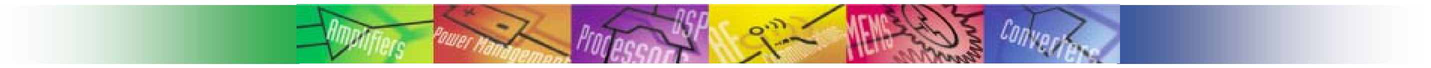

Product / Package Information

Package	BGA_ED
Body Size (mm)	27 X 27
Ball Count	256
Terminal Finish	SnAgCu
Ball Size (mm)	0.76

Environmental Information

RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	No
REACH SVHC Compliant	Yes

Materials Declaration

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious Metals	Silver	7440-22-4	3.00 E-03	75.0	750000	0.07	699
Other organic materials	Resin	Proprietary	1.00 E-03	25.0	250000	0.02	233
Subtotal	Subtotal		4.00 E-03	100.0	1000000	0.09	931

Heat Sink

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	3.15 E+00	99.9	999000	73.25	732502
Copper & its alloys	Zirconium	7704-99-6	3.15 E-03	0.1	1000	0.07	733
Subtotal			3.15 E+00	100	1000000	73.32	733236

Heat Sink Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Nickel & its alloys	Nickel	7440-02-0	1.35 E-01	99.9	1000000	3.13	31340

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper Foil	7440-50-8					
Glass	Fiber Glass	65997-17-3					
Thermoset	Bismaleimide /Triazine	13676-54-5 / 25722-66-1					
Thermoset	Epoxy Resin	29690-82-2 / 26265-08-7					
Other inorganic materials	Inorganic Filler	13776-74-4 / 7631-86-9					
	Laminate Core Subtotal		2.39 E-01	61.13	611253	5.56	55649
Other inorganic materials	Barium sulfate	7727-43-7					
Other organic materials	Dipropylene glyco monomethyl ether	34590-94-8					
Other inorganic materials	Talc containing no asbestiform fibers	14807-96-6					
Other organic materials	Acetophenone derivative	Proprietary					
Other organic materials	Solvent naphta(petroleum), heavy arom	64742-94-5					
Other inorganic materials	Silica	14808-60-7					
	Soldermask Subtotal		8.50 E-02	21.74	217391	1.98	19791
Copper & its alloys	Copper	7440-50-8	6.10 E-02	15.60	156010	1.42	14203
Nickel & its alloys	Nickel	7440-02-0	5.00 E-03	1.28	12788	0.12	1164
Precious Metals	Gold	7440-57-5	1.00 E-03	0.26	2558	0.02	233
Subtotal			3.91 E-01	100.00	1000000	9.10	91040

Solder Ball

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	4.24 E-01	96.50	965000	9.86	98639
Tin & its alloys	Silver	7440-22-4	1.32 E-02	3.00	30000	0.31	3066
Tin & its alloys	Copper	7440-50-8	2.20 E-03	0.50	5000	0.05	511
Subtotal			4.39 E-01	100	1000000	10.22	102217

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	2.57 E-02	100	1000000	0.60	5984

Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious Metals	Gold	7440-57-5	9.01 E-03	99.00	990000	0.21	2098
Precious Metals	Palladium	7440-05-3	9.10 E-05	1.00	10000	0.00	21
Subtotal			9.10 E-03	100.00	1000000	0.21	2119

Dam

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Epoxy	25068-38-6	5.40 E-03	74.0	740000	0.13	1258
Other organic materials	Silicon dioxide	60676-86-0	1.90 E-03	26.0	260000	0.04	442
Subtotal			7.30 E-03	100.0	1000000	0.17	1700

Encapsulant

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Epoxy	25068-38-6	9.99 E-02	74.0	740000	2.33	23261
Other organic materials	Silicon dioxide	60676-86-0	3.51 E-02	26.0	260000	0.82	8173
Subtotal			1.35 E-01	100.0	1000000	3.14	31433

	Weight (g)	Percentage (%)	PPM
Package Totals	**4.29 E+00**	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.

ANALOG DEVICES