Product / Package Information

Package	QSOP
Body Size	150 mils
Lead Count	20
Terminal Finish	100Sn
MS Number	MS010705B

Environmental Information

RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	Yes
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	5.34 E-02	87.7	877000	44.44	444443
Thermosets	Epoxy Resin	Proprietary	3.05 E-03	5.0	50000	2.53	25339
Thermosets	Phenol Resin	Proprietary	3.05 E-03	5.0	50000	2.53	25339
Thermosets	Epoxy Cresol Novolac	29690-82-2	1.22 E-03	2.0	20000	1.01	10136
Other inorganic materials	Carbon Black	1333-86-3	1.83 E-04	0.3	3000	0.15	1520
Subtotal			6.09 E-02	100	1000000	50.68	506776

Leadframe

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	4.92 E-02	97.57	975706	40.88	408773
Copper & its alloys	Iron	7439-89-6	1.15 E-03	2.28	22789	0.95	9547
Copper & its alloys	Zinc	7440-66-6	6.36 E-05	0.13	1263	0.05	529
Copper & its alloys	Phosphorus	7723-14-0	1.22 E-05	0.02	242	0.01	102
Subtotal			5.04 E-02	100.00	1000000	41.90	418951

Internal Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	5.56 E-04	100.0	1000000	0.46	4625

External Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	2.69 E-03	100.0	1000000	2.24	22382

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	5.25 E-04	99.99	1000000	0.44	4365

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	4.85 E-03	100.0	1000000	4.03	40293

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	2.51 E-04	80	800000	0.21	2086
Thermosets	Epoxy Resin	Proprietary	4.70 E-05	15	150000	0.04	391
Others	Curing agent & hardener	Proprietary	1.57 E-05	5	50000	0.01	130
Subtotal			3.14 E-04	100	1000000	0.26	2608

	Weight (g)	Percentage (%)	PPM
Package Totals	**1.20 E-01**	**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