

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc7851euhh#trpbf

(Engineering Calculation)

QFN 5mm X 9mm Exp. Pad

(printed on: 2020-07-11 22:47:06)

**TOTAL MASS (g) : 0.116295**

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	0.003616	1000000	31093.4023438		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.049823	975000	428419.9375		
		Iron (Fe)	7439-89-6	0.001226	24000	10542.1767578		
		Phosphorus (P)	7723-14-0	0.000015	300	128.982574463		
		Zinc (Zn)	7440-66-6	0.000036	700	309.558197021		
		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>0.051100</b>	<b>1000000</b>	<b>439400.6875</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.002793	1000000	24014.5371094		
		<b>External Plating Total:</b>				<b>0.002793</b>	<b>1000000</b>	<b>24014.5371094</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000138	1000000	1186.63977051		
<b>Internal Plating Total:</b>				<b>0.000138</b>	<b>1000000</b>	<b>1186.63977051</b>		
Die Attach	ELECTRICALLY INSULATING ADHESIVE	Silver (Ag)	7440-22-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.000015	50000	128.982574463		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000092	300000	791.093200684		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000200	650000	1719.7677002		
<b>Die Attach Total:</b>				<b>0.000307</b>	<b>1000000</b>	<b>2639.84350586</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.007554	130000	64955.6289062		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.049975	860000	429727		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000581	10000	4995.92529297		
		<b>Encapsulation Total:</b>				<b>0.058110</b>	<b>1000000</b>	<b>499678.53125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000231	1000000	1986.33178711		
					<b>TOTAL MASS (g) :</b>	<b>0.116295</b>		