



 MICROCHIP			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 e4
Semiconductor Device Type: MNXIA (PEA) 032 VQFN 5x5x0.9mm NiPdAu									
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	35.09 (mg) Total	Mold Compound	% of Total Weight	54.74
Silica, fused	60676-86-0	Mold Compound	49.266	31.580	492,660	Silica, fused	60676-86-0	90.00	
Epoxy Resin	Trade Secret	Mold Compound	2.655	1.702	26,549	Epoxy Resin	Trade Secret	4.85	
Phenolic Resin	Trade Secret	Mold Compound	2.655	1.702	26,549	Phenolic Resin	Trade Secret	4.85	
Carbon Black	1333-86-4	Mold Compound	0.164	0.105	1,642	Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	41.925	26.874	419,250	Total 100.00			
Iron	7439-89-6	Lead Frame	0.976	0.626	9,761	27.56 (mg) Total	Lead Frame	% of Total Weight	43.00
Zinc	7440-66-6	Lead Frame	0.052	0.033	516	Copper	7440-50-8	97.50	
Phosphorous	7723-14-0	Lead Frame	0.047	0.030	473	Iron	7439-89-6	2.27	
Silver	7440-22-4	Die Attach	0.131	0.084	1,309	Zinc	7440-66-6	0.12	
Acrylic Resin	Trade secret	Die Attach	0.014	0.009	145	Phosphorous	7723-14-0	0.11	
Epoxy Resin	Trade secret	Die Attach	0.004	0.003	43	Total 100.00			
Acrylated EP-Resin	Trade secret	Die Attach	0.009	0.006	94	0.11 (mg) Total	Die Attach	% of Total Weight	0.17
Polybutadiene derivative & Copolymer	9003-17-2	Die Attach	0.011	0.007	111	Silver	7440-22-4	77.00	
Silicon	7440-21-3	Chip (Die)	1.000	0.641	10,000	Acrylic Resin	Trade secret	8.50	
Gold	7440-57-5	Wire Bond	0.490	0.314	4,900	Epoxy Resin	Trade secret	2.50	
Nickel	7440-02-0	Plating on external leads (pins)	0.570	0.365	5,700	Acrylated EP-Resin	Trade secret	5.50	
Palladium	7440-05-3	Plating on external leads (pins)	0.021	0.013	210	Polybutadiene derivative & Copolymer	9003-17-2	6.50	
Gold	7440-57-5	Plating on external leads (pins)	0.009	0.006	90	Total 100.00			
TOTALS:			100.000	64.100	1,000,000	0.64 Total (mg)	Chip (Die)	% of Total Weight	1.00
0.0641 g Total Mass						Doped Silicon		7440-21-3	100.00
						Total 100.00			
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									
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