

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc2301cde#pbf

(Engineering Calculation)

DFN 4mm X 3mm Exp. Pad

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**TOTAL MASS (g) : 0.031376**

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	0.001708	1000000	54436.796875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.012783	975000	407415.4375		
		Iron (Fe)	7439-89-6	0.000315	24000	10039.5732422		
		Phosphorus (P)	7723-14-0	0.000004	300	127.48664093		
		Zinc (Zn)	7440-66-6	0.000009	700	286.844940186		
		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>0.013111</b>	<b>1000000</b>	<b>417869.34375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000607	1000000	19340.828125		
		<b>External Plating Total:</b>				<b>0.000607</b>	<b>1000000</b>	<b>19340.828125</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000295	1000000	9402.13964844		
<b>Internal Plating Total:</b>				<b>0.000295</b>	<b>1000000</b>	<b>9402.13964844</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000815	750000	25975.4023438		
		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)		0.000272	250000	8669.09179688		
<b>Die Attach Total:</b>				<b>0.001087</b>	<b>1000000</b>	<b>34644.4960938</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001888	130000	60173.6992188		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.012487	860000	397981.40625		
		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	4621.390625		
		<b>Encapsulation Total:</b>				<b>0.014520</b>	<b>1000000</b>	<b>462776.46875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000048	1000000	1529.83972168		
					<b>TOTAL MASS (g) :</b>	<b>0.031376</b>		