Semiconductor Device Type: JQC 064 LFBGA 9x9x1.72mm SAC305			Termination Base Alloy: Copper Alloy (Cu)		
Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm
Silica(Amorphous) A	60676-86-0	Mold Compound	42.198	132.291	421,981
Silica(Amorphous) B	7631-86-9	Mold Compound	5.626	17.639	56,264
Epoxy Resin	Trade Secret	Mold Compound	4.534	14.213	45,336
Phenol Resin	9003-35-4	Mold Compound	1.687	5.288	16,868
Aluminium and its compounds	1332-58-7	Mold Compound	1.687	5.288	16,868
Carbon Black	1333-86-4	Mold Compound	0.308	0.966	3,082
Copper	7440-50-8	Lead Frame	10.993	34.462	109,926
Glass fibers	65997-17-3	Lead Frame	6.553	20.543	65,527
Phenol, polymer	9003-36-5	Lead Frame	6.553	20.543	65,527
Silica, chemically prepared	7631-86-9	Lead Frame	2.450	7.679	24,496
Nickel	7440-02-0	Lead Frame	1.194	3.744	11,942
Barite	7727-43-7	Lead Frame	0.766	2.400	7,655
Magnesium silicate	14807-96-6	Lead Frame	0.612	1.920	6,124
Araldite GY 250	25068-38-6	Lead Frame	0.612	1.920	6,124
(2-Methoxymethylethoxy)propanol	34590-94-8	Lead Frame	0.245	0.768	2,450
Bisphenol A	80-05-7	Lead Frame	0.459	1.440	4,593
Aluminium-hydroxide-oxide	24623-77-6	Lead Frame	0.153	0.480	1,531
Gold	7440-57-5	Lead Frame	0.031	0.096	306
Silicon	7440-21-3	Die Attach	0.525	1.646	5,250
Silver	7440-22-4	Die Attach	0.180	0.564	1,800
Epoxy Resin	Trade secret	Die Attach	0.045	0.141	450
Silicon	7440-21-3	Chip (Die)	5.190	16.271	51,900
Copper (Cu)	7440-50-8	Wire Bond	0.175	0.549	1,751
Palladium	7440-05-3	Wire Bond	0.005	0.015	49
Tin	7440-31-5	Plating on external leads (pins)	6.967	21.842	69,673
Silver	7440-22-4	Plating on external leads (pins)	0.217	0.679	2,166
Copper	7440-50-8	Plating on external leads (pins)	0.036	0.113	361
		TOTALS:	100.000	313.500	1,000,000

0.3135 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://iq.ul.com/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

Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)				JEDEC 97 Product Marking and/or Pkg. Labeling e1
175.69	(mg) Total	Mold Compound	% ot Total Weight	56.04
	Silica(Amorphous) A	60676-86-0	75.30	
	Silica(Amorphous) B	7631-86-9	10.04	
	Epoxy Resin	Trade Secret	8.09	
	Phenol Resin	9003-35-4	3.01	
	Aluminium and its compounds	1332-58-7	3.01	
	Carbon Black	1333-86-4	0.55	
		Total	100.00	
95.99	(mg) Total	Lead Frame	% of Total Weight	30.62
	Copper	7440-50-8	35.90	
	Glass fibers	65997-17-3	21.40	
	Phenol, polymer	9003-36-5	21.40	
	Silica, chemically prepared	7631-86-9	8.00	
	Nickel	7440-02-0	3.90	
	Barite	7727-43-7	2.50	
	Magnesium silicate	14807-96-6	2.00	
	Araldite GY 250	25068-38-6	2.00	
	(2-Methoxymethylethoxy)propanol	34590-94-8	0.80	
	Bisphenol A	80-05-7	1.50	
	Aluminium-hydroxide-oxide	24623-77-6	0.50	
	Gold	7440-57-5	0.10	
		Total	100.00	
2.35	(mg) Total	Die Attach	% of Total Weight	0.75
	Silicon	7440-21-3	70.00	
	Silver	7440-22-4	24.00	
	Epoxy Resin	Trade secret	6.00	
		Total	100.00	
16.27	(mg) Total	Chip (Die)	% of Total Weight	5.19
	Doped Silicon	7440-21-3	100.00	
		Total	100.00	
0.56	(mg) Total	Wire Bond	% of Total Weight	0.18
	Copper (Cu)	7440-50-8	97.30	
	Palladium	7440-05-3	2.70	
		Total	100.00	
22.63	(mg) Total	Plating on external leads (pins)	% of Total Weight	7.22
	Tin	7440-31-5	96.50	
	Silver	7440-22-4	3.00	
	Copper	7440-50-8	0.50	
		Total	100.00	
313.50				100.00