

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1tc2664iuh-12#trpbf

(Engineering Calculation)

QFN 5mm X 5mm Exp. Pad

(printed on: 2020-07-11 17:32:55)

**TOTAL MASS (g) : 0.069933**

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	0.006074	1000000	86854.2265625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.028382	975000	405844		
		Iron (Fe)	7439-89-6	0.000699	24000	9995.2421875		
		Phosphorus (P)	7723-14-0	0.000009	300	128.694107056		
		Zinc (Zn)	7440-66-6	0.000020	700	285.986907959		
		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>416253.9375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001398	1000000	19994.4277344		
		<b>External Plating Total:</b>				<b>0.001398</b>	<b>1000000</b>	<b>19994.4277344</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000635	1000000	9080.08398438		
<b>Internal Plating Total:</b>				<b>0.000635</b>	<b>1000000</b>	<b>9080.08398438</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.002009	750000	28727.3828125		
		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)		0.000670	250000	9580.56054688		
<b>Die Attach Total:</b>				<b>0.002679</b>	<b>1000000</b>	<b>38307.9414062</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.003888	130000	55595.8515625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.025723	860000	367822.0625		
		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	4275.50390625		
		<b>Encapsulation Total:</b>				<b>0.029910</b>	<b>1000000</b>	<b>427693.40625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000127	1000000	1816.01696777		
					<b>TOTAL MASS (g) :</b>	<b>0.069933</b>		