



 MICROCHIP			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			JEDEC 97 Product Marking and/or Pkg. Labeling e3			
Semiconductor Device Type: MF (A7X) 008 DFN 3x3 mm Matte Tin												
Basic Substance		CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	12.20	(mg) Total	Mold Compound	% of Total Weight	51.24	
Silica, fused		60676-86-0	Mold Compound	46.116	10.976	461,160	Epoxy Resin (NLP # 500-033-5)	Silica, fused	60676-86-0	90.00		
Epoxy Resin (NLP # 500-033-5)		Trade Secret	Mold Compound	2.485	0.591	24,851		Epoxy Resin (NLP # 500-033-5)	Trade Secret	4.85		
Phenolic Resin		Trade Secret	Mold Compound	2.485	0.591	24,851		Phenolic Resin	Trade Secret	4.85		
Carbon Black		1333-86-4	Mold Compound	0.154	0.037	1,537		Carbon Black	1333-86-4	0.30		
Copper		7440-50-8	Lead Frame	38.576	9.181	385,763		Total				100.00
Tin		7440-31-5	Lead Frame	0.099	0.024	990	9.42	(mg) Total	Lead Frame	% of Total Weight	39.6	
Silver		7440-22-4	Lead Frame	0.754	0.180	7,544	Copper	Copper	7440-50-8	97.42		
Zinc		7440-66-6	Lead Frame	0.071	0.017	713		Tin	7440-31-5	0.25		
Chromium		7440-47-3	Lead Frame	0.099	0.024	990		Silver	7440-22-4	1.91		
Silver		7440-22-4	Die Attach	0.733	0.175	7,332		Zinc	7440-66-6	0.18		
Acrylate resins Proprietary		Trade Secret	Die Attach	0.169	0.040	1,692		Chromium	7440-47-3	0.25		
Treated silica		Trade Secret	Die Attach	0.019	0.004	188	Total			100.00	0.22	
Heterocyclic organic compound		Trade Secret	Die Attach	0.019	0.004	188	(mg) Total	Die Attach	% of Total Weight	0.94		
Silicon		7440-21-3	Chip (Die)	3.610	0.859	36,100	Silver	7440-22-4	78.00	Acrylate resins Proprietary		
Gold		7440-57-5	Wire Bond	1.470	0.350	14,700	Acrylate resins Proprietary	Trade Secret	18.00			
Tin		7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	3.140	0.747	31,400	Treated silica	Trade Secret	2.00			
TOTALS:				100.000	23.800	1,000,000	Heterocyclic organic compound	Trade Secret	2.00			
0.0238 g Total Mass						Total			100.00			
This semiconductor device and its homogenous materials comply with EU Directives: 2002/95/EC (27 January 2003) & Directive 2011/65/EU (08 June 2011) and 2015/863/EU (31 March 2015) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (zero)												
Compliance with the above EU Directives has been verified via internal design controls, supplier declarations, and /or analytical test data.												
If a chemical substance is absent from the list above, the chemical substance is NOT an intentional ingredient in the semiconductor device and, to the best of Microchip Technology Incorporated's knowledge and belief as of the date of this document, there is no credible reason to believe that the unavoidable impurity concentration of the chemical substance, if any, is not below the threshold of regulatory concern for any regulatory scheme world-wide.												
Molding compounds used by Microchip meet the UL94 V0 flammability standard for plastics. You can access the UL iQTM family of databases to obtain a test report at http://ul.com/global/eng/pages/offering/industries/chemicals/plastics/												
The protective "tubes" in which the specific product is shipped are made from polyvinyl chloride (PVC) plastic. "Window envelopes" used to hold the packing slip on the outer box and certain "reels" may be made from PVC plastic.												
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Assembled package referenced above is EU REACH compliant based on the latest SVHC candidate list of ECHA which can be found at http://echa.europa.eu/web/guest/candidate-list-table												
						23.800						100.000