

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN 3mm X 5mm Exp. Pad

(printed on: 2020-07-11 20:32:32)

**TOTAL MASS (g) : 0.162513**

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	0.002244	1000000	13808.1455078		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013133	975000	80812.1015625		
		Iron (Fe)	7439-89-6	0.000323	24000	1987.53601074		
		Phosphorus (P)	7723-14-0	0.000004	300	24.6134490967		
		Zinc (Zn)	7440-66-6	0.000009	700	55.3802642822		
		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>82879.640625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000626	1000000	3850.58154297		
		<b>External Plating Total:</b>				<b>0.000626</b>	<b>1000000</b>	<b>3850.58154297</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000302	1000000	1858.31542969		
<b>Internal Plating Total:</b>				<b>0.000302</b>	<b>1000000</b>	<b>1858.31542969</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001000	750000	6153.36230469		
		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)		0.000333	250000	2049.06958008		
<b>Die Attach Total:</b>				<b>0.001333</b>	<b>1000000</b>	<b>8202.43164062</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.018759	130000	115430.914062		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.124098	860000	763619.9375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.001443	10000	8879.30175781		
		<b>Encapsulation Total:</b>				<b>0.144300</b>	<b>1000000</b>	<b>887930.125</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000239	1000000	1470.65356445		
					<b>TOTAL MASS (g) :</b>	<b>0.162513</b>		