



			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			J-STD-609A Product Marking and/or Pkg. Labeling e3				
Semiconductor Device Type: B4X 005 SC-70 MatteTin													
Basic Substance		CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	3.34		(mg) Total	Mold Compound	% of Total Weight	53.04	
Silica, vitreous		60676-86-0	Mold Compound	45.084	2.840	450,840	3.34		Silica, vitreous	60676-86-0	85.00		
Epoxy Resin		Trade Secret	Mold Compound	3.249	0.205	32,487			Epoxy Resin	Trade Secret	6.13		
Phenolic Resin		Trade Secret	Mold Compound	3.249	0.205	32,487			Phenolic Resin	Trade Secret	6.13		
Epoxy, Cresol Novolac		29690-82-2	Mold Compound	1.299	0.082	12,995			Epoxy, Cresol Novolac	29690-82-2	2.45		
Carbon Black		1333-86-4	Mold Compound	0.159	0.010	1,591			Carbon Black	1333-86-4	0.30		
Copper		7440-50-8	Lead Frame	42.275	2.663	422,753			Total				100.00
Iron		7439-89-6	Lead Frame	1.040	0.066	10,399	2.79		(mg) Total	Lead Frame	% of Total Weight	44.25	
Silver		7440-22-4	Lead Frame	0.843	0.053	8,430	2.79		Copper	7440-50-8	95.54		
Zinc		7440-66-6	Lead Frame	0.055	0.003	553			Iron	7439-89-6	2.35		
Phosphorous		7723-14-0	Lead Frame	0.037	0.002	365			Silver	7440-22-4	1.91		
Silver (Ag)		7440-22-4	Die Attach	0.240	0.015	2,400			Zinc	7440-66-6	0.13		
Proprietary Resin		Trade Secret	Die Attach	0.060	0.004	600			Phosphorous		7723-14-0		0.08
Silicon		7440-21-3	Chip (Die)	0.710	0.045	7,100			Total				100.00
Gold		7440-57-5	Wire Bond	0.350	0.022	3,500	0.02		(mg) Total	Die Attach	% of Total Weight	0.3	
Tin		7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.350	0.085	13,500	0.02		Silver (Ag)	7440-22-4	80.00		
						Proprietary Resin			Trade Secret	20.00			
			TOTALS:	100.000	6.300	1,000,000			Total		100.00		
		0.0063 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.													
Microchip Technology Incorporated believes the information in this form concerning substances restricted by RoHS in Microchip Technology Incorporated's semiconductor devices in their original packing materials is true and correct to the best of its knowledge and belief, as of the date listed in this form. Microchip Technology Incorporated cannot guarantee the completeness and accuracy of data in this form because it has been compiled based on the ranges provided in Material Safety Data Sheets provided by raw material suppliers. Supplier information is often protected from disclosure as trade secrets and some information may not have been provided by subcontract assemblers and raw material suppliers. Information is provided only as estimates of the average weight of these parts and the average weight of anticipated significant toxic metals components. These estimates do not include trace levels of dopants, metals, and non-metal materials contained within silicon devices (silicon IC) in the finished parts.													
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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													
							0.04		Total (mg)	Chip (Die)	% of Total Weight	0.71	
									Doped Silicon	7440-21-3	100.00		
									Total		100.00		
							0.02		(mg) Total	Wire Bond	% of Total Weight	0.35	
									Gold	7440-57-5	100.00		
									Total		100.00		
							0.09		(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.35	
									Tin	7440-31-5	100.00		
									Total		100.00		