

Material Composition Declaration Sheet <MCD>



MCHP Package Code : **AYC**
Package Type : **80 TQFP 10x10x1.0mm Matte Tin**

Material Name	Material Type/Grade	Material Weight (mg)	Material Percentage (%)	Chemical Ingredient	CAS No.	% Chemical in Material	% Chemical in Product	Chemical Mass in Product (mg)	PPM
Die	Silicon Die	3.00	1.11	Silicon	7440-21-3	100.0000	1.1088	3.0000	11088
Mold Compound	Epoxy	169.93	62.81	Epoxy Resins	25928-94-3	16.0944	10.1082	27.3490	101082
				Silica	60676-86-0	83.9056	52.6977	142.5800	526977
Die Attach	Epoxy	2.23	0.82	Epoxy Resins	25928-94-3	20.0090	0.1648	0.4460	1648
				Silver	7440-22-4	69.9865	0.5766	1.5600	5766
				Anhydride	Proprietary	10.0045	0.0824	0.2230	824
IC frame	Copper Alloy	86.17	31.85	Copper	7440-50-8	97.5061	31.0539	84.0200	310539
				Iron	7439-89-6	2.3442	0.7466	2.0200	7466
				Phosphorous	7723-14-0	0.0302	0.0096	0.02600	96
				Zinc	7440-66-6	0.1195	0.0381	0.1030	381
	Plating	0.50	0.18	Silver	7440-22-4	100.0000	0.1848	0.5000	1848
Solderplate	Sn	7.17	2.65	Tin	7440-31-5	100.0000	2.6500	7.1700	26500
Bonding Wire	Gold	1.57	0.58	Gold	7440-57-5	100.0000	0.5784	1.5650	5784
Total (PKG Weight, mg)		270.56	100.00				100.00	270.56	1000000

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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