

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc3129iud-1#trpbf

(Engineering Calculation)

QFN 3mm X 3mm Exp. Pad

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**TOTAL MASS (g) : 0.023655**

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	0.001271	1000000	53731.2578125		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.008752	975000	369988.9375		
		Iron (Fe)	7439-89-6	0.000215	24000	9089.08007812		
		Phosphorus (P)	7723-14-0	0.000003	300	126.824378967		
		Zinc (Zn)	7440-66-6	0.000006	700	253.648757935		
		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>0.008976</b>	<b>1000000</b>	<b>379458.53125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000413	1000000	17449.3945312		
		<b>External Plating Total:</b>				<b>0.000413</b>	<b>1000000</b>	<b>17449.3945312</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000203	1000000	8581.78222656		
<b>Internal Plating Total:</b>				<b>0.000203</b>	<b>1000000</b>	<b>8581.78222656</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000664	750000	28070.4609375		
		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)		0.000221	250000	9342.72949219		
<b>Die Attach Total:</b>				<b>0.000885</b>	<b>1000000</b>	<b>37413.1914062</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001534	130000	64849.53125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.010148	860000	429004.59375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000118	10000	4988.42529297		
		<b>Encapsulation Total:</b>				<b>0.011800</b>	<b>1000000</b>	<b>498842.5625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000107	1000000	4523.40234375		
					<b>TOTAL MASS (g) :</b>	<b>0.023655</b>		