LINEAR TECHNOLOGY MATERIALS DECLARATION

ltc2964iudc#pbf **(Engineering Calculation)** **QFN 3mm X 4mm Exp. Pad**

(printed on: 2020-07-11 22:11:38) **TOTAL MASS (g): 0.160603**

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	**0.001540**	**1000000**	**9588.875**
Die Coat	Dow Corning	Silicone	69430-27-9	**0.000000**	**0**	**0**
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013133	975000	81773.1796875
		Iron (Fe)	7439-89-6	0.000323	24000	2011.17321777
		Phosphorus (P)	7723-14-0	0.000004	300	24.906167984
		Zinc (Zn)	7440-66-6	0.000009	700	56.0388832092
		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:		**0.013469**	**1000000**	**83865.296875**
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0
		Exter. Plating Sn	7440-31-5	0.000626	1000000	3896.37548828
		External Plating Total:		**0.000626**	**1000000**	**3896.37548828**
		Inter. Plating Ni	7440-02-0	0.000000	0	0
		Inter. Plating Ag	7440-22-4	0.000302	1000000	1880.41577148
		Internal Plating Total:		**0.000302**	**1000000**	**1880.41577148**
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	49.812335968
		Indium (In)	7440-74-6	0.000000	0	0
		Metal Oxide		0.000050	300000	311.32711792
		Antimony (Sb)	7440-36-0	0.000000	0	0
		Resin (EP)		0.000109	650000	678.693115234
		Die Attach Total:		**0.000167**	**1000000**	**1039.8326416**
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.018759	130000	116803.703125
		Bromine (Br)	40039-93-8	0.000000	0	0
		Silica (SiO2)	60676-86-0	0.124098	860000	772701.4375
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0
		Metal Hydroxide		0.000000	0	0
		Carbon Black (C)	1333-86-4	0.001443	10000	8984.90136719
		Encapsulation Total:		**0.144300**	**1000000**	**898490.0625**
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	**0.000199**	**1000000**	**1239.08190918**
					TOTAL MASS (g):	**0.160603**