

# LINEAR TECHNOLOGY MATERIALS DECLARATION

LT3045EMSE#PBF

(Engineering Calculation)

MSOP-Exposed

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**TOTAL MASS (g): 0.037666**

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	0.002586	1000000	68656.03125		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013845	975000	367572.65625		
		Iron (Fe)	7439-89-6	0.000341	24000	9053.25292969		
		Phosphorus (P)	7723-14-0	0.000004	300	106.196510315		
		Zinc (Zn)	7440-66-6	0.000010	700	265.491241455		
		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>376997.59375</b>
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000710	1000000	18850.5429688		
		<b>External Plating Total:</b>				<b>0.000710</b>	<b>1000000</b>	<b>18850.5429688</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000086	1000000	2283.22485352		
		<b>Internal Plating Total:</b>				<b>0.000086</b>	<b>1000000</b>	<b>2283.22485352</b>
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000823	750000	21849.9296875		
		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)		0.000274	250000	7274.46044922		
		<b>Die Attach Total:</b>				<b>0.001097</b>	<b>1000000</b>	<b>29124.390625</b>
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.001932	103000	51292.9140625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.016790	895000	445759.875		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		

		Carbon Black (C)	1333-86-4	0.000038	2000	1008.86669922
		<b>Encapsulation Total:</b>		<b>0.018760</b>	<b>1000000</b>	<b>498061.59375</b>
<b>Bond Wire Estimated</b>	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	<b>0.000227</b>	<b>1000000</b>	<b>6026.65185547</b>
					<b>TOTAL MASS (g):</b>	<b>0.037666</b>