

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1421csw-2.5#pbf

(Engineering Calculation)

SOIC WIDE

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**TOTAL MASS (g) : 0.638806**

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	0.004420	1000000	6919.15380859		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.139415	975000	218242.921875		
		Iron (Fe)	7439-89-6	0.003432	24000	5372.51904297		
		Phosphorus (P)	7723-14-0	0.000043	300	67.3130340576		
		Zinc (Zn)	7440-66-6	0.000100	700	156.541931152		
		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>0.142990</b>	<b>1000000</b>	<b>223839.296875</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.007167	1000000	11220.0888672		
		<b>External Plating Total:</b>				<b>0.007167</b>	<b>1000000</b>	<b>11220.0888672</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.001144	1000000	1790.83972168		
<b>Internal Plating Total:</b>				<b>0.001144</b>	<b>1000000</b>	<b>1790.83972168</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001185	750000	1855.02185059		
		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)		0.000395	250000	618.340698242		
<b>Die Attach Total:</b>				<b>0.001580</b>	<b>1000000</b>	<b>2473.36279297</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.049522	103000	77522.703125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.430316	895000	673625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000962	2000	1505.93334961		
		<b>Encapsulation Total:</b>				<b>0.480800</b>	<b>1000000</b>	<b>752653.6875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000705	1000000	1103.62060547		
					<b>TOTAL MASS (g) :</b>	<b>0.638806</b>		