



Product / Package Information	
Package	CSP BGA
Body Size (mm)	9 X 9
Ball Count	64
Terminal Finish	SnAgCu
Ball Size (mm)	0.45

Environmental Information	
RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	No
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	8.17 E-02	86.20	862000	51.87	518701
Thermosets	Epoxy resin	Proprietary	5.69 E-03	6.00	60000	3.61	36104
Thermosets	Phenol Resin	Proprietary	5.69 E-03	6.00	60000	3.61	36104
Other inorganic materials	Metal Hydroxide	Proprietary	1.42 E-03	1.50	15000	0.90	9026
Other inorganic materials	Carbon Black	1333-86-4	2.84 E-04	0.30	3000	0.18	1805
Subtotal	Subtotal		9.48 E-02	100.0	1000000	60.17	601742

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Glass Cloth	85997-17-3	3.51 E-03	13.04	130400	2.23	22301
Thermoset	Core Resin	Proprietary	2.47 E-03	9.18	91800	1.57	15700
Others	Inorganic Filler	Proprietary	2.11 E-03	7.84	78400	1.34	13408
	Laminate Core Subtotal		8.10 E-03	30.06	300600	5.14	51409
Other inorganic materials	Filler	Proprietary	1.25 E-03	4.64	46400	0.79	7935
Thermoset	Acrylic resin	Proprietary	1.17 E-03	4.36	43600	0.75	7456
Thermoset	Epoxy resin	85954-11-6	6.03 E-04	2.24	22400	0.38	3831
Other organic materials	Dipropylene Glycol Monomethyl Ether	34590-94-8	4.80 E-04	1.78	17800	0.30	3044
Other organic materials	Diethylene glycol monoethyl ether acetate	112-15-2	3.45 E-04	1.28	12800	0.22	2189
Other organic materials	High Boiling Point Petroleum Solvent	64742-94-5	3.42 E-04	1.27	12700	0.22	2172
Other organic materials	Acrylic monomer	Proprietary	2.02 E-04	0.75	7500	0.13	1283
Other organic materials	Aromatic Carbonyl Compound	Proprietary	1.16 E-04	0.43	4300	0.07	735
Others	Levelling Agents & Others	Proprietary	6.47 E-05	0.24	2400	0.04	410
Other organic materials	Amine Compound	Proprietary	1.89 E-05	0.07	700	0.01	120
Other organic materials	Phthalocyanine Green, Organic Pigment	Proprietary	1.35 E-05	0.05	500	0.01	86
	Soldermask Subtotal		4.61 E-03	17.11	171100	2.93	29261
Copper & its alloys	Copper	7440-50-8	1.32 E-02	49.07	490700	8.39	83919
Nickel & its alloys	Nickel	7440-02-0	9.13 E-04	3.39	33900	0.58	5798
Precious metals	Gold	7440-57-5	9.97 E-05	0.37	3700	0.06	633
Subtotal	Subtotal		2.69 E-02	100.00	1000000	17	171020

Solder Ball

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	2.18 E-02	96.50	965000	13.86	138612
Tin & its alloys	Silver	7440-22-4	6.79 E-04	3.00	30000	0.43	4309
Tin & its alloys	Copper	7440-50-8	1.13 E-04	0.50	5000	0.07	718
Subtotal	Subtotal		2.26 E-02	100	1000000	14.36	143640

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	5.85 E-04	99	990000	0.37	3714
Precious metals	Palladium	7440-05-3	5.91 E-06	1	10000	0.00	38
Subtotal	Subtotal		5.91 E-04	100	1000000	0.38	3751

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	1.13 E-02	100	1000000	7.16	71619

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	1.03 E-03	79.38	793800	0.65	6532
Other organic materials	Bismaleimide monomer	TS# 10049	1.03 E-04	7.94	79400	0.07	653
Other organic materials	Acrylate monomer	TS# 10064	4.11 E-05	3.17	31700	0.03	261
Other organic materials	Epoxy resin	TS# 10042	4.11 E-05	3.17	31700	0.03	261
Other organic materials	Carbamate resin	TS# 10063	4.11 E-05	3.17	31700	0.03	261
Thermoset	Acrylic resin	TS# 10051	4.11 E-05	3.17	31700	0.03	261
Subtotal	Subtotal		1.30 E-03	100.00	1000000	0.82	8229

Package Totals	Weight (g)	Percentage (%)	PPM
	1.58 E-01	100.00	1000000

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.



ADI Proprietary

