



 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: SL (D3X) 014 SOIC .150in.(3.90mm) Matte Tin																													
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	114.27	(mg) Total	Mold Compound	% of Total Weight	79.8																			
Silica, vitreous	60676-86-0	Mold Compound	69.354	99.315	693.542	<table><tr><td>Silica, vitreous</td><td>60676-86-0</td><td>86.91</td></tr><tr><td>Epoxy Resin</td><td>Trade Secret</td><td>7.67</td></tr><tr><td>Phenolic Resin</td><td>Trade Secret</td><td>5.11</td></tr><tr><td>Carbon Black</td><td>1333-86-4</td><td>0.31</td></tr><tr><td colspan="2">Total</td><td>100.00</td></tr></table>	Silica, vitreous	60676-86-0	86.91	Epoxy Resin	Trade Secret	7.67	Phenolic Resin	Trade Secret	5.11	Carbon Black	1333-86-4	0.31	Total		100.00								
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Epoxy Resin	Trade Secret	Mold Compound	6.121	8.765	61.207																								
Phenolic Resin	Trade Secret	Mold Compound	4.078	5.839	40.778																								
Carbon Black	1333-86-4	Mold Compound	0.247	0.354	2.474																								
Copper	7440-50-8	Lead Frame	10.031	14.365	100.314																								
Iron	7439-89-6	Lead Frame	0.247	0.353	2.468	<table><tr><td>Copper</td><td>7440-50-8</td><td>95.54</td></tr><tr><td>Iron</td><td>7439-89-6</td><td>2.35</td></tr><tr><td>Silver</td><td>7440-22-4</td><td>1.91</td></tr><tr><td>Zinc</td><td>7440-66-6</td><td>0.13</td></tr><tr><td>Phosphorous</td><td>7723-14-0</td><td>0.08</td></tr><tr><td colspan="2">Total</td><td>100.00</td></tr></table>	Copper	7440-50-8	95.54	Iron	7439-89-6	2.35	Silver	7440-22-4	1.91	Zinc	7440-66-6	0.13	Phosphorous	7723-14-0	0.08	Total		100.00					
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Silver	7440-22-4	Lead Frame	0.200	0.286	2.000				15.04																				
Zinc	7440-66-6	Lead Frame	0.013	0.019	131																								
Phosphorous	7723-14-0	Lead Frame	0.009	0.012	87																								
Silver (Ag)	7440-22-4	Die Attach	0.563	0.806	5.625																								
Modified Epoxy Resin	13561-08-5	Die Attach	0.105	0.150	1.050	<table><tr><td>Silver (Ag)</td><td>7440-22-4</td><td>75.00</td></tr><tr><td>Modified Epoxy Resin</td><td>13561-08-5</td><td>14.00</td></tr><tr><td>Diglycidylether of bisphenol-F</td><td>54208-63-8</td><td>7.50</td></tr><tr><td>Modified Amine</td><td>827-43-0</td><td>3.50</td></tr><tr><td colspan="2">Total</td><td>100.00</td></tr></table>	Silver (Ag)	7440-22-4	75.00	Modified Epoxy Resin	13561-08-5	14.00	Diglycidylether of bisphenol-F	54208-63-8	7.50	Modified Amine	827-43-0	3.50	Total		100.00								
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Diglycidylether of bisphenol-F	54208-63-8	Die Attach	0.056	0.081	563				1.07																				
Modified Amine	827-43-0	Die Attach	0.026	0.038	263																								
Silicon	7440-21-3	Chip (Die)	7.500	10.740	75.000																								
Doped Gold	7440-57-5	Wire Bond	0.200	0.286	2.000																								
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	1.790	12.500																								
TOTALS:			100.000	143.200	1,000,000																								
0.1432 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 for 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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