Product / Package Information

Package	LGA_CAV
Body Size (mm)	4 X 3 X 1.2
Ball Count	16
Terminal Finish	Gold
MS Number	MS011751B

Environmental Information

RoHS Compliant	Yes - with exemption 7(c)-1
High Temperature Compliant	Yes
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes

*contains Lead (Pb) > 0.1% or 1000ppm of the overall product

Last Updated **27-Sep-19**

Materials Declaration

Lid/Shield

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Stainless steel	Iron	7439-89-6	6.51 E-03	62.61	626078	26.85	268502
Stainless steel	Chromium	7440-47-3	1.89 E-03	18.20	181995	7.81	78051
Stainless steel	Nickel	7440-02-0	8.36 E-04	8.04	80402	3.45	34481
Stainless steel	Manganese	7439-96-5	1.13 E-04	1.09	10855	0.47	4656
Stainless steel	Silicon	7440-21-3	5.39 E-05	0.52	5183	0.22	2223
Stainless steel	Carbon	7440-44-0	4.00 E-06	0.04	385	0.02	165
Stainless steel	Nitrogen	7727-37-9	3.50 E-06	0.03	337	0.01	144
Stainless steel	Phosphorus	7723-14-0	2.50 E-06	0.02	240	0.01	103
Stainless steel	Molybdenum	7439-98-7	2.10 E-06	0.02	202	0.01	87
Stainless steel	Sulfur	7704-34-9	3.00 E-07	0.003	29	0.001	12
Nickel & its alloys	Nickel	7440-02-0	9.81 E-04	9.430	94295	4.044	40440
Subtotal			1.04 E-02	100.0	1000000	42.886	428864

Laminate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Composite	Fibrous glass-wool	65997-17-3	1.09 E-03	23.8095	238095	4.476	44760
Composite	Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane	105391-33-1	2.41 E-04	5.29	52935	0.995	9951
Composite	Triazine	1156-51-0	2.41 E-04	5.29	52935	0.995	9951
Composite	Phenolic Polymer Resin	9003-36-5	2.41 E-04	5.29	52935	0.995	9951
Composite	Aluminium hydroxide	21645-51-2	6.03 E-04	13.22	132200	2.485	24853
Composite	Laminate Subtotal		4.56 E-03	52.91	529132	18.80	187994
Other organic materials	Cured resin	Proprietary	3.24 E-05	5.103	51030	0.1334	1334
Other inorganic materials	Barium sulfate	7727-43-7	9.32 E-06	1.47	14700	0.04	384
Other inorganic materials	Talc	14807-96-6	3.17 E-06	0.50	5000	0.01	131
Other organic materials	Copper phthalocyanine blue	147-14-8	1.61 E-07	0.03	254	0.00	7
Other inorganic materials	Silicon dioxide	7631-86-9	1.47 E-06	0.23	2315	0.01	61
Other inorganic materials	Aluminium compounds	Proprietary	2.11 E-07	0.03	332	0.00	9
Other organic materials	Solder Mask Subtotal		6.34 E-04	7.36	73584	2.61	26143
Copper & its alloys	Copper	7440-50-8	2.57 E-03	29.82	298166	10.59	105935
Nickel & its alloys	Nickel	7440-02-0	7.71 E-04	8.95	89485	3.18	31793
Precious Metals	Gold	7440-57-5	8.30 E-05	0.96	9633	0.34	3423
Subtotal			8.62 E-03	100.00	1073631	35.53	355287

Solder Land

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	3.30 E-04	73.33	733333	1.36	13608
Nickel & its alloys	Nickel	7440-02-0	9.00 E-05	20.00	200000	0.37	3711
Precious Metals	Gold	7440-57-5	3.00 E-05	6.67	66667	0.12	1237
Subtotal			4.50 E-04	100.00	1000000	1.86	18556

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	3.96 E-04	99	990000	1.63	16329
Precious metals	Palladium	7440-05-3	4.00 E-06	1	10000	0.016	165
Subtotal			4.00 E-04	100	1000000	1.649	16494

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	2.70 E-03	100	1000000	11.13	111336

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Dimethyl siloxane,dimethylvinyl-terminated	68083-19-2	2.40 E-04	60.00	600000	0.99	9897
Other inorganic materials	Treated silica / fused silica	60676-86-0	1.60 E-04	40.00	400000	0.66	6598
Subtotal			4.00 E-04	100.00	1000000	1.65	16494

Die Coat

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Polydimethylsiloxane	Proprietary	2.00 E-04	100.00	1000000	0.825	8247

Lid/ Shield Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	1.50 E-04	75.0	750000	0.62	6185
Other organic materials	Bisphenof F type epoxy resin	9003-36-5	2.00 E-05	10.0	100000	0.08	825
Other organic materials	Bisphenof A type epoxy resin	25068-38-6	2.00 E-05	10.0	100000	0.08	825
Others	Additives	Proprietary	6.00 E-06	3.0	30000	0.02	247
Others	Curing Agent	Proprietary	4.00 E-06	2.0	20000	0.02	165
Subtotal			2.00 E-04	100.00	1000000	0.82	8247

Seal Glass

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics/Glass	Lead borosilicate glass	65997-17-3	7.74 E-04	87.5	875000	3.19	31915
Ceramics/Glass	Aluminosilicate glass	65997-17-3	1.11 E-04	12.5	125000	0.46	4559
			8.85 E-04	100.00	1000000	3.65	36474

	Weight (g)	Percentage (%)	PPM
Package Totals	**2.43 E-02**	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.

ADI Proprietary

AHEAD OF WHAT'S POSSIBLE™