



MICROCHIP											
Semiconductor Device Type:			Q7C	LFBGA 256 17x17x1.7 SAC305		Package Homogeneous Materials					
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	28.65	(mg) Total	Die	% of Total Weight	3.04	
Silicon	7440-21-3	Die	3.04	28.65	30421		Silicon	7440-21-3	100.00		
COPPER (1)(4)	7440-50-8	Substrate	3.31	31.21	33133		Total 100.00				
COPPER (2)(3)	7440-50-8	Substrate	3.31	31.21	33133						
Nickel Plating	7440-02-0	Substrate	2.45	23.05	24467	436.47	(mg) Total	Substrate	% of Total Weight	46.34	
Gold Plating	7440-57-5	Substrate	0.44	4.15	4402		COPPER (1)(4)	7440-50-8	7.15		
Copper thickness in hole	7440-50-8	Substrate	2.04	19.25	20436		COPPER (2)(3)	7440-50-8	7.15		
Thermosetting resin (Including filler)	Trade Secret	Substrate	9.28	87.42	92809		Nickel Plating	7440-02-0	5.28		
Glass cloth	65997-17-3	Substrate	6.19	58.28	61873		Gold Plating	7440-57-5	0.95		
Cured thermosetting resin (including inorganic filler)	Trade Secret	Substrate	2.38	22.39	23775		Copper thickness in hole	7440-50-8	4.41		
Continuous Filament Fiber Glass	65997-17-3	Substrate	2.38	22.39	23775		Thermosetting resin (Including filler)	Trade Secret	20.03		
Copper foil	7440-50-8	Substrate	2.91	27.45	29143		Glass cloth	65997-17-3	13.35		
Morpholine derivative	Trade Secret	Substrate	0.47	4.39	4658		Cured thermosetting resin (including inorganic filler)	Trade Secret	5.13		
Barium Sulfate	7727-43-7	Substrate	5.36	50.46	53568		Continuous Filament Fiber Glass	65997-17-3	5.13		
Silica	7631-86-9	Substrate	0.12	1.10	1165		Copper foil	7440-50-8	6.29		
Talc	14807-96-6	Substrate	0.47	4.39	4658		Morpholine derivative	Trade Secret	1.01		
Dipropylene Glycol Monomethyl Ether	34590-94-8	Substrate	2.79	26.32	27948		Barium Sulfate	7727-43-7	11.56		
Epoxy Resin	85954-11-6	Substrate	2.45	23.03	24455		Silica	7631-86-9	0.25		
Silver	7440-22-4	Die Attach Epoxy	0.37	3.47	3688		Talc	14807-96-6	1.01		
2,2-dimethyl-1,3-propanediyl bismethacrylate	1985-51-9	Die Attach Epoxy	0.02	0.23	243		Dipropylene Glycol Monomethyl Ether	34590-94-8	6.03		
Epoxy resin	Trade Secret	Die Attach Epoxy	0.02	0.23	243		Epoxy Resin	85954-11-6	5.28		
Methacrylate resin	Trade Secret	Die Attach Epoxy	0.02	0.23	243		Total 100.00				
Epoxy Resin A	Trade Secret	Mold Compound	2.76	25.97	27567						
Epoxy Resin B	Trade Secret	Mold Compound	2.02	19.04	20216	4.16	(mg) Total	Die Attach Epoxy	% of Total Weight	0.44	
Phenol Resin	9003-35-4	Mold Compound	1.10	10.39	11027		Silver	7440-22-4	83.50		
Silica(Amorphous) A	60676-86-0	Mold Compound	24.99	235.42	249945		2,2-dimethyl-1,3-propanediyl bismethacrylate	1985-51-9	5.50		
Silica(Amorphous) B	7631-86-9	Mold Compound	2.76	25.97	27567		Epoxy resin	Trade Secret	5.50		
Metal Hydroxide	Trade Secret	Mold Compound	1.10	10.39	11027		Methacrylate resin	Trade Secret	5.50		
Carbon Black	1333-86-4	Mold Compound	2.02	19.04	20216		Total 100.00				
Copper	7440-50-8	Wire	0.21	2.00	2127						
Palladium	7440-05-3	Wire	0.00	0.03	34	346.21	(mg) Total	Mold Compound	% of Total Weight	36.76	
Gold	7440-57-5	Wire	0.00	0.00	4		Epoxy Resin A	Trade Secret	7.50		
Tin	7440-31-5	Solder Ball	12.74	120.01	127415		Epoxy Resin B	Trade Secret	5.50		
Silver	7440-22-4	Solder Ball	0.40	3.73	3961		Phenol Resin	9003-35-4	3.00		
Copper	7440-50-8	Solder Ball	0.07	0.62	660		Silica(Amorphous) A	60676-86-0	68.00		
941.90 mg Total Mass			TOTALS:	100.00	941.90	1,000,000	Silica(Amorphous) B	7631-86-9	7.50		
							Metal Hydroxide	Trade Secret	3.00		
							Carbon Black	1333-86-4	5.50		
							Total 100.00				
							2.04	(mg) Total	Wire	% of Total Weight	0.22
								Copper	7440-50-8	98.28	
								Palladium	7440-05-3	1.55	
								Gold	7440-57-5	0.18	
							Total 100.00				
							124.37	(mg) Total	Solder Ball	% of Total Weight	13.20
								Tin	7440-31-5	96.50	
								Silver	7440-22-4	3.00	
								Copper	7440-50-8	0.50	
							941.90	Total 100.00		100.00	

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