


<div><h1>Package Material Content Declaration</h1></div>							
Package Description	40-Pad, 5.0 x 5.0 x 0.6 mm Body, 0.40 mm Pitch, 3.6 mm Sq Thermal ePAD, Ultra-Thin Fine-Pitch Quad Flat No Lead Package (UQF)						
Lead Finish	Nickel-Palladium-Gold (Ni-Pd-Au)			Package Code / GPC		R5B / ZAH	
J-STD-609 Category	e4			Termination Base Alloy:		Copper	
Package Material Declaration							
Material	Substance	CAS #	Weight (mg)	Homogeneous Material		Package	
				Percentage	ppm	Percentage	ppm
Leadframe	Copper (Cu)	7440-50-8	20.326	96.2	962000	43.26	432622
	Nickel (Ni)	7440-02-0	0.634	3.0	30000	1.35	13491
	Silicon (Si)	7440-21-3	0.127	0.6	6000	0.27	2698
	Magnesium (Mg)	7439-95-4	0.042	0.2	2000	0.09	899
Sub-Total			21.128	100.0	1000000	44.97	449711
Integrated Circuit	Silicon (Si)	7440-21-3	7.619	100.0	1000000	16.22	162177
Sub-Total			7.619	100.0	1000000	16.22	162177
Die Attach	Silver (Ag)	7440-22-4	0.387	76.6	766000	0.82	8240
	Acrylic Resin	Proprietary	0.042	8.3	83000	0.09	893
	Acrylate	Proprietary	0.027	5.3	53000	0.06	570
	Polybutadiene Copolymer	Proprietary	0.026	5.2	52000	0.06	559
	Epoxy Resin	Proprietary	0.012	2.4	24000	0.03	258
	Additive	Proprietary	0.005	0.9	9000	0.01	97
	Butadiene Copolymer	Proprietary	0.005	0.9	9000	0.01	97
	Peroxide	Proprietary	0.002	0.4	4000	0.00	43
Sub-Total			0.505	100.0	1000000	1.08	10757
Bond Wire	Copper (Cu)	7440-50-8	0.183	97.6	976000	0.39	3901
	Palladium (Pd)	7440-05-3	0.005	2.4	24000	0.01	96
Sub-Total			0.188	100.0	1000000	0.40	3997
Encapsulation	Silica (Amorphous) A	60676-86-0	13.254	77.6	776000	28.21	282102
	Epoxy Resin	Proprietary	1.503	8.8	88000	3.20	31991
	Silica (Amorphous) B	7631-86-9	1.503	8.8	88000	3.20	31991
	Phenol Resin	Proprietary	0.683	4.0	40000	1.45	14541
	Carbon Black	1333-86-4	0.137	0.8	8000	0.29	2908
Sub-Total			17.080	100.0	1000000	36.35	363533
Terminal Plating	Nickel (Ni)	7440-02-0	0.428	92.7	927000	0.91	9107
	Palladium (Pd)	7440-05-3	0.030	6.5	65000	0.06	639
	Gold (Au)	7440-57-5	0.004	0.8	8000	0.01	79
Sub-Total			0.462	100.0	1000000	0.98	9824
Total			46.982			100.00	1000000

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>.