



Semiconductor Device Type: P and PA (C4X) 008 PDIP .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	388.63	(mg) Total	Mold Compound	% of Total Weight	79.85	
Fused Silica	60676-86-0	Mold Compound	57.492	279.814	574,920		Fused Silica	60676-86-0	72.00		
Metal Hydro Oxide	Trade Secret	Mold Compound	8.784	42.749	87,835		Metal Hydro Oxide	Trade Secret	11.00		
Epoxy Resin	Trade Secret	Mold Compound	5.590	27.204	55,895		Epoxy Resin	Trade Secret	7.00		
Phenol Resin	Trade Secret	Mold Compound	5.590	27.204	55,895		Phenol Resin	Trade Secret	7.00		
SiO2	14808-60-7	Mold Compound	1.996	9.716	19,963		SiO2	14808-60-7	2.50		
Carbon Black	1333-86-4	Mold Compound	0.399	1.943	3,993		Carbon Black	1333-86-4	0.50		
Copper	7440-50-8	Lead Frame	9.984	48.591	99,837		<b>Total 100.00</b>				
Iron	7439-89-6	Lead Frame	0.246	1.195	2,456	50.86	(mg) Total	Lead Frame	% of Total Weight	10.45	
Silver	7440-22-4	Lead Frame	0.199	0.969	1,991		Copper	7440-50-8	95.54		
Zinc	7440-66-6	Lead Frame	0.013	0.064	131		Iron	7439-89-6	2.35		
Phosphorous	7723-14-0	Lead Frame	0.009	0.042	86		Silver	7440-22-4	1.91		
Silver	7440-22-4	Die Attach	0.558	2.714	5,577		Zinc	7440-66-6	0.13		
Solid Epoxy Resin	Trade Secret	Die Attach	0.142	0.691	1,421		Phosphorous	7723-14-0	0.08		
Phenolic Resin	Trade secret	Die Attach	0.050	0.245	503		<b>Total 100.00</b>				
Silicon	7440-21-3	Chip (Die)	7.500	36.503	75,000	3.65	(mg) Total	Die Attach	% of Total Weight	0.75	
Copper	7440-50-8	Wire Bond Copper palladium coated (CuPd)	0.197	0.956	1,965		Silver	7440-22-4	74.36		
Palladium	7440-05-3	Wire Bond Copper palladium coated (CuPd)	0.004	0.017	35		Solid Epoxy Resin	Trade Secret	18.94		
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	6.084	12,500		Phenolic Resin	Trade Secret	6.70		
<b>TOTALS: 100.000 486.700 1,000,000</b>							<b>Total 100.00</b>				
<b>0.4867 g Total Mass</b>							35.50	Total (mg)	Chip (Die)	% of Total Weight	7.5
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.							<b>Total 100.00</b>				
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.							0.97	(mg) Total	Wire Bond Copper palladium coated (CuPd)	% of Total Weight	0.2
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 <a href="http://ul.com/global/eng/pages/offering/industries/chemicals/plastics/">http://ul.com/global/eng/pages/offering/industries/chemicals/plastics/</a>							Copper	7440-50-8	98.25		
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.							Palladium	7440-05-3	1.75		
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.							<b>Total 100.00</b>				
Microchip Technology Incorporated does not provide any warranty, express or implied, with respect to the information provided in this declaration. The exclusive, limited product warranties provided by Microchip Technology Incorporated and its subsidiaries are contained in Microchip's standard terms and conditions of sale. These are provided in Microchip's quotations, sales order acknowledgement, and invoices.							6.08	(mg) Total	Plating on external leads (pins) - Matte Tin/ annealed at 150°C for 1 hour	% of Total Weight	1.25
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.							Tin	7440-31-5	100.00		
Assembled package referenced above is EU REACH compliant based on the latest SVHC candidate list of ECHA which can be found at <a href="http://echa.europa.eu/web/guest/candidate-list-table">http://echa.europa.eu/web/guest/candidate-list-table</a>							<b>Total 100.00</b>				
						486.700				100.000	