

LINEAR TECHNOLOGY MATERIALS DECLARATION

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(Engineering Calculation)

QFN 5mm X 7mm Exp. Pad

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TOTAL MASS (g) : 0.087409

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	17034.8886719		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.037381	975000	427656.90625		
		Iron (Fe)	7439-89-6	0.000920	24000	10525.25		
		Phosphorus (P)	7723-14-0	0.000012	300	137.285873413		
		Zinc (Zn)	7440-66-6	0.000027	700	308.893188477		
		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	438628.3125		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001850	1000000	21163.2070312		
		External Plating Total:				0.001850	1000000	21163.2070312
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000831	1000000	9507.04589844		
Internal Plating Total:				0.000831	1000000	9507.04589844		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.000740	750000	8465.96191406		
		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)		0.000247	250000	2825.80053711		
Die Attach Total:				0.000987	1000000	11291.7617188		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.005689	130000	65084.9335938		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.037634	860000	430551.34375		
		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	5010.93359375		
		Encapsulation Total:				0.043761	1000000	500647.1875
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000151	1000000	1727.51379395		
					TOTAL MASS (g) :	0.087409		