

# LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC2328HMS-18#PBF

(Engineering Calculation)

MSOP

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**TOTAL MASS (g): 0.037321**

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	0.003058	1000000	81937.7265625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013845	975000	370970.5625		
		Iron (Fe)	7439-89-6	0.000341	24000	9136.94140625		
		Phosphorus (P)	7723-14-0	0.000004	300	107.178192139		
		Zinc (Zn)	7440-66-6	0.000010	700	267.945495605		
		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>0.014200</b>	<b>1000000</b>	<b>380482.625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000710	1000000	19024.7988281		
		<b>External Plating Total:</b>				<b>0.000710</b>	<b>1000000</b>	<b>19024.7988281</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000086	1000000	2304.33105469		
		<b>Internal Plating Total:</b>				<b>0.000086</b>	<b>1000000</b>	<b>2304.33105469</b>
Die Attach	ELECTRICALLY INSULATING ADHESIVE	Silver (Ag)	7440-22-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.000010	50000	267.945495605		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000061	300000	1634.4675293		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000133	650000	3563.67480469		
<b>Die Attach Total:</b>				<b>0.000204</b>	<b>1000000</b>	<b>5466.08789062</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.002439	130000	65351.9023438		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.015571	830000	417217.9375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000657	35000	17604.0195312		

		Carbon Black (C)	1333-86-4	0.000094	5000	2518.68774414
		<b>Encapsulation Total:</b>		<b>0.018761</b>	<b>1000000</b>	<b>502692.53125</b>
<b>Bond Wire Estimated</b>	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	<b>0.000302</b>	<b>1000000</b>	<b>8091.95361328</b>
<b>TOTAL MASS (g):</b>						<b>0.037321</b>