MICROCHIP

Semiconductor Device Type: GZX-UQFN-20-4x4x0.5mm-MatteTin

Sub-Component	Basic Substance	CAS Number	% Total Weight	mg/part	ppm
Die	Silicon	7440-21-3	2.17	0.45	21739
Mold Compound	Epoxy Resin	Trade Secret	3.61	0.75	36082
Mold Compound	Phenolic Resins	Trade Secret	2.58	0.53	25773
Mold Compound	Vitreous silica	60676-86-0	38.66	8.00	386594
Mold Compound	Silica	7631-86-9	3.61	0.75	36082
Mold Compound	Metal hydroxide	Trade Secret	2.58	0.53	25773
Mold Compound	Carbon Black	1333-86-4	0.52	0.11	5155
Plating & Anode Ball	Lead	7439-92-1	0.00	0.00	15
Plating & Anode Ball	Tin	7440-31-5	2.99	0.62	29937
Bonding Wire	Gold	7440-57-5	0.53	0.11	5314
Lead Frame	Copper	7440-50-8	38.78	8.03	387823
Lead Frame	Silver	7440-22-4	2.85	0.59	28539
Lead Frame	Zinc	7440-66-6	0.09	0.02	905
Lead Frame	Tin	7440-31-5	0.10	0.02	1029
Lead Frame	Chromium	7440-47-3	0.10	0.02	1029
Die Attach Epoxy	2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	3388-04-3	0.01	0.00	82
Die Attach Epoxy	Isobornyl acrylate	5888-33-5	0.04	0.01	411
Die Attach Epoxy	Isobornyl methacrylate	7534-94-3	0.04	0.01	411
Die Attach Epoxy	Tricyclodecanedimethanol diacrylate	42594-17-2	0.04	0.01	411
Die Attach Epoxy	Silver	7440-22-4	0.69	0.14	6899
		TOTALS:	**100.00**	**20.70**	**1,000,000**

20.70 mg Total Mass

Package Homogeneous Materials

0.45	(mg) Total	Die	% of Total Weight	2.17
	Silicon	7440-21-3	100.00	
		Total	**100.00**	

10.67	(mg) Total	Mold Compound	% of Total Weight	51.55
	Epoxy Resin	Trade Secret	7.00	
	Phenolic Resins	Trade Secret	5.00	
	Vitreous silica	60676-86-0	75.00	
	Silica	7631-86-9	7.00	
	Metal hydroxide	Trade Secret	5.00	
	Carbon Black	1333-86-4	1.00	
		Total	**100.00**	

0.62	(mg) Total	Plating & Anode Ball	% of Total Weight	3.00
	Lead	7439-92-1	0.05	
	Tin	7440-31-5	99.95	
		Total	**100.00**	

0.11	(mg) Total	Bonding Wire	% of Total Weight	0.53
	Gold	7440-57-5	100.00	
		Total	**100.00**	

8.68	(mg) Total	Lead Frame	% of Total Weight	41.93
	Copper	7440-50-8	92.49	
	Silver	7440-22-4	6.81	
	Zinc	7440-66-6	0.22	
	Tin	7440-31-5	0.25	
	Chromium	7440-47-3	0.25	
		Total	**100.00**	

0.17	(mg) Total	Die Attach Epoxy	% of Total Weight	0.82
	2-(3,4-Epoxycyclohexyl)ethyltrimethoxysilane	3388-04-3	1.00	
	Isobornyl acrylate	5888-33-5	5.00	
	Isobornyl methacrylate	7534-94-3	5.00	
	Tricyclodecanedimethanol diacrylate	42594-17-2	5.00	
	Silver	7440-22-4	84.00	
20.70		**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.

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