

Product / Package Information

Package	LGA - ADIS16265
Body Size	
Lead Count	
Terminal Finish	

Environmental Compliance Information

RoHS Compliant	Yes - with exemption
High Temperature Compliant	No
Halogen Free Compliant	Yes
REACH SVHC Compliant	No

Materials Declaration

PCB

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Composite	Continuous Filament Fiber Glass	65997-17-3	1.19 E-02	40.00	400000	1.96	19557
Copper & its alloys	Copper	7440-50-8	1.78 E-02	60.00	600000	2.93	29335
	Core Subtotal		2.97 E-02	100.00	1000000	4.89	48891
Other organic materials	Solvent naphta (petroleum), Heavy arom	64742-94-5	6.00 E-04	30.00	113208	0.10	988
Other organic materials	Acetophenone derivative	Proprietary	5.00 E-04	25.00	94340	0.08	823
Other inorganic materials	Barium sulfate	7727-43-7	3.00 E-04	15.00	56604	0.05	494
Other inorganic materials	Silica (crystalline)	14808-60-7	2.00 E-04	10.00	37736	0.03	329
Other organic materials	Dipropylene glycol monomethyl ether	34590-94-8	2.00 E-04	10.00	37736	0.03	329
Other inorganic materials	Talc containing no asbestiform fibers	14807-96-6	2.00 E-04	10.00	37736	0.03	329
	Soldermask Subtotal		2.00 E-03	100.00	377358	0.33	3292
Precious metals	Gold	7440-57-5	6.60 E-04	100.00	1000000	0.11	1086
Nickel & its alloys	Nickel	7440-02-0	6.60 E-04	100.00	1000000	0.11	1086
			3.30 E-02	100.00	1000000	5.44	54357

Board Frame

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Composite	Continuous Filament Fiber Glass	65997-17-3	3.16 E-02	40.00	400000	5.21	52085
Copper & its alloys	Copper	7440-50-8	4.75 E-02	60.00	600000	7.81	78127
	Core Subtotal		7.91 E-02	100.00	1000000	13.02	130212
Other organic materials	Solvent naphta (petroleum), Heavy arom	64742-94-5	1.59 E-03	30.00	300000	0.26	2617
Other organic materials	Acetophenone derivative	Proprietary	1.33 E-03	25.00	250000	0.22	2181
Other inorganic materials	Barium sulfate	7727-43-7	7.95 E-04	15.00	150000	0.13	1309
Other inorganic materials	Silica (crystalline)	14808-60-7	5.30 E-04	10.00	100000	0.09	872
Other organic materials	Dipropylene glycol monomethyl ether	34590-94-8	5.30 E-04	10.00	100000	0.09	872
Other inorganic materials	Talc containing no asbestiform fibers	14807-96-6	5.30 E-04	10.00	100000	0.09	872
	Soldermask Subtotal		5.30 E-03	100.00	1000000	0.87	8725
Precious metals	Gold	7440-57-5	1.80 E-03	100.00	1000000	0.30	2963
Nickel & its alloys	Nickel	7440-02-0	1.80 E-03	100.00	1000000	0.30	2963
Subtotal			8.80 E-02	100.00	1000000	14.49	144863

Solder Paste

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin and its alloys	Tin	7440-31-5	6.99 E-02	95.00	950000	11.51	115100
Tin and its alloys	Antimony	7440-36-0	3.68 E-03	5.00	50000	0.61	6058
Subtotal			7.36 E-02	100.00	1000000	12.12	121158

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Inorganic silicon	Doped Silicon	7440-21-3	3.48 E-02	100.00	1000000	5.73	57320

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	3.92 E-02	100.00	1000000	6.48	64563

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silicon Dioxide	14808-60-7	5.39 E-04	49.90	499000	0.09	887
Organic materials	Reaction product: bisphenol-F-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	9003-36-5	2.16 E-04	20.00	200000	0.04	356
Organic materials	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8	2.16 E-04	20.00	200000	0.04	356
Others	Aromatic Amine	Proprietary	5.40 E-05	5.00	50000	0.01	89
Glass	Glass	65997-17-3	5.40 E-05	5.00	50000	0.009	89
Organic materials	Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	1.08 E-06	0.10	1000	0.0002	2
Subtotal			1.08 E-03	100.00	1000000	0.18	1778

Underfill

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other Inorganic materials	Silica	60676-86-0	1.92 E-02	73.40	260395	3.15	31549
Other organic materials	hexahydromethylphthalic anhydride	25550-51-0	3.92 E-03	15.00	53214	0.64	6447
Other organic materials	1,6-Naphthalenediol diglycidyl ether	27610-48-6	1.96 E-03	7.50	26607	0.32	3224
Other organic materials	Bisphenol-A epichlorhydrin resin MW <= 700	25068-38-6	7.83 E-04	3.00	10643	0.13	1289
Other organic materials	4,4'-Methylene diphenyl diglycidyl ether	1675-54-3	1.44 E-04	0.55	1951	0.02	236
Other organic materials	Bisphenol-F epichlorhydrin resin; MW<700	9003-36-5	1.44 E-04	0.55	1951	0.02	236
Subtotal			2.61 E-02	100.00	1000000	4.30	42982

