



			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 e3	
Semiconductor Device Type: (Q6A) 064_VQFN 8x8x0.9mm MatteTin										
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm	90.05	(mg) Total	Mold Compound	% of Total Weight	50.73
Silica Fused	60676-86-0	Mold Compound	44.779	79.483	447,794		Silica Fused	60676-86-0	88.27	
Epoxy Resin	Trade Secret	Mold Compound	3.166	5.619	31,656		Epoxy Resin	Trade Secret	6.24	
Phenol Resin	Trade Secret	Mold Compound	2.633	4.673	26,329		Phenol Resin	Trade Secret	5.19	
Carbon Black	1333-86-4	Mold Compound	0.152	0.270	1,522		Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	42.849	76.056	428,486		Total			100.00
Iron	7439-89-6	Lead Frame	1.054	1.871	10,540	79.61	(mg) Total	Lead Frame	% of Total Weight	44.85
Silver	7440-22-4	Lead Frame	0.854	1.517	8,544		Copper	7440-50-8	95.54	
Zinc	7440-66-6	Lead Frame	0.056	0.100	561		Iron	7439-89-6	2.35	
Phosphorous	7723-14-0	Lead Frame	0.037	0.066	370		Silver	7440-22-4	1.91	
Silver	7440-22-4	Die Attach	0.200	0.355	2,002		Zinc	7440-66-6	0.13	
Acrylic Resin	Trade secret	Die Attach	0.036	0.065	364		Phosphorous	7723-14-0	0.08	
Epoxy Resin	Trade secret	Die Attach	0.023	0.042	234		Total			100.00
Silicon	7440-21-3	Chip (Die)	1.810	3.213	18,100	0.46	(mg) Total	Die Attach	% of Total Weight	0.26
Gold	7440-57-5	Wire Bond	0.510	0.905	5,100		Silver	7440-22-4	77.00	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.840	3.266	18,400		Acrylic Resin	Trade secret	14.00	
		TOTALS:	100.000	177.500	1,000,000		Epoxy Resin	Trade secret	9.00	
	0.1775 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)						3.21	Total (mg)	Chip (Die)	% of Total Weight	1.81
							Doped Silicon	7440-21-3	100.00	
						Total 100.00				
Compliance with the above EU Directives has been verified via internal design controls, supplier declarations, and /or analytical test data.						0.91	(mg) Total	Wire Bond	% of Total Weight	0.51
							Gold	7440-57-5	100.00	
						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.						3.27	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.84
							Tin	7440-31-5	100.00	
						Total 100.00				
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/offers/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.										
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.										
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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										

177.50

100.00