

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

QFN MultiPad 7 X 9 X 0.9 mm

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**TOTAL MASS (g) : 0.157592**

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	0.001063	1000000	6745.25195312		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.076937	975000	488202.6875		
		Iron (Fe)	7439-89-6	0.001894	24000	12018.3515625		
		Phosphorus (P)	7723-14-0	0.000024	300	152.291687012		
		Zinc (Zn)	7440-66-6	0.000055	700	349.00177002		
		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>0.078910</b>	<b>1000000</b>	<b>500722.34375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003848	1000000	24419.5605469		
		<b>External Plating Total:</b>				<b>0.003848</b>	<b>1000000</b>	<b>24419.5605469</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001694	1000000	10749.2539062		
<b>Internal Plating Total:</b>				<b>0.001694</b>	<b>1000000</b>	<b>10749.2539062</b>		
Die Attach	95Sn / 5Sb	Silver (Ag)	7440-22-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000989	950000	6275.68603516		
		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	0.000052	50000	329.965301514		
		Resin (EP)		0.000000	0	0		
<b>Die Attach Total:</b>				<b>0.001041</b>	<b>1000000</b>	<b>6605.65185547</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.008945	130000	56760.3828125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.059177	860000	375506.84375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000688	10000	4365.69482422		
		<b>Encapsulation Total:</b>				<b>0.068810</b>	<b>1000000</b>	<b>436632.9375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.002226	1000000	14125.0527344		
					<b>TOTAL MASS (g) :</b>	<b>0.157592</b>		