



Product / Package Information

Package	CSP BGA
Body Size (mm)	17 X 17
Ball Count	225
Terminal Finish	SnAgCu
Ball Size	0.60 mm

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	2.99 E-01	86.2	862000	33.28	332760
Thermosets	Epoxy resin	Proprietary	2.08 E-02	6.0	60000	2.32	23162
Thermosets	Phenol Resin	Proprietary	2.08 E-02	6.0	60000	2.32	23162
Other inorganic materials	Metal Hydroxide	Proprietary	5.20 E-03	1.5	15000	0.58	5790
Other inorganic materials	Carbon Black	1333-86-4	1.04 E-03	0.3	3000	0.12	1158
Subtotal	Subtotal		3.47 E-01	100.0	1000000	38.60	386033

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper Foil	7440-50-8	2.91 E-02	8.98	89707	3.23	32343
Other inorganic materials	Glass Cloth	65997-17-3	6.89 E-03	2.13	21271	0.77	7669
Other inorganic materials	Pre-preg Glass Cloth	65997-17-3	2.62 E-02	8.11	80986	2.92	29198
Other inorganic materials	Pre-preg filler	21645-51-2	2.75 E-02	8.49	84782	3.06	30567
Thermoset	Core Resin	105391-33-1 / 25722-66-1, 9003-36-5	1.17 E-02	3.61	36068	1.30	13004
Thermoset	Prepreg Resin	105391-33-1 / 25722-66-1, 9003-36-5	2.62 E-02	8.11	80986	2.92	29198
Other inorganic materials	Core Filler	21645-51-2	1.29 E-02	3.98	39767	1.43	14338
	Laminate Core Subtotal		1.40 E-01	43.40	433566	15.63	156317
Thermoset	Soldermask Acrylate Resin	Proprietary	8.52 E-03	2.63	26286	0.948	9477
Other inorganic materials	Barium Sulfate, Silica, Talc	Proprietary	6.50 E-03	2.01	20052	0.723	7229
Other inorganic materials	3-Methoxy-3-Methyl Butyl-Acetate	Proprietary	4.78 E-03	1.48	14753	0.532	5319
Thermoset	Epoxy Resin	85954 - 11 - 6	4.48 E-03	1.38	13818	0.498	4982
Other organic materials	Dipropylene glycol monomethyl ether	34590-94-8	3.06 E-03	0.95	9455	0.341	3409
Other inorganic materials	Barium Sulfate	7727-43-7	2.19 E-03	0.676	6753	0.243	2435
Other organic materials	Acrylic Monomer	Proprietary	1.31 E-03	0.406	4052	0.146	1461
Other organic materials	Aromatic Carbonyl Compound	Proprietary	8.42 E-04	0.260	2597	0.094	936
Other organic materials	High Boiling Point Petroleum Solvent	Proprietary	8.08 E-04	0.250	2494	0.090	899
Others	Levelling Agents & Others	Proprietary	5.39 E-04	0.166	1662	0.060	599
Other organic materials	Organic Fillers	Proprietary	4.38 E-04	0.135	1351	0.049	487
Other organic materials	Amine Compound	Proprietary	1.35 E-04	0.042	416	0.015	150
Other organic materials	Phthalocyanine Green, Organic Pigment	Proprietary	6.73 E-05	0.021	208	0.007	75
	Soldermask Subtotal		3.37 E-02	10.40	103896	3.746	37458
Copper & its alloys	Copper	7440-50-8	1.27 E-01	39.1	390609	14.08	140829
Nickel & its alloys	Nickel	7440-02-0	1.97 E-02	6.1	60939	2.20	21971
Precious metals	Gold	7440-57-5	3.56 E-03	1.0	10989	0.40	3962
Subtotal			3.24 E-01	100.0	1000000	36	360537

Solder Ball

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	1.82 E-01	96.50	965000	20.23	202287
Tin & its alloys	Silver	7440-22-4	5.65 E-03	3.00	30000	0.63	6289
Tin & its alloys	Copper	7440-50-8	9.42 E-04	0.50	5000	0.10	1048
Subtotal			1.88 E-01	100	1000000	20.96	209624

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	5.36 E-03	99.99	1000000	0.60	5967

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	3.05 E-02	100	1000000	3.39	33884

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	2.82 E-03	79.38	793800	0.31	3140
Other organic materials	Bismaleimide monomer	TS# 10049	2.82 E-04	7.94	79400	0.03	314
Other organic materials	Acrylate monomer	TS# 10064	1.13 E-04	3.17	31700	0.01	125
Other organic materials	Epoxy resin	TS# 10042	1.13 E-04	3.17	31700	0.01	125
Other organic materials	Carbamate resin	TS# 10063	1.13 E-04	3.17	31700	0.01	125
Thermoset	Acrylic resin resin	TS# 10051	1.13 E-04	3.17	31700	0.01	125
Subtotal			3.55 E-03	100.00	1000000	0.40	3956

Package Totals			Weight (g) 8.99 E-01			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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