

LINEAR TECHNOLOGY MATERIALS DECLARATION

(Engineering Calculation)

QFN 5mm X 7mm Exp. Pad

(printed on: 2014-01-19 23:40:03)

TOTAL MASS (g): 0.088269

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	0.001985	1000000	23486.1123812		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.037381	975000	423490.28125		
		Iron (Fe)	7439-89-6	0.000920	24000	10422.703125		
		Phosphorus (P)	7723-14-0	0.000012	300	135.948303223		
		Zinc (Zn)	7440-66-6	0.000027	700	305.883666992		
		Nickel (Ni)	7440-02-0	0.000000	0	0		
		Silicon (Si)	7440-21-3	0.000000	0	0		
		Magnesium (Mg)	7439-96-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		<b>Lead Frame Total:</b>				<b>0.038340</b>	<b>1000000</b>	<b>434354.78125</b>
		Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0
Exter. Plating Sn	7440-31-5			0.001850	1000000	20957.015625		
<b>External Plating Total:</b>						<b>0.001850</b>	<b>1000000</b>	<b>20957.015625</b>
Inter. Plating Ni	7440-02-0			0.000000	0	0		
Inter. Plating Ag	7440-22-4			0.000831	1000000	9414.41992188		
<b>Internal Plating Total:</b>						<b>0.000831</b>	<b>1000000</b>	<b>9414.41992188</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000935	750000	10592.6376953		
		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)		0.000112	250000	3534.65551758		
		<b>Die Attach Total:</b>				<b>0.001147</b>	<b>1000000</b>	<b>14127.2929688</b>
		Encapsulation	MULTIAROMATIC RESIN BOND FREE	Resin (EP)		0.005689	130000	64450.8164062
				Bromine (Br)	40079-09-8	0.000000	0	0
Silica (SiO2)	60676-86-0			0.037634	860000	426356.5		
Antimony Trioxide (Sb2O3)	1309-64-4			0.000000	0	0		
Metal Hydroxide				0.000000	0	0		
Carbon Black (C)	1333-86-4			0.000438	10000	4962.11279297		
<b>Encapsulation Total:</b>						<b>0.043761</b>	<b>1000000</b>	<b>495769.4375</b>
Bond Wire Estimated	AFW/TANAKA/Kn			Gold (Au)	7440-57-5	0.000255	1000000	2888.90112305

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