Label

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Static Dissipative Adhesive	Proprietary	5.73 E-02	50.65	506500	9.43	94301
Others	Topcoat Mixture	Proprietary	2.67 E-02	23.60	236000	4.39	43939
Other organic materials	Polyimide Film	Proprietary	2.31 E-02	20.45	204500	3.81	38074
Others	Primer Mixture	Proprietary	5.99 E-03	5.30	53000	0.99	9868
Subtotal			1.13 E-01	100.00	1000000	18.62	186182

Capacitor 1

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics	Ceramic						
	Barium oxide	1304-28-5	1.56 E-03	60.00	600000	2.34	23406
	Titanium dioxide	13463-67-7	7.82 E-02	30.00	300000	1.17	11703
	Misc	Proprietary	2.61 E-03	10.00	100000	0.39	3901
	Subtotal		2.61 E-02	100.00	1000000	3.90	39010
Copper and its alloys	Outer Electrode						
	Copper	7440-50-8	5.96 E-03	100.00	1000000	0.89	8908
Glass	Silicon dioxide	7631-86-9	5.29 E-04	80.00	800000	0.08	792
Glass	Diboron trioxide	1303-86-2	1.32 E-04	20.00	200000	0.02	198
	Subtotal		6.62 E-04	100.00	1000000	0.10	990
Nickel and its alloys	Nickel	7440-02-0	4.37 E-03	100.00	167702	0.65	6542
Tin and its alloys	Tin	7440-31-5	7.26 E-04	100.00	27835	0.11	1086
	Subtotal		3.78 E-02			5.65	56536

LCC Package

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		
				Percentage (%)	PPM	Percentage (%)	PPM	
Ceramics	Ceramic Base							
	Alumina	1344-28-1	9.70 E-02	91.32	913200	14.51	145052	
	Chromium oxide	1308-38-9	4.09 E-03	3.85	38500	0.61	6115	
	Silicon dioxide	7631-86-9	3.80 E-03	3.58	35800	0.57	5686	
	Titanium dioxide	13463-67-7	1.05 E-03	0.99	9900	0.16	1573	
	Molybdenum	7439-98-7	2.76 E-04	0.26	2600	0.04	413	
	Subtotal		1.06 E-01	100.00	1000000	15.88	158839	
Other inorganic materials	Terminals							
	Tungsten	7440-33-7	9.11 E-03	83.55	835500	1.36	13621	
	Nickel	7440-02-0	1.17 E-03	10.71	107100	0.17	1746	
	Precious metals	Gold	7440-57-5	6.26 E-04	5.74	57400	0.09	936
	Subtotal		1.09 E-02	100.00	1000000	1.63	16303	
Precious metals	Metal Lid							
	Iron	7439-89-6	1.46 E-02	58.0	579900	2.19	21866	
	Nickel	7440-02-0	1.06 E-02	42.0	420100	1.58	15840	
	Subtotal		2.52 E-02	100.0	1000000	3.77	37706	
Tin & its alloys	Solder Seal							
	Lead	7439-92-1	2.01 E-03	91.14	911400	0.30	2999	
	Tin	7440-31-5	1.39 E-04	6.33	63300	0.02	208	
	Silver	7440-22-4	2.79 E-05	1.27	12700	0.00	42	
	Indium	7440-74-6	2.77 E-05	1.26	12600	0.00	41	
	Subtotal		2.20 E-03	100.0	1000000	0.33	3290	
Aluminum & its alloys	Bond Wires							
	Aluminum	7429-90-5	3.00 E-05	99.0	990000	0.00	45	
	Silicon	7440-21-3	3.03 E-07	1.0	10000	0.00000	0	
	Subtotal		3.03 E-05	100.0	1000000	0.00	45	
Polymer	Die Attach							
	Polymer	Proprietary	3.29 E-03	100	1000000	0.49	4913	
Other inorganic materials	Chip							
	Doped Silicon	7440-21-3	6.00 E-03	100	1000000	0.90	8974	
	Subtotal		1.54 E-01			23.01	230071	

