

Average Weight: 4.9237g

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Silicon Die					0.430700	8.747
	Silicon	7440-21-3	100.00		0.430700	
Solder Bump					0.021443	0.436
	Tin	7440-31-5	63.00		0.013509	
	Lead	7439-92-1	37.00		0.007934	
Underfill					0.044000	0.894
	Silica	60676-86-0	70.00		0.030800	
	Epoxy Resin A	9003-36-5	20.00		0.008800	
	Epoxy Resin B	25068-38-6	3.00		0.001320	
	Hardener	19900-65-3	7.00		0.003080	
Heat Spreader					3.000000	60.929
	Copper	7440-50-8	99.90		2.997000	
	Nickel	7440-02-0	0.10		0.003000	
Heat Spreader Adhesive					0.032500	1.076
	Zinc oxide	1314-13-2	35.00		0.017500	
	Other	N/A	65.00		0.032500	
Substrate					0.819560	16.645
	Copper	7440-50-8	47.52	Metal layer	0.381587	
	Nickel	7440-02-0	0.52	Metal layer	0.004262	
	Gold	7440-57-5	0.11	Metal layer	0.000983	
	Glass fiber	NA	10.35		0.086054	
	Halogen fire retardant	NA	5.30		0.043437	
	BT (core)	NA	27.50		0.231116	
	Solder mask	NA	8.70		0.072121	
Solder Balls					0.558020	11.333
	Tin	7440-31-5	95.50		0.532909	
	Silver	7440-22-4	4.00		0.022321	
	Copper	7440-50-8	0.50		0.002790	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
3/14/06	1.0	Initial Xilinx release.
5/01/06	1.1	100% Material Declaration.
9/22/06	1.2	Updated component descriptions.
7/20/10	1.3	Updated Heat Spreader substance description.

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