

**Product / Package Information**

Package	LGA (Flipchip)
Body Size (mm)	4 X 4
I/O Count	24
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	1.66E-02	89.40	894000	47.83	478285
Thermosets	Epoxy resin	Proprietary	9.26E-04	5.00	50000	2.67	26750
Thermosets	Phenol Resin	Proprietary	8.33E-04	4.50	45000	2.41	24075
Other inorganic materials	Other	Proprietary	1.85E-04	1.00	10000	0.53	5350
Other inorganic materials	Carbon Black	1333-86-4	1.85E-05	0.10	1000	0.05	535
Subtotal			1.85 E-02	100.00	1000000	53.50	534994

**Laminate**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	6.20 E-03	58.71	587100	17.91	179104
Thermosets	Proprietary Resin Mixture	Trade secret	2.12 E-03	20.04	200400	6.11	61135
Glass	Glass Fabric	65997-17-3	1.50 E-03	14.23	142300	4.34	43411
	Solvent naphtha(petroleum), Heavy arom.	64742-94-5	4.22 E-05	0.40	4000	0.12	1220
Other organic materials	Talc containing no asbestiform fibers	14807-96-6	1.32 E-05	0.125	1250	0.04	381
Other inorganic materials	Barium sulfate	7727-43-7	2.38 E-05	0.225	2250	0.07	686
Other inorganic materials	Dipropylene glycol monomethyl ether	34590-94-8	1.58 E-05	0.15	1500	0.05	458
Other organic materials	Other	Trade secret	4.33 E-04	4.1	41000	1.25	12508
Other organic materials	Gold	7440-57-5	1.48 E-05	0.14	1400	0.04	427
Other organic materials	Palladium	7440-05-3	1.48 E-05	0.14	1400	0.04	427
Other organic materials	Nickel	7440-02-0	1.84 E-04	1.74	17400	0.53	5308
Subtotal			1.06 E-02	100.00	1000000	30.51	305065

**Wafer Bump**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin and its alloys	Tin	7440-31-5	1.08 E-04	98.2	982000	0.31	3116
Tin and its alloys	Silver	7440-22-4	1.98 E-06	1.8	18000	0.01	57
Subtotal			1.10 E-04	100.0	1000000	0.32	3173

**Chip**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	5.40 E-03	100.0	1000000	15.60	155962

**UBM**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	2.13 E-06	79.87	798700	0.006	62
Other non-ferrous metals and alloys	Titanium	7440-32-6	5.37 E-07	20.13	201300	0.002	16
Subtotal			2.67 E-06	100.0	1000000	0.01	77

**Polyimide**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Resin	Proprietary	1.71 E-05	67.95	679500	0.05	495
Other organic materials	Tetraethylene Glycol Dimethacrylate	109-17-1	3.67 E-06	14.56	145600	0.01	106
Other organic materials	Trifluoroacetic Anhydride	407-25-0	1.47 E-06	5.83	58300	0.00	42
Other organic materials	4,4'-Oxydiphthalic Anhydride	1823-59-2	1.47 E-06	5.83	58300	0.00	42
Other organic materials	2-Hydroxyethyl Methacrylate	868-77-9	1.47 E-06	5.83	58300	0.00	42
Subtotal			2.52 E-05	100.0	1000000	0.07	729

<b>Package Totals</b>			<b>Weight (g)</b> 3.46 E-02			<b>Percentage (%)</b> 100.00	<b>PPM</b> 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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