

Product / Package Information

Package	LGA_CAV (SiP/μModule)
Body Size	11X13X2.90
Lead Count	34
Terminal Finish	NiPdAu

Environmental Compliance Information

RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes except Bisphenol - A

Materials Declaration

Substrate							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper and its alloys	Copper	7440-50-8	4.41 E-01	49.37	493700	22.80168	228017
Other organic materials	Proprietary Resin Mixture	Trade secret	1.79 E-01	20.04	200400	9.25553	92555
Composite	Glass Fabric	65997-17-3	1.27 E-01	14.23	142300	6.57217	65722
Other organic materials	Modified Epoxy Acrylate Resin	186511-06-8	5.06 E-02	5.67	56700	2.61871	26187
Other organic materials	C.I pigment blue 15	147-14-8	5.35 E-04	0.06	600	0.02771	277
Other inorganic materials	Silicon dioxide	7631-86-9	2.62 E-02	2.94	29400	1.35785	13578
Other inorganic materials	Barium Sulfate	7727-43-7	1.78 E-04	0.02	200	0.00924	92
Other inorganic materials	3-methoxy-3-methylbutylacetate	103429-90-9	8.30 E-03	0.93	9300	0.42952	4295
Other inorganic materials	Organic yellow pigment	Trade secret	5.35 E-04	0.06	600	0.02771	277
Other inorganic materials	Dipropylene glycol monomethyl ether	34590-94-8	4.55 E-03	0.51	5100	0.23555	2355
Other inorganic materials	Heavy Aromatic Solvent naphtha	64742-94-5	1.53 E-02	1.71	17100	0.78977	7898
Other inorganic materials	Talc	14807-96-6	2.18 E-02	2.44	24400	1.12692	11269
Precious metals	Gold	7440-57-5	2.50 E-03	0.28	2800	0.12932	1293
Nickel & its alloys	Nickel	7440-02-0	1.47 E-02	1.65	16500	0.76206	7621
Precious metals	Palladium	7440-05-3	8.03 E-04	0.09	900	0.04157	416
Subtotal			8.92 E-01	100.00	1000000	46.18530	461853

Chip 1							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Gallium Arsenide	1303-00-0	1.32E-02	100.00	1000000	0.68283	6828

Chip 2 & 3							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silicon	7440-21-3	9.63 E-03	100.00	1000000	0.49824	4982

Bond Wire							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	4.91 E-03	99.00	990000	0.25430	2543
Precious metals	Palladium	7440-05-3	4.96 E-05	1.00	10000	0.00257	26
Subtotal			4.96 E-03	100.00	1000000	0.25687	2569

Solder Paste							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin and its alloys	Tin	7440-31-5	6.19 E-03	96.50	965000	0.32044	3204
Tin and its alloys	Silver	7440-22-4	1.92 E-04	3.00	30000	0.00996	100
Tin and its alloys	Copper	7440-50-8	3.21 E-05	0.50	5000	0.00166	17
Subtotal			6.42 E-03	100.00	1000000	0.33206	3321

Die Attach 1							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	7.80 E-03	92.00	920000	0.40376	4038
Others	Diluent, proprietary	Trade Secret	1.70 E-04	2.00	20000	0.00878	88
Other organic materials	Epoxy, proprietary	Trade Secret	2.54 E-04	3.00	30000	0.01317	132
Other organic materials	Resin, proprietary	Trade Secret	2.54 E-04	3.00	30000	0.01317	132
Subtotal			8.48 E-03	100.00	1000000	0.43887	4389

Die Attach 2							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Epoxy Resin	Trade secret	5.70 E-04	85.0	850000	0.02952	295
Other organic materials	Acrylic resin	Trade secret	1.01 E-04	15.0	150000	0.00521	52
Subtotal			6.71 E-04	100.00	1000000	0.03473	347

Lid Shield Attach							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Bisphenol-A epichlorohydrin resin MW <= 700	25068-38-6	1.10 E-03	7.5	75000	0.05704	570
Other organic materials	Bisphenol-F epichlorohydrin resin; MW<700	9003-36-5	8.82 E-04	6	60000	0.04564	456
Copper and its alloys	Silver	7440-22-4	1.14 E-02	77.50	775000	0.58946	5895
Other organic materials	Neodecanoic acid, oxiranylmethyl ester	26761-45-5	8.82 E-04	6.00	60000	0.04564	456
Other organic materials	8-Hydroxyquinoline	148-24-3	4.41 E-04	3.00	30000	0.02282	228
Subtotal			1.47 E-02	100.00	1000000	0.76059	7606

Sealing Material							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silica, amorphous, naturally	60676-86-0	5.58 E-01	60	600000	28.85827	288583
Organic materials	Hexahydrodiphthalic anhydride	25550-51-0	1.86 E-01	20	200000	9.61942	96194
Other organic materials	Silicon dioxide	7631-86-9	6.97 E-02	7.5	75000	3.60728	36073
Thermosets	Epoxy resin	Trade secret	4.65 E-02	5	50000	2.40486	24049
Other inorganic materials	Quartz (SiO2)	14808-60-7	2.79 E-02	3	30000	1.44291	14429
Other inorganic materials	Substituted phthalic anhydride	34090-76-1	2.79 E-02	3	30000	1.44291	14429
Other inorganic materials	Bisphenol A Diglycidyl Ether	1675-54-3	4.65 E-03	0.50	5000	0.24049	2405
Other inorganic materials	Carbon black	1333-86-4	4.65 E-03	0.50	5000	0.24049	2405
Other inorganic materials	Substituted silane	Trade secret	4.65 E-03	0.50	5000	0.24049	2405
Subtotal			9.29 E-01	100.00	1000000	48.09711	480971

Capacitor (C1-C9)							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Calcium Titanate	12049-50-2	3.14 E-02	65.23	652330	1.62622	16262
Nickel & its alloys	Nickel	7440-02-0	1.03 E-02	21.42	214180	0.53394	5339
Copper & its alloys	Copper	7440-50-8	1.32 E-03	2.75	27460	0.06846	685
Tin & its alloys	Tin	7440-31-5	5.11 E-03	10.60	106030	0.26433	2643
Subtotal			4.82 E-02	100.00	1000000	2.49294	24929

Capacitor (C11)							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other non-ferrous metals and	Strontium Titanate Base	Trade secret	3.82 E-03	89.69	896900	0.19772	1977
	Titanium	7440-32-6	5.11 E-06	0.12	1200	0.00026	3
	Platinum	2023600	4.90 E-05	1.15	11500	0.00254	25
Precious Metals	Gold	7440-57-5	3.85 E-04	9.04	90400	0.01993	199
Subtotal			4.26 E-03	100.00	1000000	0.22045	2204

Package Totals			Weight (g)	1.93 E+00		Percentage (%)	100	PPM	1000000
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Control ID : MS012398F

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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