

# LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC3877IUK#PBF

(Engineering Calculation)

QFN 7mm X 7mm Exp. Pad

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**TOTAL MASS (g): 0.128354**

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	0.002796	1000000	21783.4960938		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.057847	975000	450683.0625		
		Iron (Fe)	7439-89-6	0.001424	24000	11094.3125		
		Phosphorus (P)	7723-14-0	0.000018	300	140.237091064		
		Zinc (Zn)	7440-66-6	0.000042	700	327.219909668		
		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>0.059331</b>	<b>1000000</b>	<b>462244.84375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002894	1000000	22547.4902344		
		<b>External Plating Total:</b>				<b>0.002894</b>	<b>1000000</b>	<b>22547.4902344</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001274	1000000	9925.66992188		
		<b>Internal Plating Total:</b>				<b>0.001274</b>	<b>1000000</b>	<b>9925.66992188</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001142	750000	8897.26464844		
		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)		0.000381	250000	2968.35180664		
<b>Die Attach Total:</b>				<b>0.001523</b>	<b>1000000</b>	<b>11865.6162109</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.007847	130000	61135.5820312		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.051910	860000	404428.21875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		

		Carbon Black (C)	1333-86-4	0.000604	10000	4705.73339844
		<b>Encapsulation Total:</b>		<b>0.060361</b>	<b>1000000</b>	<b>470269.53125</b>
<b>Bond Wire Estimated</b>	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	<b>0.000175</b>	<b>1000000</b>	<b>1363.4161377</b>
				<b>TOTAL MASS (g):</b>		<b>0.128354</b>