



Semiconductor Device Type: C5X-TSSOP-8-3x4.4x1.2mm-MatteTin						Package Homogeneous Materials				
Sub-Component	Basic Substance	CAS Number	% Total Weight	mg/part	ppm	19.49	(mg) Total	Mold Compound	% of Total Weight	59.06
Mold Compound	Epoxy Resin A	Trade Secret	4.13	1.36	41342		Epoxy Resin A	Trade Secret	7.00	
Mold Compound	Epoxy Resin B	Trade Secret	1.18	0.39	11812		Epoxy Resin B	Trade Secret	2.00	
Mold Compound	Phenol Resin	Trade Secret	1.18	0.39	11812		Phenol Resin	Trade Secret	2.00	
Mold Compound	Silica (Amorphous)	60676-86-0	51.97	17.15	519728		Silica (Amorphous)	60676-86-0	88.00	
Mold Compound	Carbon Black	1333-86-4	0.59	0.19	5906		Carbon Black	1333-86-4	1.00	
Lead Frame	Copper	7440-50-8	29.91	9.87	299125	Total 100.00				
Lead Frame	Nickel	7440-02-0	0.95	0.31	9456					
Lead Frame	Silicon	7440-21-3	0.32	0.10	3152	10.40	(mg) Total	Lead Frame	% of Total Weight	31.52
Lead Frame	Magnesium	7739-95-4	0.03	0.01	315		Copper	7440-50-8	94.90	
Lead Frame	Silver	7440-22-4	0.32	0.10	3152		Nickel	7440-02-0	3.00	
Die Attach	Silver	7440-22-4	1.08	0.35	10752		Silicon	7440-21-3	1.00	
Die Attach	Epoxy Resin	Trade Secret	0.01	0.00	112		Magnesium	7739-95-4	0.10	
Die Attach	Cashew, nutshell liq. polymer with epichlorohydrin	68413-24-1	0.01	0.00	112		Silver	7440-22-4	1.00	
Die Attach	Toluene	108-88-3	0.01	0.00	112	Total 100.00				
Die Attach	2-Heptyl-3,4-bis(9-isocyanatononyl)-1-pentylcyclohexane	68239-06-5	0.01	0.00	56					
Die Attach	1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	0.01	0.00	56	0.37	(mg) Total	Die Attach	% of Total Weight	1.12
Die	Silicon	7440-21-3	6.30	2.08	63000		Silver	7440-22-4	96.00	
Bonding Wire	Gold	7440-57-5	0.18	0.06	1800		Epoxy Resin	Trade Secret	1.00	
Plating on External Leads	Tin	7440-31-5	1.82	0.60	18191		Cashew, nutshell liq. polymer with epichlorohydrin	68413-24-1	1.00	
Plating on External Leads	Lead	7439-92-1	0.00	0.00	9		Toluene	108-88-3	1.00	
TOTALS: 33.00 mg Total Mass			100.00	33.00	1,000,000		2-Heptyl-3,4-bis(9-isocyanatononyl)-1-pentylcyclohexane	68239-06-5	0.50	
							1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	0.50	
						Total 100.00				
						2.08	(mg) Total	Die	% of Total Weight	6.30
							Silicon	7440-21-3	100.00	
						Total 100.00				
						0.06	(mg) Total	Bonding Wire	% of Total Weight	0.18
							Gold	7440-57-5	100.00	
						Total 100.00				
						0.60	(mg) Total	Plating on External Leads	% of Total Weight	1.82
							Tin	7440-31-5	99.95	
							Lead	7439-92-1	0.05	
						33.00	Total	100.00		100.00

The information contained in this Material Content Declaration (MCD) consists of package-level information and is not part number specific. This information is considered to be sufficiently representative of all part numbers for the package type.

Microchip Technology Incorporated designs all products to comply with global product material compliance standards, including but not limited to RoHS, REACH, and China RoHS. Additionally, Microchip products are designed to be compliant with IEC62474. For specific compliance information, please check our product material compliance website on microchip.com or ask your local sales representative.

Microchip Technology Incorporated believes the information in this MCD 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 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. These estimates do not include trace levels of dopants, impurities, metals, and non-metallic materials which may be contained within silicon devices (silicon IC) or 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 acknowledgements, and invoices.

Microchip disclaims any duty to notify users of updates or changes to MCDs 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 MCDs.