Product / Package Information

Package	LFCSP - FCOL
Body Size (mm)	
Lead Count	24
Terminal Finish	100Sn
MS Number	MS012654B + MS012853A

Environmental Information

RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes
Last Updated	March 20, 2019

Materials Declaration

Molding Compound

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silica	60676-86-0	1.44E-02	84.50	845000	41.68	416818
Thermosets	Epoxy & Phenol resin	Proprietary	2.55E-03	15.00	150000	7.40	73991
Other inorganic materials	Carbon black	1333-86-4	8.52E-05	0.50	5000	0.25	2466
Subtotal			1.70E-02	100.00	1000000	49.33	493276

Leadframe

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	1.03 E-02	97.50	975000	29.88	298768
Copper & its alloys	Nickel	7440-02-0	2.49 E-04	2.35	23500	0.72	7201
Copper & its alloys	Silicon	7440-21-3	1.27 E-05	0.12	1200	0.04	368
Copper & its alloys	Magnesium	7439-95-4	3.17 E-06	0.03	300	0.01	92
Subtotal			1.06 E-02	100.00	1000000	30.64	306429

Internal Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	4.28 E-05	100.0	1000000	0.12	1241

External Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	7.73 E-06	100.0	1000000	0.02	224

Flux

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Polyglycol ether	9038-95-3	1.42 E-03	82.5	825000	4.111	41106
Other organic materials	Carboxylic acids	68937-68-8	1.98 E-04	11.5	115000	0.573	5730
Other organic materials	Amides from C2-9 Carboxylic acids and Polyethylenimine	68876-81-3	1.03 E-04	6.0	60000	0.299	2990
Subtotal			1.72 E-03	100.0	1000000	4.98	49826

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	4.93 E-03	100.0	1000000	14.28	142764

Wafer Bump

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin and its alloys	Tin	7440-31-5	9.32 E-05	98.2	471118.0229	0.27	2699
Tin and its alloys	Silver	7440-22-4	1.71 E-06	1.8	8635.564574	0.00	49
Subtotal			9.49 E-05	100.0	479754	0.27	2749

UBM / Redistribution Layers

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
UBM 1	Titanium	7440-32-6	5.40 E-07	1.40	14009	0.002	16
UBM 1	Tungsten	7440-33-7	4.86 E-06	12.61	126079	0.014	141
UBM 1	Copper	7440-50-8	2.02 E-06	5.25	52474	0.006	59
Cu RDL	Copper	7440-50-8	3.03 E-05	78.71	787110	0.088	879
UBM 2	Titanium	7440-32-6	1.58 E-07	0.41	4091	0.000	5
UBM 2	Copper	7440-50-8	6.26 E-07	1.62	16238	0.002	18
Subtotal			3.86 E-05	100.0	1000000	0.11	1117

Polyimide

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Polyimide 1	Proprietary	4.06 E-05	49.56	495630	0.12	1177
Other organic materials	Polyimide 2	Proprietary	4.14 E-05	50.4	504370	0.12	1198
Subtotal			8.20 E-05	100.0	1000000	0.24	2375

	Weight (g)	Percentage (%)	PPM
Package Totals	**3.45E-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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