Resistor

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		
				Percentage (%)	PPM	Percentage (%)	PPM	
Ceramics	Ceramics							
	Aluminum oxide ; Alumina; Corundum;	1344-28-1	1.33 E-03	96.60	966000	0.20	1994	
	Silica; Silicon dioxide	7631-86-9	2.90 E-05	2.10	21000	0.00	43	
	Magnesium oxide	1309-48-4	1.38 E-05	1.00	10000	0.002	21	
	Calcium oxide	1305-78-8	4.14 E-06	0.30	3000	0.001	6	
	Subtotal		1.38 E-03	100.00	1000000	0.21	2064	
Precious metals	Top Terminal							
	Silver	7440-22-4	1.69 E-05	91.23	912300	0.00252	25	
	Palladium	7440-05-3	1.22 E-06	6.61	66100	0.00018	2	
	Glass	Lead(II) oxide; Lead oxide (PbO); C.I.	1317-36-8	2.40 E-07	1.30	13000	0.00004	0.4
	Glass	Silica; Silicon dioxide	7631-86-9	1.59 E-07	0.86	8600	0.00002	0.2
	Subtotal		1.85 E-05	100.00	1000000	0.00276	28	
Precious metals	Bottom Terminal							
	Silver	7440-22-4	2.33 E-05	97.49	974937	0.00349	35	
	Glass	Lead(II) oxide; Lead oxide (PbO); C.I.	1317-36-8	1.50	15038	0.00005	1	
	Glass	Silica; Silicon dioxide	7631-86-9	2.40 E-07	1.00	10025	0.00004	0.4
	Subtotal		2.39 E-05	100.00	1000000	0.00358	36	
Glass	Resistive Element							
	Ruthenium(IV) oxide	12036-10-1	7.56 E-06	42.88	428800	0.00113	11	
	Glass	Lead(II) oxide; Lead oxide (PbO); C.I.	1317-36-8	4.87 E-06	27.60	276000	0.00073	7
	Glass	Silica; Silicon dioxide	7631-86-9	3.53 E-06	20.00	200000	0.00053	5
	Glass	Boron oxide	1303-86-2	1.25 E-06	7.11	71100	0.00019	2
	Glass	Manganese dioxide	1313-13-9	4.25 E-07	2.41	24100	0.00006	1
	Subtotal		1.76 E-05	100.00	1000000	0.00264	26	
Glass	First Protective Coating							
	Lead(II) oxide; Lead oxide (PbO); C.I.	1317-36-8	9.70 E-06	54.97	549700	0.00145	15	
	Glass	Silica; Silicon dioxide	7631-86-9	4.52 E-06	25.61	256100	0.00068	7
	Glass	Boron oxide	1303-86-2	2.28 E-06	12.91	129100	0.00034	3
	Glass	Zinc oxide	1314-13-2	7.41 E-07	4.20	42000	0.00011	1
	Glass	Chromium(III) oxide; Pigment green 17	1308-38-9	4.07 E-07	2.31	23100	0.00006	1
	Subtotal		1.76 E-05	100.00	1000000	0.00264	26	
Other organic materials	Second Protective Coating							
	Epichlorohydrin, o-cresol, formaldehyde	29690-82-2	1.93 E-05	68.99	689900	0.00288	29	
	Other inorganic materials	Silicon dioxide	7631-86-9	6.43 E-06	23.01	230100	0.00096	10
	Other inorganic materials	Carbon black	1333-86-4	2.23 E-06	8.00	80000	0.00033	3
	Subtotal		2.79 E-05	100.00	1000000	0.00	42	
Other organic materials	Side Terminal							
	Bisphenol A, epichlorohydrin polymer;	25068-38-6	7.25 E-05	45.45	454511	0.01085	108	
	Precious metals	Silver	7440-22-4	7.25 E-05	45.45	454474	0.01085	108
	Other inorganic materials	Carbon black	1333-86-4	1.45 E-05	9.10	91015	0.00217	22
	Subtotal		1.60 E-04	100.00	1000000	0.02	239	
Nickel and its alloys	Middle Terminal							
	Nickel	7440-02-0	1.29 E-04	100.00	1000000	0.01929	193	
Tin and its alloys	Outer Terminal							
	Tin	7440-31-5	1.20 E-04	100.00	1000000	0.01795	179	
	Subtotal		1.89 E-03			0.28331	2833	

Capacitor 2

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		
				Percentage (%)	PPM	Percentage (%)	PPM	
Ceramics	Barium Titanate	12047-27-7	2.20 E-03	44.00	440000	0.33		3290
Copper and its alloys	Copper	7440-50-8	1.60 E-03	32.00	320000	0.24		2393
Nickel and its alloys	Nickel	7440-02-0	1.00 E-03	20.00	200000	0.15		1496
Tin and its alloys	Tin	7440-31-5	1.20 E-04	2.40	24000	0.02		179
Others	Others	Proprietary	8.00 E-05	1.60	16000	0.01		120
Subtotal			5.00 E-03	100.00	1000000	0.75		7478

Package Totals	Weight (g)	Percentage (%)	PPM
	6.69 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.



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