



Semiconductor Device Type: LT / LTY		(8AX) 005 SC-70 NiPdAu	
Basic Substance	CAS Number	"Contained In" Sub-Component	
Silica, vitreous	60676-86-0	Mold Compound	
Epoxy Resin	Trade Secret	Mold Compound	
Phenolic Resin	Trade Secret	Mold Compound	
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	
Carbon Black	1333-86-4	Mold Compound	
Copper	7440-50-8	Lead Frame	
Iron	7439-89-6	Lead Frame	
Phosphorous	7723-14-0	Lead Frame	
Zinc (Metal)	7440-66-0	Lead Frame	
Aluminum oxide	1344-28-1	Die Attach	
Diethylene glycol monoethyl ether acetate	112-15-2	Die Attach	
Epoxy resin	Trade Secret - 10114	Die Attach	
Epoxy resin	Trade Secret - 10105	Die Attach	
Amine	Trade Secret - 10039	Die Attach	
Silicon	7440-21-3	Chip (Die)	
Gold	7440-57-5	Wire Bond	
Nickel	7440-02-0	Plating on external leads (pins)	
Palladium	5/37440	Plating on external leads (pins)	
Gold	7440-57-5	Plating on external leads (pins)	
TOTALS:			

0.0063 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/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.

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>

Termination Base Alloy: Copper Alloy (Cu)			Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)			JEDEC 97 Product Marking and/or Pkg. Labeling e4	
% Total Weight	mg/part	ppm	3.94	(mg) Total	Mold Compound	% of Total Weight	62.53
53.151	3.348	531,505		Silica, vitreous	60676-86-0	85.00	
3.830	0.241	38,300		Epoxy Resin	Trade Secret	6.13	
3.830	0.241	38,300		Phenolic Resin	Trade Secret	6.13	
1.532	0.097	15,320		Epoxy, Cresol Novolac	29690-82-2	2.45	
0.188	0.012	1,876		Carbon Black	1333-86-4	0.30	
24.821	1.564	248,212		Total			100.00
0.587	0.037	5,867	1.61	(mg) Total	Lead Frame	% of Total Weight	25.51
0.064	0.004	638		Copper	7440-50-8	97.30	
0.038	0.002	383		Iron	7439-89-6	2.30	
0.601	0.038	6,012		Phosphorous	7723-14-0	0.25	
0.601	0.038	6,012		Zinc (Metal)	7440-66-0	0.15	
0.328	0.021	3,279		Total			100.00
0.164	0.010	1,640	0.11	(mg) Total	Die Attach	% of Total Weight	1.76
0.066	0.004	656		Aluminum oxide	1344-28-1	34.16	
7.520	0.474	75,200		Diethylene glycol monoethyl ether acetate	112-15-2	34.16	
1.430	0.090	14,300		Epoxy resin	Trade Secret - 10114	18.63	
1.125	0.071	11,250		Epoxy resin	Trade Secret - 10105	9.32	
0.063	0.004	625		Amine	Trade Secret - 10039	3.73	
0.063	0.004	625		Total			100.00
TOTALS:			100.000	6.300	1,000,000		
			0.47	Total (mg)	Chip (Die)	% of Total Weight	7.52
				Doped Silicon	7440-21-3	100	
			Total			100.00	
			0.09	(mg) Total	Wire Bond	% of Total Weight	1.43
				Doped Gold	7440-57-5	100	
			Total			100.00	
			0.08	(mg) Total	Plating on external leads (pins)	% of Total Weight	1.25
				Nickel	7440-02-0	90.00	
				Palladium	7440-05-3	5.00	
				Gold	7440-57-5	5.00	
			Total			100.00	
			6.300				100.000