

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1748ifw#trpbf

(Engineering Calculation)

TSSOP 6.1mm WIDTH

(printed on: 2020-07-11 17:45:02)

**TOTAL MASS (g) : 0.179116**

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	0.005747	1000000	32085.3632812		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.065071	975000	363289.84375		
		Iron (Fe)	7439-89-6	0.001602	24000	8943.92675781		
		Phosphorus (P)	7723-14-0	0.000020	300	111.659507751		
		Zinc (Zn)	7440-66-6	0.000047	700	262.399871826		
		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>0.066740</b>	<b>1000000</b>	<b>372607.8125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.004601	1000000	25687.0585938		
		<b>External Plating Total:</b>				<b>0.004601</b>	<b>1000000</b>	<b>25687.0585938</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000600	1000000	3349.78540039		
<b>Internal Plating Total:</b>				<b>0.000600</b>	<b>1000000</b>	<b>3349.78540039</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001428	750000	7972.48925781		
		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)		0.000476	250000	2657.49633789		
<b>Die Attach Total:</b>				<b>0.001904</b>	<b>1000000</b>	<b>10629.9853516</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.015269	155000	85246.4609375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.082748	840000	461980.09375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000493	5000	2752.40722656		
		<b>Encapsulation Total:</b>				<b>0.098510</b>	<b>1000000</b>	<b>549978.9375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.001014	1000000	5661.13720703		
					<b>TOTAL MASS (g) :</b>	<b>0.179116</b>		