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

MICROCHIP Semiconductor Device Type: HGA 004 UDFN 1.2x1.2x0.6mm 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
,		"Contained In" Sub-Component	% Total Weight			1.15	(mg) Total	Mold Compound	% ot Total Weight	-
Basic Substance	CAS Number			mg/part	ppm					
Silica, fused	60676-86-0	Mold Compound	43.101	1.034	431,010		Silica, fused	60676-86-0	90.00	
Epoxy Resin Phenolic Resin	Trade Secret Trade Secret	Mold Compound Mold Compound	2.323	0.056 0.056	23,227 23.227		Epoxy Resin Phenolic Resin	Trade Secret Trade Secret	4.85 4.85	
Carbon Black	1333-86-4	Mold Compound	0.144	0.003	1,437		Carbon Black	1333-86-4	0.30	
Copper	7440-50-8	Lead Frame	40.092	0.962	400.916		Calboli Black	Total	100.00	
Iron	7439-89-6	Lead Frame	0.060	0.001	603	0.96	(mg) Total	Lead Frame	% of Total Weight	40.18
				0.001		0.96				40.18
Phosphorous Zinc (Metal)	7723-14-0 7440-66-6	Lead Frame Lead Frame	0.016 0.012	0.000	161 121		Copper	7440-50-8 7439-89-6	99.78	
Silver	7440-66-6	Die Attach	0.012	0.000	4.736		Iron		0.15 0.04	
			0.474				Phosphorous	7723-14-0	0.04	
Epoxy resin	68475-94-5	Die Attach		0.004	1,472		Zinc (Metal)	7440-66-6		
Copper(II) oxide	1317-38-0	Die Attach	0.019	0.000	192			Total	100.00	
Silicon	7440-21-3	Chip (Die)	10.700	0.257	107,000	0.02	(mg) Total	Die Attach	% of Total Weight	0.64
Gold	7440-57-5	Wire Bond	0.250	0.006	2,500		Silver	7440-22-4	74.00	
Nickel	7440-02-0	Plating on external leads (pins)	0.314	0.008	3,136		Epoxy resin	68475-94-5	23.00	
Palladium	7440-05-3	Plating on external leads (pins)	0.025	0.001	254		Copper(II) oxide	1317-38-0	3.00	
	7440-57-5	Plating on external leads (pins)	0.001	0.000	10			Total	100.00	
Gold	7440-37-3									
Gold	7440-37-3	TOTALS:	100.000	2.400	1,000,000	0.26	Total (mg)	Chip (Die)	% of Total Weight	10.70
	0.0024 terials comply wit	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D	100.000		,,	0.26	Total (mg) Doped Silicon	Chip (Die) 7440-21-3 Total	% of Total Weight 100.00 100.00	10.70
miconductor device and its homogenous ma 53/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been	0.0024 terials comply wit of-Life Vehicles (E verified via interna	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero) al design controls, supplier declarations, and /or and	100.000 Directive 2011/69 alytical test data	5/EU (08 June a.	2011) and	0.26		7440-21-3	100.00	10.70 0.25
emiconductor device and its homogenous ma 53/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been mical substance is absent from the list abov hip Technology Incorporated's knowledge ar	0.0024 sterials comply with of-Life Vehicles (Everified via internate, the chemical suit delief as of the	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero)	100.000 Directive 2011/6: alytical test data iconductor devo believe that the	5/EU (08 June a. ice and, to the ne unavoidable	2011) and		Doped Silicon	7440-21-3 Total	100.00	
emiconductor device and its homogenous ma 53/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been emical substance is absent from the list abov hip Technology Incorporated's knowledge ar et	0.0024 terials comply wit of-Life Vehicles (E verified via interna e, the chemical su d belief as of the not below the thre 94 V0 flammabilit	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero) al design controls, supplier declarations, and /or an bstance is NOT an intentional ingredient in the sem date of this document, there is no credible reason to shold of regulatory concern for any regulatory sche y standard for plastics. You can access the UL iQTM	100.000 Directive 2011/6: alytical test data iconductor dev o believe that the me world-wide.	5/EU (08 June a. ice and, to the ne unavoidable	best of impurity		Doped Silicon (mg) Total	7440-21-3 Total Wire Bond	100.00 100.00 % of Total Weight	
emiconductor device and its homogenous ma 53/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been emical substance is absent from the list abov hip Technology Incorporated's knowledge ar teration of the chemical substance, if any, is a g compounds used by Microchip meet the UI at http://ul.com/global/eng/pages/offerings/in totective "tubes" in which the specific produc outer box and certain "reels" may be made f	0.0024 terials comply wit of-Life Vehicles (E verified via interna e, the chemical su do belief as of the out below the three 94 V0 flammabilit dustries/chemical t is shipped are m rom PVC plastic.	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero) al design controls, supplier declarations, and /or and bstance is NOT an intentional ingredient in the sem date of this document, there is no credible reason to shold of regulatory concern for any regulatory sche by standard for plastics. You can access the UL iQTM s/plastics/ ade from polyvinyl chloride (PVC) plastic. "Window	100.000 Directive 2011/6: alytical test data iconductor dev o believe that th me world-wide. If family of datal envelopes" use	5/EU (08 June a. ice and, to the e unavoidable bases to obtai	best of bimpurity		Doped Silicon (mg) Total	7440-21-3 Total Wire Bond 7440-57-5	100.00 100.00 % of Total Weight	
