



MICROCHIP			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials			JEDEC 97 Product Marking and/or Pkg. Labeling e3		
Semiconductor Device Type: SO & OI (N3X) 028 SOIC .300in Matte Tin											
Basic Substance	CAS Number	Contained in Sub-Component	% Total Weight	mg/part	ppm	614.78	(mg) Total	Mold Compound	% of Total Weight	79.8	
Silica, vitreous	60676-86-0	Mold Compound	67.830	522.562	678,300		Silica, vitreous	60676-86-0	85.00		
Epoxy Resin	Trade Secret	Mold Compound	4.888	37.655	48,878		Epoxy Resin	Trade Secret	6.13		
Phenolic Resin	Trade Secret	Mold Compound	4.888	37.655	48,878		Phenolic Resin	Trade Secret	6.13		
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.955	15.062	19,551		Epoxy, Cresol Novolac	29690-82-2	2.45		
Carbon Black	1333-86-4	Mold Compound	0.239	1.844	2,394		Carbon Black	1333-86-4	0.30		
Copper	7440-50-8	Lead Frame	10.031	77.282	100,314		Total 100.00				
Iron	7439-89-6	Lead Frame	0.247	1.901	2,468	80.89	(mg) Total	Lead Frame	% of Total Weight	10.5	
Silver	7440-22-4	Lead Frame	0.200	1.541	2,000		Copper	7440-50-8	95.54		
Zinc	7440-66-6	Lead Frame	0.013	0.101	131		Iron	7439-89-6	2.35		
Phosphorous	7723-14-0	Lead Frame	0.009	0.067	87		Silver	7440-22-4	1.91		
Silver (Ag)	7440-22-4	Die Attach	0.600	4.622	6,000		Zinc	7440-66-6	0.13		
Acrylate Urethane Oligomer	General	Die Attach	0.150	1.156	1,500		Phosphorous	7723-14-0	0.08		
Silicon	7440-21-3	Chip (Die)	7.500	57.780	75,000		Total 100.00				
Copper	7440-50-8	Wire Bond palladium coated copper (CuPd)	0.197	1.514	1,965	5.78	(mg) Total	Die Attach	% of Total Weight	0.75	
Palladium	7440-05-3	Wire Bond palladium coated copper (CuPd)	0.004	0.027	35		Silver (Ag)	7440-22-4	80.00		
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	9.630	12,500		Acrylate Urethane Oligomer	General	20.00		
TOTALS:			100.000	770.400	1,000,000	Total 100.00					
0.7704 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/offerings/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											
							9.63	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.25
								Tin	7440-31-5	100.00	
								Total 100.00			
770.400							100.000				