

LINEAR TECHNOLOGY MATERIALS DECLARATION

LTC2378IMS-20#PBF

(Engineering Calculation)

MSCP

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TOTAL MASS (g): 0.036597

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	0.002351	1000000	64240.1953125		
Die Coat	Dow Corning	Silicone	69130-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.013845	975000	378309.46875		
		Iron (Fe)	7439-89-6	0.000355	25000	9700.2421875		
		Phosphorus (P)	7723-14-0	0.000004	300	109.29850709		
		Zinc (Zn)	7440-66-6	0.000010	700	273.246246338		
		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		
		<b>Lead Frame Total:</b>				<b>0.014214</b>	<b>1001000</b>	<b>388392.21875</b>
Plating	PMI	Enter. Plating Pb	7439-92-1	0.000000	0	0		
		Enter. Plating Sn	7440-31-5	0.000710	1000000	19401.1660156		
		<b>External Plating Total:</b>				<b>0.000710</b>	<b>1000000</b>	<b>19401.1660156</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000086	1000000	2349.91772461		
		<b>Internal Plating Total:</b>				<b>0.000086</b>	<b>1000000</b>	<b>2349.91772461</b>
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	0.000009	50000	245.921630839		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000052	300000	1420.88049316		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000112	650000	3060.3381543		
		<b>Die Attach Total:</b>				<b>0.000173</b>	<b>1000000</b>	<b>4727.16015625</b>
		Encapsulation	MULTIAROMATIC RESIN B/SB-FREE	Resin (EP)		0.002439	130000	66644.7578125
				Bromine (Br)	40039-93-8	0.000000	0	0
Silica (SiO2)	60676-86-0			0.015571	830000	425471.75		
Antimony Trioxide (Sb2O3)	1309-64-4			0.000000	0	0		
Metal Hydroxide				0.000657	35000	17952.2773438		
Carbon Black (C)	1333-86-4			0.000094	5000	2568.51489238		
<b>Encapsulation Total:</b>				<b>0.018761</b>	<b>1000000</b>	<b>512637.3125</b>		
Bond Wire Estimated	APW/TANAKA/Kn	Gold (Au)	7440-57-5	0.000302	1000000	8252.03710938		

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