

Product / Package Information

Package	Flatpack
Body Size (mm)	
Lead Count	2
Terminal Finish	Au

Environmental Information

RoHS Compliant	Yes
High Temperature Compliant	N/A
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes

Materials Declaration

Combo Lid

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other Ferrous alloys	Kovar		7.91E-02	92.0	920000	52.27	522727
Nickel & its alloys	Nickel	7440-02-0	3.44E-03	4.00	40000	2.27	22727
Precious metals	Gold	7440-57-5	3.44E-03	4.00	40000	2.27	22727
Subtotal			8.60E-02	100.00	1000000	56.82	568182

Lid Frame

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	4.77 E-03	79.58	795800	3.15	31546
Tin & its alloys	Tin	7440-31-5	1.23 E-03	20.42	204200	0.81	8095
Subtotal			6.00E-03	100.00	1000000	3.96	39641

Ceramic Package

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics							
Ceramics	Aluminum oxide	1344-28-1	2.69 E-02	90.49	904853	17.79	177900
Ceramics	Chromium oxide	1308-38-9	1.16 E-03	3.90	38960	0.77	7660
Ceramics	Silicon Dioxide	14808-60-7	1.04 E-03	3.50	35044	0.69	6890
Ceramics	Titanium dioxide	13463-67-7	2.97 E-04	1.00	9985	0.20	1963
Ceramics	Magnesium oxide	1309-48-4	1.81 E-04	0.61	6069	0.12	1193
Ceramics	Calcium oxide	1305-78-8	1.51 E-04	0.51	5090	0.10	1001
Subtotal			2.98 E-02	100.00	1000000	19.66	196607
Metallization							
Other inorganic materials	Tungsten	7440-33-7	3.37 E-03	100.00	1000000	2.23	22286
Subtotal			3.37 E-03	100.00	1000000	2.23	22286
Leads							
Iron & its alloys	Iron	7439-89-6	1.09 E-02	54.0	540121	7.23	72286
Iron & its alloys	Nickel	7440-02-0	5.87 E-03	29.0	289905	3.88	38799
Iron & its alloys	Cobalt	7440-48-4	3.44 E-03	17.0	169974	2.27	22748
Subtotal			2.03 E-02	100.00	1000000	13.38	133833
Brazing							
Precious metals	Silver	7440-22-4	7.40 E-04	72.2	721591	0.49	4888
Copper & its alloys	Copper	7440-50-8	2.85 E-04	27.8	278409	0.19	1886
Subtotal			1.03 E-03	100.00	1000000	0.68	6774
Nickel Plating							
Nickel & its alloys	Nickel	7440-02-0	1.57 E-04	99.6	995685	0.10	1039
Nickel & its alloys	Boron	7440-42-8	5.83 E-07	0.4	3688	0.0004	4
Nickel & its alloys	Bismuth	7440-69-9	9.90 E-08	0.1	627	0.0001	1
Subtotal			1.58 E-04	100.00	1000000	0.10	1044
Nickel Plating							
Nickel & its alloys	Nickel	7440-02-0	1.26 E-03	99.99	999907	0.83	8314
Other inorganic materials	Lead	7440-31-5	1.17 E-07	0.009	93	0.0001	1
Subtotal			1.26 E-03	100.00	1000000	0.83	8315
Subtotal			5.58 E-02			36.89	368860

External Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	2.43 E-03	100.00	1000000	1.61	16051

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Aluminum	7429-90-5	1.00 E-04	100.00	1000000	0.07	661

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	9.00 E-04	100.00	1000000	0.59	5946

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Silver	7440-22-4	8.00 E-05	80.00	800000	0.05	529
Polymer	Cyanate ester resin	Proprietary	2.00 E-05	20.00	200000	0.01	132
Subtotal			1.00 E-04	100.00	1000000	0.07	661

Package Totals			Weight (g) 1.51 E-01			Percentage (%) 100.00	PPM 1000000
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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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Product / Package Information

Package	Flatpack
Body Size (mm)	
Lead Count	2
Terminal Finish	SnPb

Environmental Information

RoHS Compliant	No
High Temperature Compliant	N/A
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes

