



Semiconductor Device Type: UKX 016 QFN 5x5x0.9mm Matte Tin			Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials			J-STD-609A Product Marking and/or Pkg. Labeling e3	
Basic Substance	CAS Number	Contained in Sub-Component	% Total Weight	mg/part	ppm	(mg) Total	Mold Compound	% of Total Weight		
Silica, vitreous (or fused)	60676-86-0	Mold Compound	31.450	17.109	314,500	20.13	Silica, vitreous (or fused) Epoxy Resin Phenolic Resin Carbon Black	60676-86-0 Trade Secret Trade Secret 1333-86-4	85.00 8.70 6.00 0.30	37.00
Epoxy Resin	Trade Secret	Mold Compound	3.219	1.751	32,190					
Phenolic Resin	Trade Secret	Mold Compound	2.220	1.208	22,200					
Carbon Black	1333-86-4	Mold Compound	0.111	0.060	1,110					
Copper	7440-50-8	Lead Frame	51.922	28.246	519,222					
Silver	7440-22-4	Lead Frame	1.015	0.552	10,154	29.00	Lead Frame	Total	100.00	53.30
Tin	7440-31-5	Lead Frame	0.133	0.072	1,333					
Chromium	7440-47-3	Lead Frame	0.133	0.072	1,333					
Zinc	7440-66-6	Lead Frame	0.096	0.052	959					
Silver	7440-22-4	Die Attach	3.183	1.732	31,834					
(Octahydro-4,7-methano-1H-indenediyl)bis(methylene) diacrylate	42594-17-2	Die Attach	0.219	0.119	2,189	2.09	Die Attach	Total	100.00	3.84
Methacrylic acid, isobornyl ester	7534-94-3	Die Attach	0.219	0.119	2,189					
Exo-1,7,7-Trimethylbicyclo[2.2.1]hept-2-yl acrylate	5888-33-5	Die Attach	0.000	0.000	0					
0.00	0	Die Attach	0.000	0.000	0					
0.00	0	Die Attach	0.000	0.000	0					
Silicon	7440-21-3	Dual Chip (Die)	2.410	1.311	24,100	1.31	Dual Chip (Die)	Total	100.00	2.41
Copper	7440-50-8	Wire Bond Copper palladium coated (CuPdAu)	0.685	0.373	6,853					
Palladium	7440-05-3	Wire Bond Copper palladium coated (CuPdAu)	0.014	0.008	140					
Gold	7440-57-5	Wire Bond Copper palladium coated (CuPdAu)	0.001	0.000	7					
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	2.750	1.496	27,500					
TOTALS:			100.000	54.400	1,000,000					
0.0544 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 2000/53/EC and 2016/774/EU (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/offering/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.										
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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										
						54.400			100.000	

(mg) Total	Lead Frame	% of Total Weight	
20.13			37.00
29.00			53.30
2.09			3.84
1.31			2.41
0.38			0.70
1.50			2.75
54.400			100.000