



Semiconductor Device Type: PT (V2X) 064 TQFP 10x10x1mm 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	228.79	(mg) Total	Mold Compound	% of Total Weight	79.8
Silica, vitreous	60676-86-0	Mold Compound	69.354	198.838	693,542		Silica, vitreous	60676-86-0	86.91	
Epoxy Resin	Trade Secret	Mold Compound	6.121	17.548	61,207		Epoxy Resin	Trade Secret	7.67	
Phenolic Resin	Trade Secret	Mold Compound	4.078	11.691	40,778		Phenolic Resin	Trade Secret	5.11	
Carbon Black	1333-86-4	Mold Compound	0.247	0.709	2,474		Carbon Black	1333-86-4	0.31	
Copper	7440-50-8	Lead Frame	10.000	28.671	100,003		Total			100.00
Nickel	7440-02-0	Lead Frame	0.267	0.765	2,667	30.10	(mg) Total	Lead Frame	% of Total Weight	10.5
Silver	7440-22-4	Lead Frame	0.175	0.502	1,752		Copper	7440-50-8	95.24	
Silicon	7440-21-3	Lead Frame	0.047	0.135	473		Nickel	7440-02-0	2.54	
Magnesium	7439-95-4	Lead Frame	0.011	0.030	105		Silver	7440-22-4	1.67	
Silver (Ag)	7440-22-4	Die Attach	0.600	1.720	6,000		Silicon	7440-21-3	0.45	
Acrylate Urethane Oligomer	General	Die Attach	0.150	0.430	1,500		Magnesium	7439-95-4	0.10	
Silicon	7440-21-3	Chip (Die)	7.500	21.503	75,000		Total			100.00
Copper	7440-50-8	Wire Bond palladium coated copper (CuPd)	0.197	0.563	1,965	2.15	(mg) Total	Die Attach	% of Total Weight	0.75
Palladium	7440-05-3	Wire Bond palladium coated copper (CuPd)	0.004	0.010	35		Silver (Ag)	7440-22-4	80.00	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	3.584	12,500		Acrylate Urethane Oligomer	General	20.00	
TOTALS:						100.000	286.700	1,000,000		
0.2867 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)										
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/										
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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										
							286.700	Total		100.00