

Product / Package Information

Package	LGA
Body Size (mm)	3 X 3
I/O Count	20
Terminal Finish	Gold
MS Number	MS012269B + MS012362B

Environmental Information

RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes

Materials Declaration

Molding Compound

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silica	60676-86-0	7.47E-03	89.40	894000	53.72	537198
Thermosets	Epoxy resin	Proprietary	4.18E-04	5.00	50000	3.00	30045
Thermosets	Phenol Resin	Proprietary	3.76E-04	4.50	45000	2.70	27040
Other inorganic materials	Other	Proprietary	8.36E-05	1.00	10000	0.60	6009
Other inorganic materials	Carbon Black	1333-86-4	8.36E-06	0.10	1000	0.06	601
Subtotal			8.36 E-03	100.00	1000000	60.09	600892

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Glass	Glass fabric	65997-17-3	5.02 E-04	14.23	142300	3.61	36085
Copper & its alloys	Copper	7440-50-8	1.74 E-03	49.37	493700	12.52	125195
Thermoset	Organic Resin	9003-36-5	7.07 E-04	20.04	200400	5.08	50818
	Laminate Core Subtotal		2.95 E-03	83.64	836400	21.21	212098
Other organic materials	Modified Epoxy Acrylate Resins	186511-06-8	2.00 E-04	5.67	56700	1.44	14378
Other inorganic materials	Silica	7631-86-9	1.04 E-04	2.94	29400	0.75	7455
Other inorganic materials	Talc	14807-96-6	8.61 E-05	2.44	24400	0.62	6187
Other organic materials	3-methoxy-3-methylbutylacetate	103429-90-9	3.28 E-05	0.93	9300	0.24	2358
Other organic materials	Dipropylene glycol monomethyl ether	34590-94-8	1.80 E-05	0.51	5100	0.13	1293
Other organic materials	Heavy Aromatic Naphtha	64742-94-5	6.03 E-05	1.71	17100	0.43	4336
Other organic materials	C.I pigment blue 15	147-14-8	2.12 E-06	0.06	600	0.02	152
Other organic materials	Organic yellow pigment	Proprietary	2.12 E-06	0.06	600	0.02	152
Other inorganic materials	Barium Sulfate	7727-43-7	7.06 E-07	0.02	200	0.005	51
	Soldermask Subtotal		5.06 E-04	14.34	143400	3.64	36364
Nickel & its alloys	Nickel	7440-02-0	6.14 E-05	1.74	17400	0.44	4412
Other organic materials	Palladium	7440-05-3	4.94 E-06	0.14	1400	0.04	355
Precious metals	Gold	7440-57-5	4.94 E-06	0.14	1400	0.04	355
Subtotal			3.53 E-03	100.00	1000000	25.36	253585

Wafer Bump

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin and its alloys	Tin	7440-31-5	2.46 E-04	98.2	982000	1.77	17695
Tin and its alloys	Silver	7440-22-4	4.51 E-06	1.8	18000	0.03	324
Subtotal			2.51 E-04	100.0	1000000	1.80	18020

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	1.56 E-03	100.0	1000000	11.24	112438

UBM

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	1.65 E-06	79.87	798700	0.012	119
Other non-ferrous metals and alloys	Titanium	7440-32-6	4.17 E-07	20.13	201300	0.003	30
Subtotal			2.07 E-06	100.0	1000000	0.01	149

Polyimide

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Resin	Proprietary	1.41 E-04	67.95	679500	1.01	10136
Other organic materials	Tetraethylene Glycol Dimethacrylate	109-17-1	3.02 E-05	14.56	145600	0.22	2172
Other organic materials	Trifluoroacetic Anhydride	407-25-0	1.21 E-05	5.83	58300	0.09	870
Other organic materials	4,4'-Oxydiphthalic Anhydride	1823-59-2	1.21 E-05	5.83	58300	0.09	870
Other organic materials	2-Hydroxyethyl Methacrylate	868-77-9	1.21 E-05	5.83	58300	0.09	870
Subtotal			2.08 E-04	100.0	1000000	1.49	14917

Package Totals			Weight (g) 1.39 E-02			Percentage (%) 100.00	PPM 1000000
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Note: The information provided in this declaration are true to the best of ADI's knowledge. ADI derived most of the information listed in this declaration from documents provided by third parties, and assumes no liability to any inaccuracy of such information.



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