



Semiconductor Device Type: ABZJ (RTX) 056 VQFN 8x8x0.9 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	74.48	(mg) Total	Mold Compound	% of Total Weight	40.82
Silica, vitreous (or fused)	60676-86-0	Mold Compound	34.697	63.308	346,970		Silica, vitreous (or fused)	60676-86-0	85.00	
Epoxy Resin	Trade Secret	Mold Compound	3.551	6.480	35,513		Epoxy Resin	Trade Secret	8.70	
Phenolic Resin	Trade Secret	Mold Compound	2.449	4.469	24,492		Phenolic Resin	Trade Secret	6.00	
Carbon Black	1333-86-4	Mold Compound	0.122	0.223	1,225		Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	50.558	92.249	505,584		Total 100.00			
Iron	7439-89-6	Lead Frame	1.244	2.269	12,436	96.56	(mg) Total	Lead Frame	% of Total Weight	52.92
Silver	7440-22-4	Lead Frame	1.008	1.839	10,081		Copper	7440-50-8	95.54	
Zinc	7440-66-6	Lead Frame	0.066	0.121	662		Iron	7439-89-6	2.35	
Phosphorous	7723-14-0	Lead Frame	0.044	0.080	437		Silver	7440-22-4	1.91	
Silver	7440-22-4	Die Attach	0.120	0.219	1,200		Zinc	7440-66-6	0.13	
Epoxy resin	Trade Secret	Die Attach	0.030	0.055	300		Phosphorous	7723-14-0	0.08	
Silicon	7440-21-3	Chip (Die)	2.500	4.562	25,000		Total 100.00			
Copper	7440-50-8	Wire Bond palladium coated copper (CuPd)	1.857	3.388	18,569	0.27	(mg) Total	Die Attach	% of Total Weight	0.15
Palladium	7440-05-3	Wire Bond palladium coated copper (CuPd)	0.033	0.060	331		Silver	7440-22-4	80.00	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.720	3.138	17,200		Epoxy resin	Trade Secret	20.00	
TOTALS: 100.000 182.460 1,000,000							Total 100.00			
0.18246 g Total Mass						4.56	Total (mg)	Chip (Die)	% of Total Weight	2.5
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.							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.						3.45	(mg) Total	Wire Bond palladium coated copper (CuPd)	% of Total Weight	1.89
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/							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.							Total 100.00			
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.						3.14	(mg) Total	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	% of Total Weight	1.72
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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							Total 100.00			
						182.460				100.000