emiconductor device and its homogenous ma 53/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been emical substance is absent from the list abov hip Technology Incorporated's knowledge ar tration of the chemical substance, if any, is a g compounds used by Microchip meet the UI at http://ul.com/global/eng/pages/offerings/in betective "tubes" in which the specific produc outer box and certain "reels" may be made f hip I echnology Incorporated believes the int inductor devices in their original packing ma pology Incorporated cannot guarantee the con il Safety Data Sheets provided by raw material to have been provided by subcontract assem a average weight of anticipated significant to	0.0024 terials comply wit of-Life Vehicles (E verified via interna e, the chemical su d belief as of the e out below the three 94 V0 flammabilit dustries/chemical t is shipped are m rom PVC plastic. ormation in this to terials is true and o pleteness and ac al suppliers. Suppl blers and raw mat kic metals compor	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero) al design controls, supplier declarations, and /or and bstance is NOT an intentional ingredient in the sem date of this document, there is no credible reason to shold of regulatory concern for any regulatory sche y standard for plastics. You can access the UL iQTM s/plastics/ ade from polyvinyl chloride (PVC) plastic. "Window orm concerning substances restricted by RoHS in M correct to the best of its knowledge and belief, as of curacy of data in this form because it has been com lier information is often protected from disclosure a erial suppliers. Information is provided only as estin tents. These estimates do not include trace levels o	100.000 Directive 2011/6: alytical test data iconductor dev to believe that the me world-wide. If family of datal envelopes" use icrochip Techn f the date listed upiled based on s trade secrets nates of the ave	a. ice and, to the unavoidable bases to obtai ed to hold the cology Incorpo in this form. In the ranges prand some inforcage weight of	best of bimpurity n a test packing slip rated's flicrochip ovided in ormation f these parts	0.01	Doped Silicon (mg) Total Gold	7440-21-3 Total Wire Bond 7440-57-5 Total Plating on external	100.00 100.00 % of Total Weight 100.00	0.25
emiconductor device and its homogenous ma 63/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been emical substance is absent from the list above hip Technology Incorporated's knowledge ar tration of the chemical substance, if any, is a g compounds used by Microchip meet the UI at http://ul.com/global/eng/pages/offerings/in betective "tubes" in which the specific produce outer box and certain "reels" may be made for hip Technology Incorporated believes the introductor devices in their original packing ma alology Incorporated cannot guarantee the con all Safety Data Sheets provided by raw materic to have been provided by subcontract asset to a everage weight of anticipated significant to als contained within silicon devices (silicon Id- hip Technology Incorporated does not provice product warranties provided by Microchip To- these are provided in Microchip's quotations,	0.0024 terials comply wit of-Life Vehicles (E verified via interna e, the chemical su do belief as of the e out below the three 94 V0 flammabilit dustries/chemical t is shipped are m rom PVC plastic. ormation in this to cerials is true and upleteness and ac al suppliers. Suppl belers and raw mat kic metals compor to in the finished on the any warranty, e echnology incorpc sales order ackno	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero) al design controls, supplier declarations, and /or and bstance is NOT an intentional ingredient in the sem date of this document, there is no credible reason to shold of regulatory concern for any regulatory sche by standard for plastics. You can access the UL iQTM s/plastics/ ade from polyvinyl chloride (PVC) plastic. "Window form concerning substances restricted by ROHS in M correct to the best of its knowledge and belief, as of curacy of data in this form because it has been com lier information is often protected from disclosure a erial suppliers. Information is provided only as estin tents. These estimates do not include trace levels o arts. xpress or implied, with respect to the information pi rated and its subsidiaries are contained in Microch weledgement, and invoices.	