

LINEAR TECHNOLOGY MATERIALS DECLARATION

ltc4231cms-2#trpbf

(Engineering Calculation)

MSOP

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TOTAL MASS (g) : 0.036644

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	0.001877	1000000	51222.5390625		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013845	975000	377824.25		
		Iron (Fe)	7439-89-6	0.000341	24000	9305.74707031		
		Phosphorus (P)	7723-14-0	0.000004	300	109.158317566		
		Zinc (Zn)	7440-66-6	0.000010	700	272.895782471		
		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		
Lead Frame Total:				0.014200	1000000	387512.03125		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.000710	1000000	19376.2832031		
		External Plating Total:				0.000710	1000000	19376.2832031
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000086	1000000	2346.90380859		
Internal Plating Total:				0.000086	1000000	2346.90380859		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000657	750000	17929.2539062		
		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)		0.000219	250000	5976.41796875		
Die Attach Total:				0.000876	1000000	23905.671875		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.002439	130000	66559.28125		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.015571	830000	424926.03125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000657	35000	17929.2539062		
		Carbon Black (C)	1333-86-4	0.000094	5000	2565.22070312		
		Encapsulation Total:				0.018761	1000000	511979.8125
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000134	1000000	3656.80395508		
					TOTAL MASS (g) :	0.036644		