

LINEAR TECHNOLOGY MATERIALS DECLARATION

ltc2297iup#trpbf

(Engineering Calculation)

QFN 9mm X 9mm Exp. Pad

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TOTAL MASS (g) : 0.224304

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	0.005263	1000000	23463.6621094		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.104491	975000	465844.90625		
		Iron (Fe)	7439-89-6	0.002572	24000	11466.5673828		
		Phosphorus (P)	7723-14-0	0.000032	300	142.663360596		
		Zinc (Zn)	7440-66-6	0.000075	700	334.367248535		
		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:				0.107170	1000000	477788.46875		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.003192	1000000	14231.8828125		
		External Plating Total:				0.003192	1000000	14231.8828125
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.002279	1000000	10160.3056641		
Internal Plating Total:				0.002279	1000000	10160.3056641		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001823	750000	8127.35302734		
		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)		0.000608	250000	2710.60375977		
Die Attach Total:				0.002431	1000000	10837.9560547		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.013460	130000	60007.7734375		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.089044	860000	396978.625		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.001035	10000	4614.26757812		
		Encapsulation Total:				0.103539	1000000	461600.625
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000430	1000000	1917.03881836		
					TOTAL MASS (g) :	0.224304		