

**Product / Package Information**

Package	WLCSP
Body Size	
I/O Count	20
Terminal Finish	SnAgCu
MS Number	MS011055B

**Environmental Information**

RoHS Compliant	Yes
High Temperature Compliant	N/A
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes

**Materials Declaration**

**Chip**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	4.58E-03	100.00	1000000	56.32	563166

**Wafer Bumps**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	1.16E-03	95.50	955000	14.22	142226
Tin & its alloys	Silver	7440-22-4	4.85E-05	4.00	40000	0.60	5957
Tin & its alloys	Copper	7440-50-8	6.06E-06	0.50	5000	0.074	745
Subtotal			1.21 E-03	100.00	1000000	14.89	148927

**UBM**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	3.95 E-05	89.95	653270	0.49	4850
Nickel & its alloys	Nickel	7440-02-0	1.69 E-05	8.10	279564	0.208	2076
Nickel & its alloys	Vanadium	7440-62-2	1.57 E-06	0.75	25970	0.019	193
Other non-ferrous metals and alloys	Titanium	7440-32-6	2.49 E-06	1.19	41196	0.031	306
Subtotal			6.04 E-05	100.00	1000000	0.74	7425

**Polyimide**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other organic materials	Resin	Proprietary	1.46 E-03	67.95	679500	17.90	178996
Other organic materials	Tetraethylene Glycol Dimethacrylate	109-17-1	3.12 E-04	14.56	145600	3.835	38354
Other organic materials	Trifluoroacetic Anhydride	407-25-0	1.25 E-04	5.83	58300	1.536	15358
Other organic materials	4,4'-Oxydiphthalic Anhydride	1823-59-2	1.25 E-04	5.83	58300	1.536	15358
Other organic materials	2-Hydroxyethyl Methacrylate	868-77-9	1.25 E-04	5.83	58300	1.536	15358
Subtotal			2.14 E-03	100.0	1000000	26.34	263422

**Backside Coating**

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silica	Proprietary	5.92 E-05	42.68	426800	0.73	7281
Thermoplastic	Epoxy Resin	Proprietary	3.89 E-05	28.05	280500	0.48	4785
Thermoplastic	Acrylic polymer	Proprietary	3.89 E-05	28.05	280500	0.48	4785
Other organic materials	Carbon black	Proprietary	1.69 E-06	1.22	12200	0.02	208
Subtotal			1.39 E-04	100.0	1000000	1.71	17060

<b>Package Totals</b>			<b>Weight (g)</b> 8.13 E-03			<b>Percentage (%)</b> 100	<b>PPM</b> 1000000
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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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