

Product / Package Information

Package	CerDIP
Body Size	300 mils
Lead Count	20
Terminal Finish	63Sn37Pb

Environmental Compliance Information

RoHS Compliant	No
High Temperature Compliant	N/A
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes, Except Lead (Pb)
Last Updated	18-Mar-19

Materials Declaration

Base							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics	Aluminum oxide	1344-28-1	1.01E+00	67.49	674940	35.18	351774
Ceramics	Manganese dioxide	1313-13-9	3.71E-02	2.47	24700	1.29	12873
Ceramics	Silicon Dioxide	14808-60-7	3.30E-02	2.20	22000	1.15	11466
Ceramics	Titanium Dioxide	13463-67-7	2.09E-02	1.39	13900	0.72	7245
Ceramics	Chromium oxide	1308-38-9	1.65E-02	1.10	11000	0.57	5733
Ceramics	Iron Oxide		1.34E-02	0.89	8900	0.46	4639
Ceramics	Magnesium oxide	1309-48-4	5.40E-03	0.36	3600	0.19	1876
Ceramics	Cobalt oxide	1308-06-1	3.00E-03	0.20	2000	0.10	1042
Ceramics	Calcium oxide	1305-78-8	4.50E-04	0.03	300	0.02	156
	Subtotal		1.14E+00	76.13	761340	39.68	396805
Sealing Glass	Lead Oxide	1309-60-0	2.17E-01	14.48	144800	7.55	75469
Glass	Tin Oxide	18282-10-5	5.67E-02	3.78	37800	1.97	19701
Glass	Silicon Dioxide	14808-60-7	2.52E-02	1.68	16800	0.88	8756
Glass	Boron Trioxide	1303-86-2	2.06E-02	1.37	13740	0.72	7161
Glass	Aluminum Oxide	1344-28-1	1.50E-02	1.00	10000	0.52	5212
Glass	Titanium Dioxide	13463-67-7	1.12E-02	0.75	7480	0.39	3899
Glass	Magnesium Oxide	1309-48-4	7.35E-03	0.49	4900	0.26	2554
Glass	Zinc Oxide	1314-13-2	3.00E-03	0.20	2000	0.10	1042
Glass	Calcium Oxide	1305-78-8	6.90E-04	0.05	460	0.02	240
Glass	Chromium Oxide	1308-38-9	4.20E-04	0.03	280	0.01	146
Glass	Iron Oxide		4.20E-04	0.03	280	0.01	146
Glass	Manganese dioxide	1313-13-9	1.50E-04	0.01	100	0.005	52
Glass	Sodium Oxide	1313-59-3	3.00E-05	0.002	20	0.001	10
	Subtotal		3.58 E-01	23.87	238660	12.44	124388
Subtotal			1.50E+00	100.00	1000000	52.12	521193

Caps							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Ceramics	Aluminum oxide	1344-28-1	6.26 E-01	62.60	626000	21.75	217511
Ceramics	Manganese dioxide	1313-13-9	2.40 E-02	2.40	24000	0.83	8339
Ceramics	Silicon Dioxide	14808-60-7	2.00 E-02	2.00	20000	0.69	6949
Ceramics	Titanium Dioxide	1317-70-0	1.30 E-02	1.30	13000	0.45	4517
Ceramics	Chromium oxide	1308-38-9	1.00 E-02	1.00	10000	0.35	3475
Ceramics	Iron Oxide		7.90 E-03	0.79	7900	0.27	2745
Ceramics	Magnesium oxide	1309-48-4	4.00 E-03	0.40	4000	0.14	1390
Ceramics	Cobalt oxide	1308-06-1	2.00 E-03	0.20	2000	0.07	695
Ceramics	Calcium oxide	1305-78-8	3.00 E-04	0.03	300	0.01	104
	Subtotal		7.07 E-01	70.72	707200	24.57	245725
Sealing Glass	Lead Oxide	1309-60-0	1.78 E-01	17.82	178200	6.19	61918
Glass	Tin Oxide		4.60 E-02	4.60	45970	1.60	15973
Glass	Silicon Dioxide	14808-60-7	2.20 E-02	2.20	22000	0.76	7644
Glass	Boron Trioxide	1303-86-2	1.70 E-02	1.70	17000	0.59	5907
Glass	Aluminum Oxide	1344-28-1	1.20 E-02	1.20	12000	0.42	4170
Glass	Magnesium Oxide	1309-48-4	7.00 E-03	0.70	7000	0.24	2432
Glass	Titanium Dioxide	1317-70-0	7.00 E-03	0.70	7000	0.24	2432
Glass	Zinc Oxide	1314-13-2	2.00 E-03	0.20	2000	0.07	695
Glass	Calcium Oxide	1305-78-8	7.00 E-04	0.07	700	0.02	243
Glass	Chromium Oxide	1308-38-9	4.00 E-04	0.04	400	0.01	139
Glass	Iron Oxide		4.00 E-04	0.04	400	0.01	139
Glass	Manganese dioxide	1313-13-9	1.00 E-04	0.01	100	0.00	35
Glass	Sodium Oxide		3.00 E-05	0.003	30	0.00	10
	Subtotal		2.93 E-01	29.28	292800	10.17	101737
Subtotal			1.00 E+00	100.00	1000000	34.75	347462

Leadframe							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Iron & its alloys	Iron	7439-89-6	1.75 E-01	58.45	584500	6.09	60928
Iron & its alloys	Nickel	7440-02-0	1.23 E-01	40.84	408400	4.26	42571
Iron & its alloys	Manganese	7439-96-5	1.56 E-03	0.52	5190	0.05	541
Iron & its alloys	Silicon	7440-21-3	3.90 E-04	0.13	1300	0.01	136
Iron & its alloys	Cobalt	7440-48-4	9.00 E-05	0.03	300	0.003	31
Iron & its alloys	Aluminum	7429-90-5	3.00 E-05	0.01	100	0.001	10
Iron & its alloys	Chromium	7440-47-3	3.00 E-05	0.01	100	0.001	10
Iron & its alloys	Sulfur	7704-34-9	1.80 E-05	0.01	60	0.001	6
Iron & its alloys	Carbon	7440-44-0	9.00 E-06	0.003	30	0.0003	3
Iron & its alloys	Phosphorus	7723-14-0	6.00 E-06	0.002	20	0.0002	2
	Subtotal		3.00 E-01	100.0	1000000	10.42	104239

External Leadframe Plating							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7439-92-1	1.89 E-02	63.0	630000	0.66	6569
Tin & its alloys	Lead	7440-31-5	1.11 E-02	37.0	370000	0.39	3858
	Subtotal		3.00 E-02	100.0	1000000	1.04	10427

Bond Wires							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Aluminum	7429-90-5	2.00 E-02	100.0	1000000	0.69	6949

Chip							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	8.00 E-03	100.0	1000000	0.28	2780

Die Attach							
Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Silver	7440-22-4	1.80 E-02	80.00	800000	0.56	5559
Glass	Glass frit (containing lead)	65997-18-4	4.00 E-03	20.00	200000	0.14	1390
	Subtotal		2.00 E-02	100.0	1000000	0.69	6949

Package Totals			Weight (g)	2.88 E+00		Percentage (%)	100.000	PPM	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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