

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc6946iufd-2#pbf

(Engineering Calculation)

QFN 4mm X 5mm Exp. Pad

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**TOTAL MASS (g) : 0.050574**

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	0.002535	1000000	50124.3671875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.019997	975000	395399.21875		
		Iron (Fe)	7439-89-6	0.000492	24000	9728.28027344		
		Phosphorus (P)	7723-14-0	0.000006	300	118.637557983		
		Zinc (Zn)	7440-66-6	0.000014	700	276.820953369		
		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>0.020509</b>	<b>1000000</b>	<b>405522.9375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000227	1000000	4492.56640625		
		<b>External Plating Total:</b>				<b>0.000227</b>	<b>1000000</b>	<b>4492.56640625</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000429	1000000	8482.58496094		
<b>Internal Plating Total:</b>				<b>0.000429</b>	<b>1000000</b>	<b>8482.58496094</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001090	750000	21552.4902344		
		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)		0.000363	250000	7177.57177734		
<b>Die Attach Total:</b>				<b>0.001453</b>	<b>1000000</b>	<b>28730.0605469</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003244	130000	64143.3671875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.021457	860000	424267.65625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000250	10000	4943.23144531		
		<b>Encapsulation Total:</b>				<b>0.024951</b>	<b>1000000</b>	<b>493354.25</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000470	1000000	9293.27539062		
					<b>TOTAL MASS (g) :</b>	<b>0.050574</b>		