

Product / Package Information

Package	LGA (Flipchip)
Body Size (mm)	4 X 4
I/O Count	24
Terminal Finish	NiPdAu
MS Number	MS012678 + 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	1.75E-02	89.40	894000	59.43	594298
Thermosets	Epoxy resin	Proprietary	9.77E-04	5.00	50000	3.32	33238
Thermosets	Phenol Resin	Proprietary	8.79E-04	4.50	45000	2.99	29914
Other inorganic materials	Other	Proprietary	1.95E-04	1.00	10000	0.66	6648
Other inorganic materials	Carbon Black	1333-86-4	1.95E-05	0.10	1000	0.07	665
Subtotal			1.95 E-02	100.00	1000000	66.48	664763

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	3.92 E-03	55.71	557100	13.35	133462
Thermosets	Proprietary Resin Mixture	Trade secret	1.41 E-03	20.04	200400	4.80	48009
Glass	Glass Fabric	65997-17-3	1.00 E-03	14.23	142300	3.41	34090
Other inorganic materials	Talc containing no asbestiform fibers	14807-96-6	8.45 E-06	0.12	1200	0.03	287
Other inorganic materials	Silica, amorphous	Trade secret	3.10 E-05	0.44	4400	0.11	1054
Other inorganic materials	Barium sulfate	7727-43-7	5.63 E-05	0.8	8000	0.19	1917
Other inorganic materials	Epoxy resin	85954-11-6	1.41 E-05	0.2	2000	0.05	479
Other inorganic materials	Phosphin oxide derivative	Trade secret	8.45 E-06	0.12	1200	0.03	287
Other inorganic materials	Other	Trade secret	4.45 E-04	6.32	63200	1.51	15141
Other organic materials	Gold	7440-57-5	9.86 E-06	0.14	1400	0.03	335
Other organic materials	Palladium	7440-05-3	9.86 E-06	0.14	1400	0.03	335
Other organic materials	Nickel	7440-02-0	1.22 E-04	1.74	17400	0.42	4168
Subtotal			7.04 E-03	100.00	1000000	23.96	239566

Wafer Bump

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin and its alloys	Tin	7440-31-5	3.69 E-05	98.2	982000	0.13	1256
Tin and its alloys	Silver	7440-22-4	6.76 E-07	1.8	18000	0.00	23
Subtotal			3.76 E-05	100.0	1000000	0.13	1279

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	2.76 E-03	100.0	1000000	9.39	93950

UBM

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	7.29 E-07	79.87	798700	0.002	25
Other non-ferrous metals and alloys	Titanium	7440-32-6	1.84 E-07	20.13	201300	0.001	6
Subtotal			9.13 E-07	100.0	1000000	0.00	31

Polyimide

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Polyimide 1	70485-58-4	1.21 E-05	100.00	1000000	0.04	412
Subtotal			1.21 E-05	100.0	1000000	0.04	412

Package Totals			Weight (g) 2.94 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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