

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1438ig#pbf

(Engineering Calculation)

SSOP

(printed on: 2020-07-11 21:37:30)

**TOTAL MASS (g) : 0.236699**

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	0.007795	1000000	32932.1289062		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.122431	975000	517243.5625		
		Iron (Fe)	7439-89-6	0.003014	24000	12733.4746094		
		Phosphorus (P)	7723-14-0	0.000038	300	160.541488647		
		Zinc (Zn)	7440-66-6	0.000088	700	371.780273438		
		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>0.125571</b>	<b>1000000</b>	<b>530509.375</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003749	1000000	15838.3955078		
		<b>External Plating Total:</b>				<b>0.003749</b>	<b>1000000</b>	<b>15838.3955078</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001005	1000000	4245.89941406		
<b>Internal Plating Total:</b>				<b>0.001005</b>	<b>1000000</b>	<b>4245.89941406</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001809	750000	7642.61962891		
		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)		0.000603	250000	2547.54003906		
<b>Die Attach Total:</b>				<b>0.002412</b>	<b>1000000</b>	<b>10190.1601562</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.009848	103000	41605.5898438		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.085571	895000	361518.28125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000191	2000	806.932250977		
		<b>Encapsulation Total:</b>				<b>0.095610</b>	<b>1000000</b>	<b>403930.84375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000557	1000000	2353.20019531		
					<b>TOTAL MASS (g) :</b>	<b>0.236699</b>		