



Product / Package Information

Package	CSP BGA
Body Size (mm)	5 X 5
Ball Count	49
Terminal Finish	SnAgCu
Ball Size (mm)	0.40

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	1.06 E-02	86.20	862000	22.84	228378
Thermosets	Epoxy resin	Proprietary	7.39 E-04	6.00	60000	1.59	15896
Thermosets	Phenol Resin	Proprietary	7.39 E-04	6.00	60000	1.59	15896
Other inorganic materials	Metal Hydroxide	Proprietary	1.85 E-04	1.50	15000	0.40	3974
Other inorganic materials	Carbon Black	1333-86-4	3.69 E-05	0.30	3000	0.08	795
Subtotal	Subtotal		1.23 E-02	100.0	1000000	26.49	264940

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper Foil	7440-50-8	3.75 E-03	28.83	288300	8.07	80660
Glass	Glass Cloth	Proprietary	1.57 E-03	12.11	121100	3.39	33881
Thermoset	Core Resin	Proprietary	1.39 E-03	10.67	106700	2.99	29852
Others	Filler	Proprietary	6.37 E-04	4.90	49000	1.37	13709
	Laminate Core Subtotal		7.35 E-03	56.51	565100	15.81	158102
Thermoset	Soldermask Acrylate Resin	Proprietary	9.66 E-04	7.43	74304	2.08	20789
Other inorganic materials	Barium Sulfate	7727-43-7	8.54 E-04	6.57	65664	1.84	18371
Thermoset	Epoxy Resin	Proprietary	4.91 E-04	3.77	37740	1.06	10559
Other organic materials	Dipropylene glycol monomethyl ether	34590-94-8	3.59 E-04	2.76	27648	0.77	7735
Other organic materials	Solvent naphtha (petroleum), Heavy aron	64742-94-5	3.45 E-04	2.65	26500	0.74	7414
Other organic materials	Diethylene glycol monoethyl ether acetate	112-15-2	2.81 E-04	2.16	21600	0.60	6043
Other organic materials	Acrylic Ester Monomer	Proprietary	1.42 E-04	1.09	10941	0.31	3061
Other inorganic materials	Talc	14807-96-8	9.73 E-05	0.75	7200	0.21	2014
Other organic materials	Morpholine Derivative:	Proprietary	9.36 E-05	0.72	7200	0.20	2014
Other organic materials	Urethane Resin	Proprietary	4.81 E-05	0.37	3700	0.10	1035
Other organic materials	Silane Compounds	Proprietary	3.38 E-05	0.26	2600	0.07	727
Other organic materials	Triazine derivatives	Proprietary	1.27 E-05	0.10	980	0.03	274
Others	Pigment Green	328-53-6	9.10 E-06	0.07	700	0.02	196
Other inorganic materials	Silica	7631-86-9	9.74 E-06	0.07	749	0.02	210
Others	Pigment Yellow	5468-75-7	1.12 E-06	0.01	86.4	0.002	24
	Soldermask Subtotal		3.74 E-03	28.79	287900.4	8.05	80548
Copper & its alloys	Copper	7440-50-8	1.74 E-03	13.40	134000	3.75	37490
Nickel & its alloys	Nickel	7440-02-0	1.56 E-04	1.20	12000	0.34	3357
Precious metals	Gold	7440-57-5	1.30 E-05	0.10	1000	0.03	280
Subtotal			1.30 E-02	100.0	1000000	28	279777

Solder Ball

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	1.17 E-02	96.50	965000	25.25	252451
Tin & its alloys	Silver	7440-22-4	3.65 E-04	3.00	30000	0.78	7848
Tin & its alloys	Copper	7440-50-8	6.08 E-05	0.50	5000	0.13	1308
Subtotal			1.22 E-02	100	1000000	26.16	261608

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	3.83 E-04	99	990000	0.82	8242
Precious metals	Palladium	7440-05-3	3.87 E-06	1	10000	0.01	83
Subtotal			3.87 E-04	100	1000000	0.83	8325

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	7.71 E-03	100	1000000	16.60	165974

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	7.15 E-04	79.38	793800	1.54	15380
Other organic materials	Bismaleimide monomer	TS# 10049	7.15 E-05	7.94	79400	0.15	1538
Other organic materials	Acrylate monomer	TS# 10064	2.85 E-05	3.17	31700	0.06	614
Other organic materials	Epoxy resin	TS# 10042	2.85 E-05	3.17	31700	0.06	614
Other organic materials	Carbamate resin	TS# 10063	2.85 E-05	3.17	31700	0.06	614
Thermoset	Acrylic resin	TS# 10051	2.85 E-05	3.17	31700	0.06	614
Subtotal			9.00 E-04	100.00	1000000	1.94	19376

Package Totals			Weight (g)	4.65 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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