MICROCHIP

Semiconductor Device Type: (DAA) 004 SOT-143 NiPdAu

Termination Base Alloy: Copper Alloy (Cu)

Package Homogeneous Materials: 8.1 Electronics (e.g. pc boards, displays)

J-STD-609A Product Marking and/or Pkg. Labeling e4

Basic Substance	CAS Number	"Contained In" Sub-Component	% Total Weight	mg/part	ppm
Silica, vitreous	60676-86-0	Mold Compound	43.036	4.734	430,355
Epoxy Resin	Trade Secret	Mold Compound	3.101	0.341	31,011
Phenolic Resin	Trade Secret	Mold Compound	3.101	0.341	31,011
Epoxy, Cresol Novolac	29690-82-2	Mold Compound	1.240	0.136	12,404
Carbon Black	1333-86-4	Mold Compound	0.152	0.017	1,519
Copper	7440-50-8	Lead Frame	42.666	4.693	426,661
Iron	7439-89-6	Lead Frame	1.009	0.111	10,086
Phosphorous	7723-14-0	Lead Frame	0.110	0.012	1,096
Zinc (Metal)	7440-66-6	Lead Frame	0.066	0.007	658
Silver (Ag)	7440-22-4	Die Attach	0.997	0.110	9,970
Proprietary Resin	Trade Secret	Die Attach	0.235	0.026	2,350
Proprietary Curing agent & Hardener	Trade Secret	Die Attach	0.038	0.004	381
Silicon	7440-21-3	Chip (Die)	2.360	0.260	23,600
Gold	7440-57-5	Wire Bond	0.926	0.102	9,260
Nickel	7440-02-0	Plating on external leads (pins)	0.864	0.095	8,640
Palladium	7440-05-3	Plating on external leads (pins)	0.048	0.005	480
Gold	7440-57-5	Plating on external leads (pins)	0.048	0.005	480
		TOTALS:	**99.996**	**11.000**	**999,960**

0.0110 g Total Mass

5.57	(mg) Total	Mold Compound	% ot Total Weight	50.63
	Silica, vitreous	60676-86-0	85.00	
	Epoxy Resin	Trade Secret	6.13	
	Phenolic Resin	Trade Secret	6.13	
	Epoxy, Cresol Novolac	29690-82-2	2.45	
	Carbon Black	1333-86-4	0.30	
		Total	**100.00**	

4.82	(mg) Total	Lead Frame	% of Total Weight	43.85
	Copper	7440-50-8	97.30	
	Iron	7439-89-6	2.30	
	Phosphorous	7723-14-0	0.25	
	Zinc (Metal)	7440-66-6	0.15	
		Total	**100.00**	

0.14	(mg) Total	Die Attach	% of Total Weight	1.27
84-1LMISR4	Silver (Ag)	7440-22-4	78.50	
	Proprietary Resin	Trade Secret	18.50	
	Proprietary Curing agent & Hard	Trade Secret	3.00	
		Total	**100.00**	

0.26	Total (mg)	Chip (Die)	% of Total Weight	2.36
	Doped Silicon	7440-21-3	100.00	
		Total	**100.00**	

0.10	(mg) Total	Wire Bond	% of Total Weight	0.93
	Gold	7440-57-5	100.00	
		Total	**100.00**	

0.11	(mg) Total	Plating on external leads (pins)	% of Total Weight	0.96
	Nickel	7440-02-0	90.00	
	Palladium	7440-05-3	5.00	
	Gold	7440-57-5	5.00	
		Total	**100.00**	

11.00 100.00

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/

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