

LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC4020IUHF#TRPBF

(Engineering Calculation)

QFN 5mm X 7mm Exp. Pad

(printed on: 2017-12-03 13:29:15)

TOTAL MASS (g): 0.088987

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	0.002526	1000000	28386.2128906		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.037381	975000	420073.28125		
		Iron (Fe)	7439-89-6	0.000920	24000	10338.6054688		
		Phosphorus (P)	7723-14-0	0.000012	300	134.851379395		
		Zinc (Zn)	7440-66-6	0.000027	700	303.415588379		
		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:				0.038340	1000000	430850.125		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001850	1000000	20787.9179688		
		External Plating Total:				0.001850	1000000	20787.9179688
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000831	1000000	9338.45703125		
		Internal Plating Total:				0.000831	1000000	9338.45703125
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001068	750000	12001.7714844		
		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)		0.000356	250000	4000.59057617		
Die Attach Total:				0.001424	1000000	16002.3623047		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.005689	130000	63930.7890625		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.037634	860000	422916.375		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		

		Carbon Black (C)	1333-86-4	0.000438	10000	4922.07470703
		Encapsulation Total:		0.043761	1000000	491769.25
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000255	1000000	2865.59155273
					TOTAL MASS (g):	0.088987