LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC4219CDHC-12#PBF **(Engineering Calculation)** DFN 5mm X 3mm Exp. Pad

(printed on: 2014-01-20 01:39:04) **TOTAL MASS (g): 0.037968**

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	**0.001489**	**1000000**	**39217.2382812**
Die Coat	Dow Corning	Silicone	69430-27-9	**0.000000**	**0**	**0**
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.017069	974800.0625	449562.8125
		Iron (Fe)	7439-89-6	0.000411	23500	10824.9042969
		Phosporus (P)	7723-14-0	0.000015	850	395.069549561
		Zinc (Zn)	7440-66-6	0.000015	850	395.069549561
		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:		**0.017510**	**1000000**	**461177.84375**
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0
		Exter. Plating Sn	7440-31-5	0.000817	1000000	21518.1757812
		External Plating Total:		**0.000817**	**1000000**	**21518.1757812**
		Inter. Plating Ni	7440-02-0	0.000000	0	0
		Inter. Plating Ag	7440-22-4	0.000391	1000000	10298.1464844
		Internal Plating Total:		**0.000391**	**1000000**	**10298.1464844**
Die Attach	ELECTRICALLY INSULATING ADHESIVE	Silver (Ag)	7440-22-4	0.000000	0	0
		Tin (Sn)	7440-31-5	0.000000	0	0
		Lead (Pb)	7439-92-1	0.000000	0	0
		Silica (SiO2)	60676-86-0	0.000008	50000	210.70375061
		Indium (In)	7440-74-6	0.000000	0	0
		Metal Oxide		0.000049	300000	1290.5604248
		Antimony (Sb)	7440-36-0	0.000000	0	0
		Resin (EP)		0.000107	650000	2818.1628418
		Die Attach Total:		**0.000164**	**1000000**	**4319.42724609**
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.002274	130000	59892.546875
		Bromine (Br)	40039-93-8	0.000000	0	0
		Silica (SiO2)	60676-86-0	0.015041	860000	396149.40625
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0
		Metal Hydroxide		0.000000	0	0
		Carbon Black (C)	1333-86-4	0.000175	10000	4609.14453125
		Encapsulation Total:		**0.017490**	**1000000**	**460651.0625**
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	**0.000107**	**1000000**	**2818.1628418**

TOTAL MASS (g): **0.037968**