alytical test data iconductor devo believe that the me world-wide. If amily of datal envelopes" use incrocnip Technic the date listed ipiled based on strade secrets nates of the ave if dopants, meta rovided in this cip's standard te	a. ice and, to the ne unavoidable bases to obtai ed to hold the ology Incorpo in this form. In the ranges pr and some informage weight o als, and non-m declaration. The	best of impurity in a test packing slip rated's flicrochip ovided in ormation if these parts etal exclusive, itions of	0.01	Doped Silicon (mg) Total Gold (mg) Total	7440-21-3 Total Wire Bond 7440-57-5 Total Plating on external leads (pins)	100.00 100.00 % of Total Weight 100.00 100.00 % of Total Weight	0.25
emiconductor device and its homogenous ma 63/EU (31 March 2015) and 2002/53/EC (End- ance with the above EU Directives has been emical substance is absent from the list abov hip Technology Incorporated's knowledge ar itration of the chemical substance, if any, is ig g compounds used by Microchip meet the UI at http://ul.com/global/eng/pages/offerings/in betective "tubes" in which the specific product outer box and certain "reels" may be made for hip Technology Incorporated believes the introductor devices in their original packing ma ology Incorporated cannot guarantee the con all Safety Data Sheets provided by raw material to have been provided by subcontract assem e average weight of anticipated significant to als contained within silicon devices (silicon to las contained within silicon devices (silicon to hip Technology Incorporated does not provice product warranties provided by Microchip To- nese are provided in Microchip's quotations, hip disclaims any duty to notify users of updi-	0.0024 tterials comply wit of-Life Vehicles (E verified via interna e, the chemical su id belief as of the e ont below the thre. 94 V0 flammabilit dustries/chemical t is shipped are m rom PVC plastic. ormation in this to terials is true and e appleteness and ac- tipleteness and ac- suppliers. Suppl blers and raw mate kic metals compor 2) in the finished in e any warranty, e echnology Incorpo- sales order ackno- terd parties as a rese trd parties as a rese	TOTALS: g Total Mass h EU Directives: 2002/95/EC (27 January 2003) & D LV) without exemption (zero) al design controls, supplier declarations, and /or and bstance is NOT an intentional ingredient in the sem date of this document, there is no credible reason to shold of regulatory concern for any regulatory sche y standard for plastics. You can access the UL iQTM s/plastics/ ade from polyvinyl chloride (PVC) plastic. "Window orm concerning substances restricted by RoHS in M correct to the best of its knowledge and belief, as of curacy of data in this form because it has been com lier information is often protected from disclosure a erial suppliers. Information is provided only as estin nents. These estimates do not include trace levels o arts. xpress or implied, with respect to the information pi orated and its subsidiaries are contained in Microch wledgement, and invoices. Material Content Declarations and shall not be liab built of the users' reliance on the information in Mate	alytical test data iconductor devo believe that the me world-wide. If amily of datal envelopes" use incrochip Technic fate listed pilled based on s trade secrets nates of the ave if dopants, meta rovided in this cip's standard te lele for any dama	a. ice and, to the eunavoidable bases to obtained to hold the ology Incorpoint this form. In the ranges principles and some inferage weight oals, and non-muleclaration. Therms and condinges, direct or	best of impurity in a test packing slip rated's licrochip ovided in ormation if these parts etal lice exclusive, itions of indirect,	0.01	Doped Silicon (mg) Total Gold (mg) Total Nickel	7440-21-3 Total Wire Bond 7440-57-5 Total Plating on external leads (pins)	100.00 100.00 % of Total Weight 100.00 % of Total Weight 92.23	0.25

Au 14:13 : 06/28/16