Materials Declaration

Package	LQFP_PQ4
Body Size	10 X 10 X 1.4
LeadCount	52
Option	Pb-Free

Molding Compound

Item	% of Compound	Weight (g)	PPM
SiO2 Filler	88.00	1.63 E-01	329286
Multiaromatic resin	11.50	2.13 E-02	43032
Carbon Black	0.50	9.26 E-04	1871

Leadframe

Item	% of Leadframe	Weight (g)	PPM
Cu	99.25	9.08 E-02	183543
Cr	0.30	2.75 E-04	556
Sn	0.25	2.29 E-04	463
Zn	0.20	1.83 E-04	370

Internal Leadframe Plating

	% of Plating	Weight (g)	PPM
Ag	100.0	5.40 E-04	1091

External Leadframe Plating

Item	% of Plating	Weight (g)	PPM
Sn	100.0	4.14 E-03	8363

External Heat Sink Plating

Item	% of Plating	Weight (g)	PPM
Sn	100.0	2.84 E-03	5732

Bond Wires

	% of Wire	Weight (g)	PPM
Au	99.99	2.03 E-03	4104

Chip

	% of Chip	Weight (g)	PPM
Si	100.0	2.80 E-02	56655

Die Attach

Item	% of Die Attach	Weight (g)	PPM
Ag	70.0	3.09 E-03	6247
Resin	20.0	8.83 E-04	1784
Anhydride	10.0	4.42 E-04	893

Heat Sink

	% of Heat Sink	Weight (g)	PPM
Cu	100.0	1.76 E-01	356011

Package Totals

Weight (g)	PPM
4.95 E-01	1000000

Molding Compound

Item	PPM	Method
Pb	None Detected	US EPA 3050B. ICP-AES
Cd	None Detected	EN 1122:2001. ICP-AES
Hg	None Detected	US EPA 3052. ICP - AES
Cr+6	None Detected	US EPA 3060A & 7196A.
PBB	None Detected	US EPA 3540C. Analysis performed by HPLC/DAD, LC/MS or GC/MS
PBDE	None Detected	US EPA 3540C. Analysis performed by HPLC/DAD, LC/MS or GC/MS

Die Attach Paste

Item	PPM	Method
Pb	None Detected	US EPA 3052. ICP -OES
Cd	None Detected	US EPA 3052. ICP -OES
Hg	None Detected	US EPA 3052. ICP -OES
Cr+6	None Detected	US EPA 3060A & 7196A . UV-VIS
PBB	None Detected	SGS-in house method. Analysis performed by GC/MS
PBDE	None Detected	SGS-in house method. Analysis performed by GC/MS

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
any inaccuracy of such information.

ANALOG DEVICES

ADI Proprietary

Materials Declaration

Package	LQFP_PQ4
Body Size	10 X 10 X 1.4
LeadCount	52
Option	Sn/Pb

Molding Compound

Item	% of Compound	Weight (g)	PPM
SiO2 Filler	85.0	1.60 E-01	319344
Biphenyl resin	9.0	1.70 E-02	33813
Phenol Resin	5.0	9.44 E-03	18785
Sb2O3	0.5	9.44 E-04	1878
Brominated Resin	0.5	9.44 E-04	1878

Leadframe

Item	% of Leadframe	Weight (g)	PPM
Cu	99.25	9.64 E-02	191773
Cr	0.30	2.91 E-04	580
Sn	0.25	2.43 E-04	483
Zn	0.20	1.94 E-04	386

Internal Leadframe Plating

	% of Plating	Weight (g)	PPM
Ag	100.0	2.43 E-03	4836

External Leadframe Plating

Item	% of Plating	Weight (g)	PPM
Sn	85.0	3.83 E-03	7611
Pb	15.0	6.75 E-04	1343

External Heat Sink Plating

Item	% of Plating	Weight (g)	PPM
Sn	85.0	2.64 E-03	5243
Pb	15.0	4.65 E-04	925

Bond Wires

	% of Wire	Weight (g)	PPM
Au	99.99	3.40 E-03	6766

Chip

	% of Chip	Weight (g)	PPM
Si	100.0	2.34 E-02	46564

Die Attach

Item	% of Die Attach	Weight (g)	PPM
Ag	74.0	2.66 E-03	5301
Resin	26.0	9.36 E-04	1863

Heat Sink

	% of Heat Sink	Weight (g)	PPM
Cu	100.0	1.76 E-01	350626

Package Totals

Weight (g)	PPM
5.03 E-01	1000000

Molding Compound

Item	PPM	Method
Pb	None Detected	US EPA 3050B. ICP-AES
Cd	None Detected	EN 1122:2001. ICP-AES
Hg	None Detected	US EPA 3052. ICP - AES
Cr+6	None Detected	US EPA 3060A & 7196A.
PBB	None Detected	US EPA 3540C. Analysis performed by HPLC/DAD, LC/MS or GC/MS
PBDE	None Detected	US EPA 3540C. Analysis performed by HPLC/DAD, LC/MS or GC/MS

Die Attach

Item	PPM	Method
Pb	3	US EPA 3052. ICP-OES
Cd	None Detected	US EPA 3052. ICP-OES
Hg	None Detected	US EPA 3052. ICP-OES
Cr+6	None Detected	US EPA 3060A & 7196A. UV-VIS
PBB	None Detected	Analysis performed by GC/MS
PBDE	None Detected	Analysis performed by GC/MS

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ANALOG DEVICES