Semiconductor Device Type: P and PL (S2X) 040 PDIP .600in Matte Tin			Termination Base Alloy: Copper Alloy (Cu)		
Basic Substance	**CAS Number**	**"Contained In" Sub-Component**	**% Total Weight**	**mg/part**	**ppm**
Fused Silica	60676-86-0	Mold Compound	57.132	3713.580	571,320
Metal Hydro Oxide	Trade Secret	Mold Compound	8.729	567.353	87,285
Epoxy Resin	Trade Secret	Mold Compound	5.555	361.043	55,545
Phenol Resin	Trade Secret	Mold Compound	5.555	361.043	55,545
SiO2	14808-60-7	Mold Compound	1.984	128.944	19,838
Carbon Black	1333-86-4	Mold Compound	0.397	25.789	3,968
Copper	7440-50-8	Lead Frame Tape	9.984	648.938	99,837
Iron	7439-89-6	Lead Frame Tape	0.246	15.962	2,456
Silver	7440-22-4	Lead Frame Tape	0.199	12.940	1,991
Zinc	7440-66-6	Lead Frame Tape	0.013	0.849	131
Phosphorous	7723-14-0	Lead Frame Tape	0.009	0.560	86
Polyimide	25038-81-7	Lead Frame Tape	0.215	13.975	2,150
Poly - ethylene – terephthalate	25038-59-9	Lead Frame Tape	0.190	12.350	1,900
NBR	9003-18-3	Lead Frame Tape	0.035	2.275	350
Bismaleimide	79922-55-7	Lead Frame Tape	0.030	1.950	300
Phenol resin	453-20-5 / 9016-8	Lead Frame Tape	0.030	1.950	300
Silver	7440-22-4	Die Attach	0.550	35.763	5,502
Epoxy Resin	9003-36-5	Die Attach	0.110	7.152	1,100
Diluent	3101-60-8	Die Attach	0.055	3.573	550
Phenolic hardener	Trade secret	Die Attach	0.022	1.428	220
Amine type hardener	827-43-0	Die Attach	0.011	0.717	110
Dicyandiamide	461-58-5	Die Attach	0.002	0.117	18
Silicon	7440-21-3	Chip (Die)	7.500	487.500	75,000
Copper	7440-50-8	Wire Bond palladium coated copper (CuPd)	0.197	12.773	1,965
Palladium	7440-05-3	Wire Bond palladium coated copper (CuPd)	0.004	0.228	35
Tin	7440-31-5	Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour	1.250	81.250	12,500
		TOTALS:	100.000	6,500.000	1,000,000

6.5000 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/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.

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.

Microchip Technology Incorporated does not provide any warranty, express or implied, with respect to the information provided in this declaration. The exclusive, limited product warranties provided by Microchip Technology Incorporated and its subsidiaries are contained in Microchip's standard terms and conditions of sale. These are provided in Microchip's quotations, sales order acknowledgement, and invoices.

Microchip disclaims any duty to notify users of updates or changes to Material Content Declarations and shall not be liable for any damages, direct or indirect, consequential or otherwise, suffered by users or third parties as a result of the users' reliance on the information in Material Content Declarations (MCD) or independent third party test reports (SGS) or of this Certificate of Compliance for semiconductor products.

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

Package Homogeneous Materials

JEDEC 97 Product Marking and/or Pkg. Labeling e3

5157.75	**(mg) Total**	**Mold Compound**	**% ot Total Weight**	**79.35**
	Fused Silica	60676-86-0	72.00	
	Metal Hydro Oxide	Trade Secret	11.00	
	Epoxy Resin	Trade Secret	7.00	
	Phenol Resin	Trade Secret	7.00	
	SiO2	14808-60-7	2.50	
	Carbon Black	1333-86-4	0.50	
		Total	**100.00**	

679.25	**(mg) Total**	**Lead Frame**	**% of Total Weight**	**10.45**
	Copper	7440-50-8	95.54	
	Iron	7439-89-6	2.35	
	Silver	7440-22-4	1.91	
	Zinc	7440-66-6	0.13	
	Phosphorous	7723-14-0	0.08	
		Total	**100.00**	

32.50	**(mg) Total**	**Lead Frame Tape**	**% of Total Weight**	**0.5**
	Polyimide	25038-81-7	43.00	
	Poly - ethylene – terephthalate	25038-59-9	38.00	
	NBR	9003-18-3	7.00	
	Bismaleimide	79922-55-7	6.00	
	Phenol resin	28453-20-5 / 9016-83-5	6.00	
		Total	**100.00**	

48.75	**(mg) Total**	**Die Attach**	**% of Total Weight**	**0.75**
	Silver	7440-22-4	73.36	
	Epoxy Resin	9003-36-5	14.67	
	Diluent	3101-60-8	7.33	
	Phenolic hardener	Trade secret	2.93	
	Amine type hardener	827-43-0	1.47	
	Dicyandiamide	461-58-5	0.24	
		Total	**100.00**	

487.50	**Total (mg)**	**Chip (Die)**	**% of Total Weight**	**7.5**
	Doped Silicon	7440-21-3	100.00	
		Total	**100.00**	

13.00	**(mg) Total**	**Wire Bond palladium coated copper (CuPd)**	**% of Total Weight**	**0.2**
	Copper	7440-50-8	98.25	
	Palladium	7440-05-3	1.75	
		Total	**100.00**	

81.25	**(mg) Total**	**Plating on external leads (pins) - Matte Tin / annealed at 150°C for 1 hour**	**% of Total Weight**	**1.25**
	Tin	7440-31-5	100.00	
		Total	**100.00**	
6,500.000				**100.000**