

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t3010ems8e#pbf

(Engineering Calculation)

MSOP-Exposed

(printed on: 2020-07-11 17:43:57)

**TOTAL MASS (g) : 0.027396**

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	0.002103	1000000	76762.9609375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.010433	975000	380821.65625		
		Iron (Fe)	7439-89-6	0.000257	24000	9380.92382812		
		Phosphorus (P)	7723-14-0	0.000003	300	109.504936218		
		Zinc (Zn)	7440-66-6	0.000007	700	255.511520386		
		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>0.010700</b>	<b>1000000</b>	<b>390567.625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000710	1000000	25917.0800781		
		<b>External Plating Total:</b>				<b>0.000710</b>	<b>1000000</b>	<b>25917.0800781</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000086	1000000	3139.14160156		
		<b>Internal Plating Total:</b>				<b>0.000086</b>	<b>1000000</b>	<b>3139.14160156</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000711	750000	25952.6699219		
		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)		0.000237	250000	8650.88964844		
<b>Die Attach Total:</b>				<b>0.000948</b>	<b>1000000</b>	<b>34603.5585938</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001314	103000	47963.1601562		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.011420	895000	416848.8125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000026	2000	949.042785645		
		<b>Encapsulation Total:</b>				<b>0.012760</b>	<b>1000000</b>	<b>465761</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000089	1000000	3248.64648438		
					<b>TOTAL MASS (g) :</b>	<b>0.027396</b>		