Compliant with IEC 62474/ D9.00 Compliant to IEC 61249-2-21:2003

AICROCHIP Semiconductor Device Type:	SS (G3X) 020 SSOP .209in Matte Tin		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 e3
Basic Substance	CAS Number	"Contained In" Sub-Component	% lotal Weight	mg/part	ppm	131.03	(mg) Total	Mold Compound	% ot Total Weight	79.8
Silica, vitreous	60676-86-0	Mold Compound	69.354	113.880	693,542		Silica, vitreous	60676-86-0	86.91	
Epoxy Resin (No bromine, No diantimony trioxide)	Trade Secret	Mold Compound	6.121	10.050	61,207		Epoxy Resin	Trade Secret	7.67	
Phenolic Resin (No Br / CL SbO3, No diantimony trioxide)	Trade Secret	Mold Compound	4.078	6.696	40,778		Phenolic Resin	Trade Secret	5.11	
Carbon Black	1333-86-4	Mold Compound	0.247	0.406	2,474		Carbon Black	1333-86-4	0.31	
Copper	7440-50-8	Lead Frame	10.031	16.472	100,314			Total	100.00	
Iron	7439-89-6	Lead Frame	0.247	0.405	2,468	17.24	(mg) Total	Lead Frame	% of Total Weight	10.5
Silver	7440-22-4	Lead Frame	0.200	0.328	2,000		Copper	7440-50-8	95.54	
Zinc	7440-66-6	Lead Frame	0.013	0.022	131		Iron	7439-89-6	2.35	
Phosphorous Silver (Ag)	7723-14-0 7440-22-4	Lead Frame Die Attach	0.009	0.014 0.924	87 5.625		Silver Zinc	7440-22-4 7440-66-6	1.91 0.13	
Modified Epoxy Resin	13561-08-5	Die Attach	0.105	0.172	1.050		Phosphorous	7723-14-0	0.13	
Diglycidylether of bisphenol-F	54208-63-8	Die Attach	0.056	0.092	563		Filospilotous	Total	100.00]
Modified Amine	827-43-0	Die Attach	0.036	0.043	263	1.23	(mg) Total	Die Attach	% of Total Weight	0.75
Silicon	7440-21-3	Chip (Die)	7.500	12.315	75,000	1.23	Silver (Aq)	7440-22-4	75.00	0.73
Doped Gold	7440-57-5	Wire Bond	0.200	0.328	2.000		Modified Epoxy Resin	13561-08-5	14.00	
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	2.053	12,500		Diglycidylether of bisphenol-F	54208-63-8	7.50	
••••		TOTALS:		164.200	1,000,000		Modified Amine	827-43-0	3.50	
	0 1642	g Total Mass						Total	100.00	1
		2002/95/EC (27 January 2003) & Directive 2011/65/EU (08	June 2011) a	and 2015/863/E	U (31 March	12 22	(mg) Total	Chin (Dio)	% of Total Woight	7.5
s semiconductor device and its homogenous materials comply wit 5) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (appliance with the above EU Directives has been verified via interna-	zero) al design control:	s, supplier declarations, and /or analytical test data.	·			12.32	(mg) Total Doped Silicon	Chip (Die) 7440-21-3	% of Total Weight 100.00	7.5
5) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (npliance with the above EU Directives has been verified via intern- chemical substance is absent from the list above, the chemical su proprated's knowledge and belief as of the date of this document, , is not below the threshold of regulatory concern for any regulato ding compounds used by Microchip meet the UL94 V0 flammabilit	(zero) al design controls abstance is NOT a there is no credit ory scheme world ty standard for pl	s, supplier declarations, and /or analytical test data. In intentional ingredient in the semiconductor device and, to le reason to believe that the unavoidable impurity concent-wide.	to the best o	of Microchip Te chemical sub	echnology	0.33	<u> </u>	7440-21-3	100.00	0.2
5) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (npliance with the above EU Directives has been verified via internachemical substance is absent from the list above, the chemical supporated's knowledge and belief as of the date of this document, is not below the threshold of regulatory concern for any regulator, is not below the threshold of regulatory concern for any regulator ding compounds used by Microchip meet the UL94 V0 flammability://ul.com/globa/leng/pages/offerings/industries/chemicals/plastics protective "tubes" in which the specific product is shipped are m	(zero) al design control: abstance is NOT a there is no credit ory scheme world by standard for pl	s, supplier declarations, and /or analytical test data. In intentional ingredient in the semiconductor device and, ole reason to believe that the unavoidable impurity concent-wide. astics. You can access the UL iQTM family of databases to	to the best o tration of the	of Microchip To e chemical sub ot report at	echnology ostance, if		Doped Silicon	7440-21-3 Total	100.00	
5) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (npliance with the above EU Directives has been verified via international substance is absent from the list above, the chemical supporated's knowledge and belief as of the date of this document, is not below the threshold of regulatory concern for any regulator ding compounds used by Microchip meet the UL94 V0 flammability://ul.com/global/eng/pages/offerings/industries/chemicals/plastics protective "tubes" in which the specific product is shipped are material "reels" may be made from PVC plastic.	(zero) al design control: abstance is NOT a there is no credit ory scheme world ty standard for pl ade from polyvin	s, supplier declarations, and /or analytical test data. In intentional ingredient in the semiconductor device and, ole reason to believe that the unavoidable impurity concent-wide. astics. You can access the UL iQTM family of databases to lyl chloride (PVC) plastic. "Window envelopes" used to hole	to the best o tration of the o obtain a tes	of Microchip To e chemical sub the treport at ng slip on the o	echnology ostance, if outer box		Doped Silicon (mg) Total	7440-21-3 Total Wire Bond	100.00 100.00 % of Total Weight	
