

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

1t1019cs8-10#trpbf

(Engineering Calculation)

SOIC

(printed on: 2020-07-11 17:22:21)

**TOTAL MASS (g) : 0.074285**

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	0.002733	1000000	36790.8125		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	A42	Copper (Cu)	7440-50-8	0.000000	0	0		
		Iron (Fe)	7439-89-6	0.014071	580000	189419.515625		
		Phosphorus (P)	7723-14-0	0.000000	0	0		
		Zinc (Zn)	7440-66-6	0.000000	0	0		
		Nickel (Ni)	7440-02-0	0.010189	420000	137161.203125		
		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>0.024260</b>	<b>1000000</b>	<b>326580.71875</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001477	1000000	19880.9296875		
		<b>External Plating Total:</b>				<b>0.001477</b>	<b>1000000</b>	<b>19880.9296875</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000194	1000000	2611.56860352		
<b>Internal Plating Total:</b>				<b>0.000194</b>	<b>1000000</b>	<b>2611.56860352</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000848	750000	11415.5166016		
		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)		0.000283	250000	3809.65966797		
<b>Die Attach Total:</b>				<b>0.001131</b>	<b>1000000</b>	<b>15225.1767578</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.006657	150000	89614.5		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.036392	820000	489898		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.001110	25000	14942.4804688		
		Carbon Black (C)	1333-86-4	0.000222	5000	2988.49633789		
		<b>Encapsulation Total:</b>				<b>0.044381</b>	<b>1000000</b>	<b>597443.4375</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000109	1000000	1467.3248291		
					<b>TOTAL MASS (g) :</b>	<b>0.074285</b>		