

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t864leudc#trpbf

(Engineering Calculation)

FCOL-QFN 3mm X 4mm Exp.Pad

(printed on: 2020-07-11 19:21:39)

**TOTAL MASS (g) : 0.162312**

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	0.002204	1000000	13578.8046875		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013133	975000	80912.1796875		
		Iron (Fe)	7439-89-6	0.000323	24000	1989.99719238		
		Phosphorus (P)	7723-14-0	0.000004	299.999908447	24.6439285278		
		Zinc (Zn)	7440-66-6	0.000009	700	55.4488449097		
		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>0.013469</b>	<b>1000000</b>	<b>82982.2734375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000626	1000000	3855.35009766		
		<b>External Plating Total:</b>				<b>0.000626</b>	<b>1000000</b>	<b>3855.35009766</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000302	1000000	1860.61669922		
		<b>Internal Plating Total:</b>				<b>0.000302</b>	<b>1000000</b>	<b>1860.61669922</b>
Die Attach	SnAg CAP	Silver (Ag)	7440-22-4	0.000040	25000	246.43927002		
		Tin (Sn)	7440-31-5	0.001571	975000	9678.90332031		
		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)		0.000000	0	0		
<b>Die Attach Total:</b>				<b>0.001611</b>	<b>1000000</b>	<b>9925.34277344</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.018733	130000	115413.6875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.123926	860000	763505.875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.001441	10000	8877.97558594		
		<b>Encapsulation Total:</b>				<b>0.144100</b>	<b>1000000</b>	<b>887797.5625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000000	0	0		
					<b>TOTAL MASS (g) :</b>	<b>0.162312</b>		