

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1414ign#pbf

(Engineering Calculation)

SSOP

(printed on: 2020-07-11 19:18:25)

**TOTAL MASS (g) : 0.171112**

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	0.003625	1000000	21184.9628906		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.064009	975000	374076.78125		
		Iron (Fe)	7439-89-6	0.001576	24000	9210.34570312		
		Phosphorus (P)	7723-14-0	0.000020	300	116.882545471		
		Zinc (Zn)	7440-66-6	0.000046	700	268.829864502		
		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>0.065651</b>	<b>1000000</b>	<b>383672.8125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003749	1000000	21909.234375		
		<b>External Plating Total:</b>				<b>0.003749</b>	<b>1000000</b>	<b>21909.234375</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000525	1000000	3068.16674805		
<b>Internal Plating Total:</b>				<b>0.000525</b>	<b>1000000</b>	<b>3068.16674805</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001046	750000	6112.95800781		
		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)		0.000349	250000	2039.60058594		
<b>Die Attach Total:</b>				<b>0.001395</b>	<b>1000000</b>	<b>8152.55859375</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb Free	Resin (EP)		0.009848	103000	57552.9648438		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.085571	895000	500087.8125		
		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	1116.22827148		
		<b>Encapsulation Total:</b>				<b>0.095610</b>	<b>1000000</b>	<b>558757</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000557	1000000	3255.17895508		
					<b>TOTAL MASS (g) :</b>	<b>0.171112</b>		