




<div> MICROCHIP</div>			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: PT / PF (V3X) 064 TQFP 14x14x1mm Matte Tin										
Basic Substance	CAS Number	Contained in Sub-Component	% Total Weight	mg/part	ppm	289.33	(mg) Total	Mold Compound	% of Total Weight	53.58
Silica, vitreous (or fused)	60676-86-0	Mold Compound	45.543	245.932	455,430		Silica, vitreous (or fused)	60676-86-0	85.00	
Epoxy Resin	Trade Secret	Mold Compound	4.661	25.172	46,615		Epoxy Resin	Trade Secret	8.70	
Phenolic Resin	Trade Secret	Mold Compound	3.215	17.360	32,148		Phenolic Resin	Trade Secret	6.00	
Carbon Black	1333-86-4	Mold Compound	0.161	0.868	1,607		Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	32.381	174.856	323,807		Total			100.00
Tin	7440-31-5	Lead Frame	0.083	0.449	831	179.50	(mg) Total	Lead Frame	% of Total Weight	33.24
Silver	7440-22-4	Lead Frame	0.633	3.419	6,332		Copper	7440-50-8	97.42	
Zinc	7440-66-6	Lead Frame	0.060	0.323	598		Tin	7440-31-5	0.25	
Chromium	7440-47-3	Lead Frame	0.083	0.449	831		Silver	7440-22-4	1.91	
Silver (Ag)	7440-22-4	Die Attach	1.129	6.096	11,288		Zinc	7440-66-6	0.18	
ANHYDRIDE	Trade Secret	Die Attach	0.122	0.661	1,224		Chromium	7440-47-3	0.25	
EPOXY RESIN	Trade Secret	Die Attach	0.109	0.588	1,088		Total			100.00
Silicon	7440-21-3	Chip (Die)	10.540	56.916	105,400	7.34	(mg) Total	Die Attach	% of Total Weight	1.36
Gold	7440-57-5	Wire Bond	0.340	1.836	3,400		Silver (Ag)	7440-22-4	83.00	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	0.940	5.076	9,400		ANHYDRIDE	Trade Secret	9.00	
TOTALS:			100.000	540.000	1,000,000		EPOXY RESIN	Trade Secret	8.00	
0.5400 g Total Mass										
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										
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