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5) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (npliance with the above EU Directives has been verified via intern- chemical substance is absent from the list above, the chemical su- proprated's knowledge and belief as of the date of this document, , is not below the threshold of regulatory concern for any regulator ding compounds used by Microchip meet the UL94 V0 flammabilit //ul.com/global/eng/pages/offerings/industries/chemicals/plastics protective "tubes" in which the specific product is shipped are m certain "reels" may be made from PVC plastic. rochip Technology Incorporated believes the information in this fe- neir original packing materials is true and correct to the best of its npleteness and accuracy of data in this form because it has been c pilier information is often protected from disclosure as trade secre rmation is provided only as estimates of the average weight of the	(zero) al design controls abstance is NOT a there is no credit ory scheme world by scheme world scheme and from polyvin orm concerning s knowledge and i compiled based ets and some infe ese parts and the ained within silic express or implied	s, supplier declarations, and /or analytical test data. In intentional ingredient in the semiconductor device and, ole reason to believe that the unavoidable impurity concent-wide. astics. You can access the UL iQTM family of databases to apply chloride (PVC) plastic. "Window envelopes" used to hole substances restricted by RoHS in Microchip Technology In the ranges provided in Material Safety Data Sheets provided in the ranges provided in Material Safety Data Sheets provided provided by subcontract asses average weight of anticipated significant toxic metals comon devices (silicon IC) in the finished parts.	to the best of tration of the probability of the packin corporated's pagy incorpor ided by raw in miblers and inponents. The	of Microchip To e chemical substituted the g slip on the of e semiconduct ated cannot g material supplicate material supplicates are see estimates	echnology ostance, if outer box or devices uarantee the iers. od not		Doped Silicon (mg) Total Doped Gold (mg) Total	7440-21-3 Total Wire Bond 7440-57-5	100.00 100.00 % of Total Weight	
5) and 2002/53/EC (End-of-Life Vehicles (ELV) without exemption (npliance with the above EU Directives has been verified via interna- chemical substance is absent from the list above, the chemical supporated's knowledge and belief as of the date of this document, is not below the threshold of regulatory concern for any regulator ding compounds used by Microchip meet the UL94 V0 flammability. "Jul.com/global/eng/pages/offerings/industries/chemicals/plastics protective "tubes" in which the specific product is shipped are m certain "reels" may be made from PVC plastic. Trochip Technology Incorporated believes the information in this for heir original packing materials is true and correct to the best of its pleteness and accuracy of data in this form because it has been oplier information is often protected from disclosure as trade secre function is provided only as estimates of the average weight of the ude trace levels of dopants, metals, and non-metal materials cont- rochip Technology Incorporated does not provide any warranty, e ranties provided by Microchip Technology Incorporated and its si	(zero) al design control: abstance is NOT a there is no credit ory scheme world by standard for pl ade from polyvin comments of the control compiled based of ets and some info ese parts and the ained within silica express or implied absidiaries are co	s, supplier declarations, and /or analytical test data. In intentional ingredient in the semiconductor device and, ole reason to believe that the unavoidable impurity concent-wide. astics. You can access the UL iQTM family of databases to yl chloride (PVC) plastic. "Window envelopes" used to hol substances restricted by RoHS in Microchip Technology Incelief, as of the date listed in this form. Microchip Technolog in the ranges provided in Material Safety Data Sheets proviourmation may not have been provided by subcontract asse average weight of anticipated significant toxic metals comon devices (silicon IC) in the finished parts. It, with respect to the information provided in this declaration tails in Microchip's standard terms and conditions of sit to Declarations and shall not be liable for any damages, direct	to the best of tration of the orbitain a tess of the pockin corporated's gogy incorpor dided by raw imblers and inponents. The on. The excitale. These are ect or indirect	of Microchip To e chemical sub- et report at a semiconduct ated cannot g material suppl raw material s lese estimates usive, limited e provided in	echnology ostance, if outer box or devices uarantee the iers. uppliers. s do not product Microchip's	0.33	Doped Silicon (mg) Total Doped Gold (mg) Total	7440-21-3 Total Wire Bond 7440-57-5 Total Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1	100.00 100.00 % of Total Weight 100.00	0.2

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