Materials Declaration

Combo Lid

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other Ferrous alloys	Kovar		7.91E-02	92.0	920000	49.03	490332
Nickel & its alloys	Nickel	7440-02-0	3.44E-03	4.00	40000	2.13	21319
Precious metals	Gold	7440-57-5	3.44E-03	4.00	40000	2.13	21319
Subtotal			8.60E-02	100.00	1000000	53.30	532970

Lid Frame

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	4.77 E-03	79.58	795800	2.96	29591
Tin & its alloys	Tin	7440-31-5	1.23 E-03	20.42	204200	0.76	7593
Subtotal			6.00E-03	100.00	1000000	3.72	37184

Ceramic Package

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics							
Ceramics	Aluminum oxide	1344-28-1	2.69 E-02	90.49	904853	16.69	166875
Ceramics	Chromium oxide	1308-38-9	1.18 E-03	3.90	38960	0.72	7185
Ceramics	Silicon Dioxide	14808-60-7	1.04 E-03	3.50	35044	0.65	6463
Ceramics	Titanium dioxide	13463-67-7	2.97 E-04	1.00	9985	0.18	1841
Ceramics	Magnesium oxide	1309-48-4	1.81 E-04	0.61	6069	0.11	1119
Ceramics	Calcium oxide	1305-78-8	1.51 E-04	0.51	5090	0.09	939
Subtotal			2.98 E-02	100.00	1000000	18.44	184423
Metallization							
Other inorganic materials	Tungsten	7440-33-7	3.37 E-03	100.00	1000000	2.09	20905
Subtotal			3.37 E-03	100.00	1000000	2.09	20905
Leads							
Iron & its alloys	Iron	7439-89-6	1.09 E-02	54.0	540121	6.78	67806
Iron & its alloys	Nickel	7440-02-0	5.87 E-03	29.0	289905	3.64	36394
Iron & its alloys	Cobalt	7440-48-4	3.44 E-03	17.0	169974	2.13	21338
Subtotal			2.03 E-02	100.00	1000000	12.55	125539
Brazing							
Precious metals	Silver	7440-22-4	7.40 E-04	72.2	721591	0.46	4585
Copper & its alloys	Copper	7440-50-8	2.85 E-04	27.8	278409	0.18	1769
Subtotal			1.03 E-03	100.00	1000000	0.64	6355
Nickel Plating							
Nickel & its alloys	Nickel	7440-02-0	1.57 E-04	99.6	995685	0.10	975
Nickel & its alloys	Boron	7440-42-8	5.83 E-07	0.4	3688	0.0004	4
Nickel & its alloys	Bismuth	7440-69-9	9.90 E-08	0.1	627	0.0001	1
Subtotal			1.58 E-04	100.00	1000000	0.10	979
Nickel Plating							
Nickel & its alloys	Nickel	7440-02-0	1.26 E-03	34.12	341221	0.78	7799
Precious metals	Gold	7440-57-5	2.43 E-03	65.87	658747	1.51	15056
Other inorganic materials	Lead	7439-92-1	1.17 E-07	0.003	32	0.0001	1
Subtotal			3.69 E-03	100.00	1000000	2.29	22856
Subtotal			5.83 E-02			36.11	361056

External Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	6.30 E-03	63.00	630000	3.90	39043
Tin & its alloys	Lead	7439-92-1	3.70 E-03	37.00	370000	2.29	22930
Subtotal			1.00 E-02	100.00	1000000	6.20	61973

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Aluminum	7429-90-5	1.00 E-04	100.00	1000000	0.06	620

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	9.00 E-04	100.00	1000000	0.56	5578

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Silver	7440-22-4	8.00 E-05	80.00	800000	0.05	496
Polymer	Cyanate ester resin	Proprietary	2.00 E-05	20.00	200000	0.01	124
Subtotal			1.00 E-04	100.00	1000000	0.06	620

Package Totals			Weight (g) 1.61 E-01			Percentage (%) 100.00	PPM 1000000
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