



Product / Package Information	
Package	BGA
Body Size	19 X 19 mm
Ball Count	169
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	5.61 E-01	86.2	862000	46.54	465372
Thermosets	Epoxy resin	Proprietary	3.90 E-02	6.0	60000	3.24	32392
Thermosets	Phenol Resin	Proprietary	3.90 E-02	6.0	60000	3.24	32392
Other inorganic materials	Metal Hydroxide	Proprietary	9.76 E-03	1.5	15000	0.81	8098
Other inorganic materials	Carbon Black	1333-86-4	1.95 E-03	0.3	3000	0.16	1620
Subtotal	Subtotal		6.51 E-01	100.0	1000000	53.99	539874

Laminate							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Thermoset	Prepreg resin	29690-82-2/68541-56-0/26265-08-7	5.48 E-02	14.27	142700	4.55	45479
Other inorganic materials	Prepreg Glass Cloth	65997-17-3	3.81 E-02	9.92	99200	3.16	31616
Copper & its alloys	Copper Foil	7440-50-8	3.72 E-02	9.68	96800	3.09	30851
Other inorganic materials	Glass Cloth	65997-17-3	3.72 E-02	9.68	96800	3.09	30851
Thermoset	Core Resin	29690-82-2/68541-56-0/26265-08-7	2.32 E-02	6.05	60500	1.93	19282
	Laminate Core Subtotal		1.91 E-01	49.60	496000	15.81	158078
Thermoset	Soldermask Acrylate Resin	Proprietary	3.46 E-03	0.90	9000	0.29	2868
Other inorganic materials	Barium Sulfate	7727-43-7	3.07 E-03	0.80	8000	0.25	2550
Thermoset	Epoxy Resin	85954-11-6	1.77 E-03	0.46	4600	0.15	1466
Other organic materials	Dipropylene glycol monomethyl ether	34590-94-8	1.31 E-03	0.34	3400	0.11	1084
Other organic materials	Solvent naphta (petroleum), Heavy arom	Proprietary	1.23 E-03	0.32	3200	0.10	1020
Other organic materials	Diethylene glycol monoethyl ether acetate	112-15-2	9.99 E-04	0.26	2600	0.08	829
Other organic materials	Acrylic Ester Monomer	Proprietary	4.99 E-04	0.13	1300	0.04	414
Other inorganic materials	Talc	14807-96-6	3.46 E-04	0.09	900	0.03	287
Other organic materials	Morpholine Derivatives	Proprietary	3.46 E-04	0.09	900	0.03	287
Other organic materials	Urethane Resin	Proprietary	1.92 E-04	0.05	500	0.02	159
Other inorganic materials	Silane Compounds	Proprietary	1.15 E-04	0.03	300	0.01	96
Other organic materials	Triazine derivatives	Proprietary	3.84 E-05	0.01	100	0.003	32
Other inorganic materials	Pigment Green	Proprietary	3.84 E-05	0.01	100	0.003	32
Other inorganic materials	Silica	Proprietary	3.84 E-05	0.01	100	0.003	32
Other inorganic materials	Pigment Yellow	Proprietary	3.84 E-06	0.00	10	0.000	3
	Soldermask Subtotal		1.34 E-02	3.50	35010	1.12	11158
Copper & its alloys	Copper	7440-50-8	1.75 E-01	45.60	456000	14.53	145330
Nickel & its alloys	Nickel	7440-02-0	4.23 E-03	1.10	11000	0.35	3506
Precious metals	Gold	7440-57-5	7.68 E-04	0.20	2000	0.06	637
Subtotal	Subtotal		3.84 E-01	100.00	1000010	31.87	318706

Solder Ball							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	1.36 E-01	96.50	965000	11.33	113250
Tin & its alloys	Silver	7440-22-4	4.24 E-03	3.00	30000	0.35	3521
Tin & its alloys	Copper	7440-50-8	7.07 E-04	0.50	5000	0.06	587
Subtotal	Subtotal		1.41 E-01	100	1000000	11.74	117358

Bond Wires							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	3.03 E-03	99.99	1000000	0.25	2515

Chip							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	2.24 E-02	100	1000000	1.86	18561

Die Attach							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	2.86 E-03	79.38	793800	0.24	2370
Other organic materials	Bismaleimide monomer	TS# 10049	2.86 E-04	7.94	79400	0.02	237
Other organic materials	Acrylate monomer	TS# 10064	1.14 E-04	3.17	31700	0.01	95
Other organic materials	Epoxy resin	TS# 10042	1.14 E-04	3.17	31700	0.01	95
Other organic materials	Carbamate resin	TS# 10063	1.14 E-04	3.17	31700	0.01	95
Thermoset	Acrylic resin	TS# 10051	1.14 E-04	3.17	31700	0.01	95
Subtotal	Subtotal		3.60 E-03	100.00	1000000	0.30	2986

Package Totals	Weight (g)	Percentage (%)	PPM
	1.21 E+00	100.0	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.



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