

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

ltc1853ifw#pbf

(Engineering Calculation)

TSSOP

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**TOTAL MASS (g) : 0.17923**

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	0.005765	1000000	32165.3828125		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.065071	975000	363058.71875		
		Iron (Fe)	7439-89-6	0.001602	24000	8938.23828125		
		Phosphorus (P)	7723-14-0	0.000020	300	111.588478088		
		Zinc (Zn)	7440-66-6	0.000047	700	262.232971191		
		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>372370.78125</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.004601	1000000	25670.7207031		
		<b>External Plating Total:</b>				<b>0.004601</b>	<b>1000000</b>	<b>25670.7207031</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000600	1000000	3347.65478516		
<b>Internal Plating Total:</b>				<b>0.000600</b>	<b>1000000</b>	<b>3347.65478516</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001500	750000	8369.13671875		
		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)		0.000500	250000	2789.7121582		
<b>Die Attach Total:</b>				<b>0.002000</b>	<b>1000000</b>	<b>11158.8486328</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.015269	155000	85192.234375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.082748	840000	461686.21875		
		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	2750.65625		
		<b>Encapsulation Total:</b>				<b>0.098510</b>	<b>1000000</b>	<b>549629.0625</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.001014	1000000	5657.53662109		
					<b>TOTAL MASS (g) :</b>	<b>0.17923</b>		