

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1tc2662cuh-16#trpbf

(Engineering Calculation)

QFN 5mm X 5mm Exp. Pad

(printed on: 2020-07-11 17:03:24)

**TOTAL MASS (g) : 0.069701**

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	0.005902	1000000	84675.640625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.028382	975000	407194.875		
		Iron (Fe)	7439-89-6	0.000699	24000	10028.5126953		
		Phosphorus (P)	7723-14-0	0.000009	300	129.1224823		
		Zinc (Zn)	7440-66-6	0.000020	700	286.938812256		
		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>0.029110</b>	<b>1000000</b>	<b>417639.4375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001398	1000000	20060.9804688		
		<b>External Plating Total:</b>				<b>0.001398</b>	<b>1000000</b>	<b>20060.9804688</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000635	1000000	9110.30761719		
<b>Internal Plating Total:</b>				<b>0.000635</b>	<b>1000000</b>	<b>9110.30761719</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001964	750000	28177.3945312		
		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)		0.000655	250000	9397.24609375		
<b>Die Attach Total:</b>				<b>0.002619</b>	<b>1000000</b>	<b>37574.6367188</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003888	130000	55780.90625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.025723	860000	369046.375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000299	10000	4289.73535156		
		<b>Encapsulation Total:</b>				<b>0.029910</b>	<b>1000000</b>	<b>429117</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000127	1000000	1822.06164551		
					<b>TOTAL MASS (g) :</b>	<b>0.069701</b>		