

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc2170iukg-14#pbf

(Engineering Calculation)

QFN 7mm X 8mm Exp. Pad

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**TOTAL MASS (g) : 0.159119**

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	0.003657	1000000	22982.7519531		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.076937	975000	483517.625		
		Iron (Fe)	7439-89-6	0.001894	24000	11903.0166016		
		Phosphorus (P)	7723-14-0	0.000024	300	150.830215454		
		Zinc (Zn)	7440-66-6	0.000055	700	345.652557373		
		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>0.078910</b>	<b>1000000</b>	<b>495917.15625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003848	1000000	24185.21875		
		<b>External Plating Total:</b>				<b>0.003848</b>	<b>1000000</b>	<b>24185.21875</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001694	1000000	10646.0986328		
		<b>Internal Plating Total:</b>				<b>0.001694</b>	<b>1000000</b>	<b>10646.0986328</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001388	750000	8723.01269531		
		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)		0.000463	250000	2909.76611328		
<b>Die Attach Total:</b>				<b>0.001851</b>	<b>1000000</b>	<b>11632.7792969</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.008945	130000	56215.6757812		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.059177	860000	371903.3125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000688	10000	4323.79931641		
		<b>Encapsulation Total:</b>				<b>0.068810</b>	<b>1000000</b>	<b>432442.78125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000349	1000000	2193.32275391		
					<b>TOTAL MASS (g) :</b>	<b>0.159119</b>		