

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1tc2956cud-1#trpbf

(Engineering Calculation)

QFN 3mm X 3mm Exp. Pad

(printed on: 2020-07-11 19:38:49)

**TOTAL MASS (g) : 0.023427**

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	0.001155	1000000	49302.5898438		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.008752	975000	373589.84375		
		Iron (Fe)	7439-89-6	0.000215	24000	9177.53808594		
		Phosphorus (P)	7723-14-0	0.000003	300	128.058685303		
		Zinc (Zn)	7440-66-6	0.000006	700	256.117370605		
		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>0.008976</b>	<b>1000000</b>	<b>383151.59375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000413	1000000	17619.21875		
		<b>External Plating Total:</b>				<b>0.000413</b>	<b>1000000</b>	<b>17619.21875</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000203	1000000	8665.3046875		
		<b>Internal Plating Total:</b>				<b>0.000203</b>	<b>1000000</b>	<b>8665.3046875</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000624	750000	26636.2050781		
		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)		0.000208	250000	8878.73535156		
<b>Die Attach Total:</b>				<b>0.000832</b>	<b>1000000</b>	<b>35514.9414062</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001534	130000	65480.671875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.010148	860000	433179.8125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000118	10000	5036.97460938		
		<b>Encapsulation Total:</b>				<b>0.011800</b>	<b>1000000</b>	<b>503697.5</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000048	1000000	2048.93896484		
					<b>TOTAL MASS (g) :</b>	<b>0.023427</b>		