

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc2754iukg-12#pbf

(Engineering Calculation)

QFN 7mm X 8mm Exp. Pad

(printed on: 2020-07-11 18:13:47)

**TOTAL MASS (g) : 0.167196**

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	0.009661	1000000	57782.375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.076937	975000	460159.625		
		Iron (Fe)	7439-89-6	0.001894	24000	11328.0009766		
		Phosphorus (P)	7723-14-0	0.000024	300	143.543838501		
		Zinc (Zn)	7440-66-6	0.000055	700	328.954589844		
		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>471960.15625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003848	1000000	23016.8671875		
		<b>External Plating Total:</b>				<b>0.003848</b>	<b>1000000</b>	<b>23016.8671875</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001694	1000000	10131.8017578		
		<b>Internal Plating Total:</b>				<b>0.001694</b>	<b>1000000</b>	<b>10131.8017578</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.002943	750000	17602.0625		
		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)		0.000981	250000	5867.35400391		
<b>Die Attach Total:</b>				<b>0.003924</b>	<b>1000000</b>	<b>23469.4160156</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.008945	130000	53499.984375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.059177	860000	353937.21875		
		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	4114.92285156		
		<b>Encapsulation Total:</b>				<b>0.068810</b>	<b>1000000</b>	<b>411552.125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000349	1000000	2087.36645508		
					<b>TOTAL MASS (g) :</b>	<b>0.167196</b>		