

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

TO-92

(printed on: 2020-07-11 18:48:36)

**TOTAL MASS (g) : 0.205131**

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	0.001947	1000000	9491.48632812		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.088433	975000	431104.5625		
		Iron (Fe)	7439-89-6	0.002177	24000	10612.7197266		
		Phosphorus (P)	7723-14-0	0.000027	300	131.623077393		
		Zinc (Zn)	7440-66-6	0.000063	700	307.120513916		
		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>0.090700</b>	<b>1000000</b>	<b>442156.03125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.005680	1000000	27690.5683594		
		<b>External Plating Total:</b>				<b>0.005680</b>	<b>1000000</b>	<b>27690.5683594</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000320	1000000	1559.97717285		
<b>Internal Plating Total:</b>				<b>0.000320</b>	<b>1000000</b>	<b>1559.97717285</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000676	750000	3295.4519043		
		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)		0.000225	250000	1096.85900879		
<b>Die Attach Total:</b>				<b>0.000901</b>	<b>1000000</b>	<b>4392.31103516</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.014243	135000	69433.6171875		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.090730	860000	442302.25		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000528	5000	2573.96240234		
		<b>Encapsulation Total:</b>				<b>0.105501</b>	<b>1000000</b>	<b>514309.875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000082	1000000	399.744140625		
					<b>TOTAL MASS (g) :</b>	<b>0.205131</b>		