

Construction element	Materials	Material group	CAS (where available)	Average mass (%)	Sum (%)	Mass (mg)	ppm
Die Composition	Silicon	Silicon	7440-21-3	4.61	4.61	1.318	53559
Leadframe	Copper	Copper alloy	7440-50-8	34.30	35.23	9.804	342952
	Iron		7439-89-6	0.85		0.242	8454
	Phosphorus		7723-14-0	0.03		0.008	282
	Lead		7439-92-1	0.01		0.003	106
	Zinc		7440-66-6	0.05		0.013	458
Wires	Gold	Gold	7440-57-5	10.93	10.93	3.125	127033
Die Attach	Silver	Silver-loaded epoxy	7440-22-4	1.36	1.82	0.387	3874
	Epoxy Resin		9003-36-5	0.27		0.078	780
	1,4-bis(2,3-epoxypropoxy)butane		2425-79-8	0.14		0.039	390
	Aromatic Amine		-	0.05		0.016	156
Encapsulation	Brominated Phenol Novolac	Filled epoxy	-	10.85	44.83	3.101	126066
	Silica		7631-86-9	31.51		9.009	366217
	Amine Compound		-	0.58		0.167	6772
	Carbon Black		1333-86-4	0.58		0.167	6772
	Antimony oxide		1309-64-4	1.30		0.372	15107
Lead finish	Tin	Matte Tin	7440-31-5	2.59	2.59	0.740	30081
Sum in Total:					100.00	28.59	

Fluctuation margin	+/-10%
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This environmental data is based on information provided by our suppliers; we believe it to be correct but do not routinely validate it by measurement.

The information is for guidance only, and Zetex does not guarantee its absolute accuracy or completeness.

The active part of each device is a silicon chip doped at atomic levels (some tens of ppb) with Phosphorus, Boron and Arsenic. The back of the die is raw or metallized with thin layers of Titanium, Nickel, Silver or Gold in order to enhance the die bonding to the header or leadframe. These and other substances are not reported as being present in Zetex products where their concentration is less than 20ppm, as they are not considered detectable by normal analytical methods.

This part is compliant with 2002/95/EC (RoHS Directive) and can be used in WEEE applications.

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