Product / Package Information

Package	SSOP
Body Size	
Lead Count	20
Terminal Finish	100 Sn
MS Number	MS011647A

Environmental Compliance Information

RoHS Compliant	Yes
High Temperature Compliant	Yes
Halogen Free Compliant	Yes
REACH SVHC Compliant	Yes

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	8.99 E-02	87.70	877000	53.20	532009
Thermosets	Epoxy Resin	Proprietary	5.13 E-03	5.00	50000	3.03	30331
Thermosets	Phenol Resin	Proprietary	5.13 E-03	5.00	50000	3.03	30331
Thermosets	Epoxy Cresol Novolac	29690-82-2	2.05 E-03	2.00	20000	1.21	12132
Other inorganic materials	Carbon Black	1333-86-3	3.08 E-04	0.30	3000	0.18	1820
Subtotal			1.03 E-01	100	1000000	60.66	606624

Leadframe

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Copper & its alloys	Copper	7440-50-8	5.95 E-02	97.57	975706	35.24	352428
Copper & its alloys	Iron	7439-89-6	1.39 E-03	2.28	22789	0.82	8231
Copper & its alloys	Zinc	7440-66-6	7.71 E-05	0.13	1263	0.05	456
Copper & its alloys	Phosphorus	7723-14-0	1.48 E-05	0.02	242	0.01	88
Subtotal			6.10 E-02	100.00	1000000	36.12	361203

Internal Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	6.17 E-04	100.0	1000000	0.36	3649

External Leadframe Plating

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Tin & its alloys	Tin	7440-31-5	2.73 E-03	100.0	1000000	1.62	16155

Bond Wires

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Gold	7440-57-5	2.00 E-04	100.00	1000000	0.12	1184

Chip

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Other inorganic materials	Doped Silicon	7440-21-3	1.59 E-03	100.0	1000000	0.94	9410

Die Attach

Description	Substance	CAS#	Weight (g)	Homogeneous Material Level		Component Level	
				Percentage (%)	PPM	Percentage (%)	PPM
Precious metals	Silver	7440-22-4	2.40 E-04	80.00	800000	0.14	1420
Thermosets	Epoxy Resin	Proprietary	4.50 E-05	15.00	150000	0.03	266
Others	Curing agent & hardener	Proprietary	1.50 E-05	5.00	50000	0.01	89
Subtotal			3.00 E-04	100	1000000	0.18	1775

	Weight (g)	Percentage (%)	PPM
Package Totals	**1.69 E-01**	**100.00**	**1000000**

ANALOG DEVICES