

Construction element	Material group	Materials	CAS (if applicable)	Average mass (%)	Sum (%)	Mass (mg)	ppm
Chip	Silicon	Silicon	7440-21-3	7.74	7.74	1.393	77389
Leadframe	Copper Alloy	Copper	7440-50-8	42.18	43.33	7.593	421839
		Iron	7439-89-6	1.04		0.187	10399
		Zinc	7440-66-6	0.06		0.010	563
		Phosphorus	7723-14-0	0.03		0.006	347
		Lead	7439-92-1	0.01		0.002	130
Leadframe plating	Silver	Silver	7440-22-4	0.08	0.08	0.015	833
Wires	Gold	Gold	7440-57-5	1.00	1.00	0.180	10000
Encapsulation	Filled Epoxy	Silica	60676-86-0	30.75	45.08	5.534	307468
		Epoxy Resin	29690-82-2	8.21		1.477	82052
		Phenol Novolac	9003-35-4	4.10		0.738	41026
		Antimony oxide	1309-64-4	0.68		0.122	6763
		Carbon Black	1333-86-4	0.12		0.022	1217
		Other	-	1.23		0.222	12308
Die Attach	Silver loaded epoxy	Epoxy Resin	9003-36-5	0.06	0.38	0.010	556
		1,4-bis(2,3-epoxypropoxy)butane	2425-79-8	0.03		0.005	278
		Aromatic Amine	-	0.01		0.002	111
		Silver	7440-22-4	0.29		0.052	2889
Leadfinish	Matte Tin	Tin	7440-31-5	2.39	2.39	0.429	23834
Sum in Total:					100.00	18.000	

Fluctuation margin	±10%
--------------------	------

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.

The Company reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service.

Europe
 Zetex GmbH
 Kustermann-Park
 Balanstrasse 59, 8th Floor
 D-81541 München Germany
 Tel: (49) 89 45 49 49 0
 Fax: (49) 89 45 49 49 49
 email: europa.sales@zetex.com

Americas
 Zetex Inc
 700 Veterans Memorial Highway
 Hauppauge, NY 11788
 USA
 Tel: (1) 631 360 2222
 Fax: (1) 631 360 8222
 email: usa.sales@zetex.com

Asia Pacific
 Zetex (Asia) Ltd
 3701-04 Metroplaza Tower 1
 Hing Fong Road, Kwai Fong
 Hong Kong
 Tel: (852) 26100 611
 Fax: (852) 24250 494
 email: asia.sales@zetex.com

Corporate Headquarters
 Zetex Semiconductors plc
 Zetex Technology Park,
 Chadderton, Oldham, OL9 9LL
 United Kingdom
 Tel: (44) 161 622 4444
 Fax: (44) 161 622 4446
 email: hq@zetex.com

Zetex products are distributed worldwide. For details, see <http://www.zetex.com/>