9296875</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001129	750000	34462.9335938		
		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)		0.000176	250000	11477.470931		
		<b>Die Attach Total:</b>				<b>0.001505</b>	<b>1000000</b>	<b>45940.40625</b>
		Encapsulation	MULTIAROMATIC RESIN BOND FREE	Resin (EP)		0.001888	130000	57631.5507812
Bromine (Br)	40093-93-8			0.000000	0	0		
Silica (SiO2)	60676-86-0			0.012487	860000	381167.96875		
Antimony Trioxide (Sb2O3)	1309-64-4			0.000000	0	0		
Metal Hydroxide				0.000000	0	0		
Carbon Black (C)	1333-86-4			0.000145	10000	4426.15185547		
<b>Encapsulation Total:</b>						<b>0.014520</b>	<b>1000000</b>	<b>443225.6875</b>
Bond Wire Estimated	AFW/TANAKA/Kn	Gold (Au)	7440-57-5	0.000081	1000000	2472.53979492		

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