



Semiconductor Device Type: AIA (9QX) 010 VDFN 3x3x0.9 NiPdAu				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 e4
Basic Substance	CAS Number	Contained in Sub-Component	% Total Weight	mg/part	ppm	(mg) Total	Mold Compound	% of Total Weight		
Silica, fused	60676-86-0	Mold Compound	42.204	11.690	422.035	13.56	Silica, fused	60676-86-0	86.20	
Epoxy Resin	Trade Secret	Mold Compound	2.938	0.814	29.376		Epoxy Resin	Trade Secret	6.00	
Phenolic Resin A	Trade Secret	Mold Compound	2.938	0.814	29.376		Phenolic Resin A	Trade Secret	6.00	
Aluminium hydroxide	21645-51-2	Mold Compound	0.734	0.203	7.344		Aluminium hydroxide	21645-51-2	1.50	
Carbon Black	1333-86-4	Mold Compound	0.147	0.041	1.469		Carbon Black	1333-86-4	0.30	
			Total				100.00			
Copper	7440-50-8	Lead Frame	37.993	10.524	379.928	10.81	Copper	7440-50-8	97.34	
Iron	7439-89-6	Lead Frame	0.917	0.254	9.172		Iron	7439-89-6	2.35	
Zinc	7440-66-6	Lead Frame	0.049	0.014	488		Zinc	7440-66-6	0.13	
Silver	7440-22-4	Lead Frame	0.039	0.011	390		Silver	7440-22-4	0.10	
Phosphorus	7723-14-0	Lead Frame	0.032	0.009	322		Phosphorus	7723-14-0	0.08	
			Total			100.00				
Silver	7440-22-4	Die Attach	0.477	0.132	4,774	0.17	Silver	7440-22-4	77.00	
Epoxy resin	Trade Secret	Die Attach	0.124	0.034	1,240		Epoxy resin	Trade Secret	20.00	
Metal oxide	Trade Secret	Die Attach	0.019	0.005	186		Metal oxide	Trade Secret	3.00	
Silicon	7440-21-3	Chip (Die)	9.110	2.523	91,100		Total		100.00	
Doped Gold	7440-57-5	Wire Bond	0.080	0.022	800				0.62	
Nickel	7440-02-0	Plating on external leads (pins)	1.980	0.548	19,800				2.52	
Palladium	7440-05-3	Plating on external leads (pins)	0.110	0.030	1,100					
Gold	7440-57-5	Plating on external leads (pins)	0.110	0.030	1,100					
TOTALS:			100.000	27.700	1,000,000					
0.0277 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)						Doped Silicon		7440-21-3	100.00	
Compliance with the above EU Directives has been verified via internal design controls, supplier declarations, and /or analytical test data.						Total		100.00		
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.						0.02 (mg) Total		Wire Bond	% of Total Weight	0.08
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/						Doped Gold		7440-57-5	100.00	
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.						Total		100.00		
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.						0.61 (mg) Total		Plating on external leads (pins)	% of Total Weight	2.2
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Microchip disclaims any duty to notify users of updates or changes to Material Content Declarations and shall not be liable for any damages, direct or indirect, consequential or otherwise, suffered by users or third parties as a result of the users' reliance on the information in Material Content Declarations (MCD) or independent third party test reports (SGS) or of this Certificate of Compliance for semiconductor products.						Palladium		7440-05-3	5.00	
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						Gold		7440-57-5	5.00	
						Total		100.00		
						27.70		100.00		