



Semiconductor Device Type: SO & OI (N3X) 028 SOIC .300in Matte Tin			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials			JEDEC 97 Product Marking and/or Pkg. Labeling e3				
Basic Substance	CAS Number	Contained in Sub-Component	% Total Weight	mg/part	ppm	(mg) Total	Mold Compound	% of Total Weight					
Silica, vitreous	60676-86-0	Mold Compound	67.830	522.562	678.300	614.78	60676-86-0	85.00	79.8				
Epoxy Resin	Trade Secret	Mold Compound	4.888	37.655	48.878			6.13					
Phenolic Resin	Trade Secret	Mold Compound	4.888	37.655	48.878			6.13					
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.955	15.062	19.551			2.45					
Carbon Black	1333-86-4	Mold Compound	0.239	1.844	2.394			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	Lead Frame	% of Total Weight	10.5				
Silver	7440-22-4	Lead Frame	0.200	1.541	2.000					95.54			
Zinc	7440-66-6	Lead Frame	0.013	0.101	131					2.35			
Phosphorous	7723-14-0	Lead Frame	0.009	0.067	87					1.91			
Silver (Ag)	7440-22-4	Die Attach	0.600	4.622	6,000					0.13			
Acrylate Urethane Oligomer	General	Die Attach	0.150	1.156	1,500					0.08			
Silicon	7440-21-3	Chip (Die)	7.500	57.780	75,000	5.78	Die Attach	% of Total Weight	0.75				
Copper	7440-50-8	Wire Bond palladium coated copper (CuPd)	0.197	1.514	1,965					80.00			
Palladium	7440-05-3	Wire Bond palladium coated copper (CuPd)	0.004	0.027	35					20.00			
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	9.630	12,500					Total	100.00		
0.7704 g Total Mass			TOTALS:	100.000	770.400					1,000,000			
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													
						57.78	Total (mg)	Chip (Die)	% of Total Weight	7.5			
							Doped Silicon	7440-21-3	100.00				
							Total		100.00				
						1.54	(mg) Total	Wire Bond palladium coated copper (CuPd)	% of Total Weight	0.2			
							Copper	7440-50-8	98.25				
							Palladium	7440-05-3	1.75				
							Total		100.00				
						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			