

## Materials Declaration

<b>Package</b>	BGA
<b>Body Size</b>	27 X 27
<b>Ball Count</b>	297
<b>Option</b>	Pb-Free
<b>Ball Size</b>	0.6mm

### Molding Compound

Item	% of Compound	Weight (g)	PPM
Epoxy resin	10	1.22E-01	47627
SiO2 Filler	77	9.40E-01	366728
Phenol Resin	10	1.22E-01	47627
Carbon Black	0.5	6.11E-03	2381
Metal Hydroxide	2.5	3.05E-02	11907

### Laminate

Item	% of Laminate	Weight (g)	PPM
BT-Epoxy	25	2.71E-01	105691
Glass Fiber	25	2.71E-01	105691
Copper	19	2.06E-01	80325
Nickel	11	1.19E-01	46504
Gold	7.8	8.46E-02	32975
Solder Mask (AUS303)	12.2	9.97E-02	38894

### Solder Ball

Item	% of Solder Ball	Weight (g)	PPM
Sn	96.5	2.40 E-01	93600
Ag	3	7.46 E-03	2909
Cu	0.5	1.24 E-03	484

### Bond Wires

Item	% of Wire	Weight (g)	PPM
Au	99	6.01 E-03	2344

### Chip

Item	% of Chip	Weight (g)	PPM
Si	100	3.19 E-02	12441

### Die Attach

Item	% of Die Attach	Weight (g)	PPM
Ag	75	3.60 E-03	1404
Resin	5	2.40 E-04	94
Diester	12.5	6.00 E-04	234
Functionalized urethane	2.5	1.20 E-04	47
Functionalized ester	5	2.40 E-04	94

### Package Totals

Weight (g)	PPM
<b>2.56 E+00</b>	<b>1000000</b>

### Molding Compound

Item	PPM	Method
Pb	Not detected	SGS Test Report
Cd	Not detected	SGS Test Report
Hg	Not detected	SGS Test Report
Cr+6	Not detected	SGS Test Report
PBB	Not detected	SGS Test Report
PBDE	Not detected	SGS Test Report

### Die Attach Paste

Item	PPM	Method
Pb	Not detected	US EPA Method #3050B
Cd	Not detected	EN 1122:2001, Method B
Hg	Not detected	US EPA Method #3052
Cr+6	Not detected	US EPA Method #7196A, #3060A
PBB	Not detected	US EPA Method #3540 or #3550
PBDE	Not detected	US EPA Method #3540 or #3551

### Laminate

Item	PPM	Method
Pb		
Cd		
Hg		
Cr+6		
PBB		
PBDE		

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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<b>Body Size</b>	27 X 27
<b>Ball Count</b>	297
<b>Option</b>	SnPbAg
<b>Ball Size</b>	0.6mm

### Molding Compound

Item	% of Compound	Weight (g)	PPM
Silica	71	8.83900E-01	337533
Epoxy Resin	25	3.11220E-01	118845
Antimony Oxide	3	3.73500E-02	14263
Carbon Black	1	1.24489E-02	4754

### Laminate

Item	% of Laminate	Weight (g)	PPM
BT-Epoxy	25	2.71E-01	103486
Glass Fiber	25	2.71E-01	103486
Copper	19	2.06E-01	78649
Nickel	11	1.19E-01	45534
Gold	7.8	8.46E-02	32288
Solder Mask (AUS5)	12.2	9.97E-02	38083

### Solder Ball

Item	% of Solder ball	Weight (g)	PPM
Tin	62	1.75 E-01	66837
Lead	36	1.02 E-01	38808
Silver	2	5.65 E-03	2156

### Bond Wires

Item	% of Wire	Weight (g)	PPM
Gold	99	6.01 E-03	2295

### Chip

Item	% of Chip	Weight (g)	PPM
Si	100	3.19 E-02	12182

### Die Attach

Item	% of Die Attach	Weight (g)	PPM
Ag	75	1.57500E-03	601
Resin	15	3.15000E-04	120
Amine	5	1.05000E-04	40
Silane	5	1.05000E-04	40

### Package Totals

Weight (g)	PPM
<b>2.62 E+00</b>	<b>1000000</b>

### Molding Compound

Item	PPM	Method
Pb	Not detected	US EPA Method #3052
Cd	Not detected	US EPA Method #3052
Hg	Not detected	US EPA Method #3052
Cr+6	Not detected	US EPA Method #7196A, #3060A
PBB	Not detected	Analysis was performed by GC/MS
PBDE	Not detected	Analysis was performed by GC/MS

### Die Attach Paste

Item	PPM	Method
Pb	Not detected	US EPA Method #3052
Cd	Not detected	US EPA Method #3052
Hg	Not detected	US EPA Method #3052
Cr+6	Not detected	US EPA Method #7196A, #3060A
PBB	Not detected	Analysis was performed by GC/MS
PBDE	Not detected	Analysis was performed by GC/MS

### Laminate

Item	PPM	Method
Pb		
Cd		
Hg		
Cr+6		
PBB		
PBDE		

STS-B-C

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