

Product / Package Information	
Package	LGA_CAV
Body Size (mm)	3.8X5.0X1.0
I/O Count	24
Terminal Finish	Gold
MS Number	MS012794

Environmental Information	
RoHS Compliant	Yes
High Temperature Compliant	NA
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes
Last Updated	05-Sep-19

Materials Declaration

Lid Shield

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Composite	Polymer	147310-94-9	2.38E-03	60.50	605000	9.78		97776
Composite	Glass oxide	65997-17-3	1.46E-03	37.00	370000	5.98		59797
Composite	Carbon black	1333-86-4	9.84E-05	2.50	25000	0.40		4040
Subtotal			3.94 E-03	100.00	1000000	16.16		161612

Substrate

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Core	Copper	7440-50-8	3.88 E-03	60.00	600000	15.93		159301
	Cured thermosetting resin (including inorganic Continuous Filament Fiber Glass	Not applicable	1.29 E-03	20.00	171611	5.31		53100
	Subtotal	65997-17-3	1.29 E-03	20.00	171611	5.31		53100
Solder Mask	Acrylic Resin	Secret	3.42 E-04	32.00	320000	1.41		14055
	Barium Sulfate	7727-43-7	3.42 E-04	32.00	320000	1.41		14055
	Diethylene Glycol Monoethyl Ether Acetate	112-15 -2	1.07 E-04	10.00	100000	0.44		4392
	High Boiling Point Petroleum Solvent	64742-94-5	1.07 E-04	10.00	100000	0.44		4392
	Photoinitiator	Secret	8.03 E-05	7.50	75000	0.33		3294
	Iaic	14807-96-6	3.75 E-05	3.50	35000	0.15		1537
	Defoamer and others	Secret	3.21 E-05	3.00	30000	0.13		1318
	Carbon black and others	Secret	5.35 E-06	0.50	5000	0.02		220
	Amine Compound	Secret	5.35 E-06	0.50	5000	0.02		220
	Dipropylene Glycol Monomethyl Ether	34590-94-8	5.35 E-06	0.50	5000	0.02		220
	Propylene Glycol Monomethyl Ether Acetate	108-65-6	5.35 E-06	0.50	5000	0.02		220
Subtotal		1.07 E-03	100.00	1000000	4.39		43922	
Subtotal			7.94 E-03	100.00	1000000	30.94		309423

Solder Land

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Copper & its alloys	Copper	7440-50-8	4.30 E-04	74.68	746835	1.76		17639
Nickel & its alloys	Nickel	7440-02-0	1.24 E-04	21.52	215190	0.51		5082
Precious Metals	Gold	7440-57-5	2.18 E-05	3.80	37975	0.09		897
Subtotal			5.75 E-04	100.0	1000000	2.36		23618

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Precious metals	Gold	7440-57-5	2.91 E-04	100.00	1000000	1.19		11945

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Other inorganic materials	Doped Silicon	7440-21-3	1.78 E-03	100.0	1000000	7.31		73066

Die Attach 1

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Composite	Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	4.44 E-05	37.00	370000	0.18		1823
Other organic materials	Bismaleimide monomer	Proprietary	3.30 E-05	27.50	275000	0.14		1355
Other inorganic materials	Silicon dioxide	7631-86-9	2.10 E-05	17.50	175000	0.09		862
Other organic materials	Acrylate monomer	Proprietary	9.00 E-06	7.50	75000	0.04		369
Other organic materials	Epoxy resin	Proprietary	9.00 E-06	7.50	75000	0.04		369
Others	Additive	Proprietary	3.60 E-06	3.00	30000	0.01		148
Subtotal			1.20 E-04	100.00	1000000	0.49		4926

Lid Shield Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Thermoset	Epoxy resin1	25085-99-8	1.10 E-04	50.00	500000	0.45		4515
Other inorganic materials	Epoxy resin2	2095-03-6	2.09 E-05	9.50	95000	0.09		858
Other organic materials	Dicyanodiamide	461-58-5	4.40 E-05	20.00	200000	0.18		1806
Other organic materials	Silica Filler	7631-86-9	3.30 E-05	15.00	150000	0.14		1355
Other organic materials	Silicon dioxide	67762-90-7	6.05 E-06	2.75	27500	0.02		248
Other inorganic materials	Carbon black	1333-86-4	6.05 E-06	2.75	27500	0.025		248
Subtotal			2.20 E-04	100.0	1000000	0.90		9031

Mold Compound

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level		PPM
				Percentage (%)	PPM	Percentage (%)	PPM	
Other organic materials	Epoxy Resin	258068-38-6	7.43 E-03	75.00	750000	30.48		304784
Other organic materials	Acid Anhydride	85-42-7/19438-60-9	2.38 E-03	24.00	240000	9.75		97531
Other organic materials	2,6 -Diter. tart. butyl-4-methylphenol	128-37-0	9.90 E-05	1.00	10000	0.41		4064
Subtotal			9.90 E-03	100.0	1000000	40.64		406379

Package Totals	Weight (g)	Percentage (%)	PPM
	2.44 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.



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