

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t1990ims8-10#trpbf

(Engineering Calculation)

MSOP

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**TOTAL MASS (g) : 0.027328**

COMPONENT MATERIAL	VENDOR/ INDUSTRY NAMES	CONSTITUENT NAME	CAS NUMBER	CONSTITUENT MASS (g)	CONSTITUENT (PPM) OF MATERIAL	CONSTITUENT (PPM) OF TOTAL PKG.		
<b>Active Device</b>	Linear Technology	Silicon (Si)	7440-21-3	0.002001	1000000	73221.5390625		
<b>Die Coat</b>	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
<b>Lead Frame</b>	A42	Copper (Cu)	7440-50-8	0.000000	0	0		
		Iron (Fe)	7439-89-6	0.006206	580000	227092.890625		
		Phosphorus (P)	7723-14-0	0.000000	0	0		
		Zinc (Zn)	7440-66-6	0.000000	0	0		
		Nickel (Ni)	7440-02-0	0.004494	420000	164446.578125		
		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>0.010700</b>	<b>1000000</b>	<b>391539.46875</b>		
<b>Plating</b>	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000710	1000000	25981.5683594		
		<b>External Plating Total:</b>				<b>0.000710</b>	<b>1000000</b>	<b>25981.5683594</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000086	1000000	3146.95239258		
		<b>Internal Plating Total:</b>				<b>0.000086</b>	<b>1000000</b>	<b>3146.95239258</b>
<b>Die Attach</b>	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000689	750000	25212.2128906		
		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)		0.000230	250000	8416.26855469		
<b>Die Attach Total:</b>				<b>0.000919</b>	<b>1000000</b>	<b>33628.4804688</b>		
<b>Encapsulation</b>	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001659	130000	60706.9101562		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.010591	830000	387550.875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000447	35000	16356.8349609		
		Carbon Black (C)	1333-86-4	0.000064	5000	2341.91821289		
		<b>Encapsulation Total:</b>				<b>0.012761</b>	<b>1000000</b>	<b>466956.53125</b>
<b>Bond Wire Estimated</b>	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000151	1000000	5525.46337891		
					<b>TOTAL MASS (g) :</b>	<b>0.027328</b>		