

LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC4228CUFD-1#TRPBF

(Engineering Calculation)

QFN 4mm X 5mm Exp. Pad

(printed on: 2014-01-20 02:45:08)

TOTAL MASS (g): 0.051951

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	0.002678	1000000	70797.1953125		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.019997	975000	384918.90625		
		Iron (Fe)	7439-89-6	0.000492	24000	9470.42578125		
		Phosphorus (P)	7723-14-0	0.000006	300	115.492988586		
		Zinc (Zn)	7440-66-6	0.000014	700	269.483642578		
		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:				0.020599	1000000	394774.28125
		Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0
Exter. Plating Sn	7440-31-5			0.000227	1000000	4373.48779297		
External Plating Total:						0.000227	1000000	4373.48779297
Inter. Plating Ni	7440-02-0			0.000000	0	0		
Inter. Plating Ag	7440-22-4			0.000429	1000000	8257.74902344		
Internal Plating Total:						0.000429	1000000	8257.74902344
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001409	750000	27121.6035156		
		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)		0.000470	250000	9846.95019531		
		Die Attach Total:				0.001879	1000000	36168.5546875
		Encapsulation	MULTIAROMATIC RESIN BOND FREE	Resin (EP)		0.003241	130000	62443.2070312
Bromine (Br)	40093-93-8			0.000000	0	0		
Silica (SiO2)	60676-86-0			0.021457	860000	413022.15625		
Antimony Trioxide (Sb2O3)	1309-64-4			0.000000	0	0		
Metal Hydroxide				0.000000	0	0		
Carbon Black (C)	1333-86-4			0.000250	10000	4812.20800781		
Encapsulation Total:						0.024951	1000000	480277.5625
Bond Wire Estimated	AFW/TANAKA/Kn	Gold (Au)	7440-57-5	0.000278	1000000	5351.17488469		

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0.051951