

**Average Weight: 18.5g**

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
<b>Silicon Die</b>					<b>1.06135</b>	<b>5.74</b>
	Silicon	7440-21-3	100.00		1.06135	
<b>Solder Bump</b>					<b>0.05432</b>	<b>0.29</b>
	Tin	7440-31-5	63.00		0.03422034	
	Lead	7439-92-1	37.00		0.02009766	
<b>Underfill</b>					<b>0.0440</b>	<b>0.25</b>
	Epoxy Resin A	9003-36-5	20.00		0.008800	
	Epoxy Resin B	25068-38-6	3.00		0.001320	
	Silica	60676-86-0	70.00		0.030800	
	Hardener	19900-65-3	7.00		0.003080	
<b>Heat Spreader</b>					<b>3.0000</b>	<b>16.22</b>
	Copper	7440-50-8	99.90		2.99700	
	Nickel	7440-02-0	0.10		0.00300	
<b>Heat Spreader Adhesive</b>					<b>0.053</b>	<b>0.28</b>
	Organopolysiloxane mixture		100.00		0.053000	
<b>Substrate</b>					<b>13.32398</b>	<b>72.03</b>
	Copper	7440-50-8	46.91	Metal layer	6.25027996	
	Nickel	7440-02-0	0.52	Metal layer	0.06928471	
	Gold	7440-57-5	0.12	Metal layer	0.01598878	
	BT (core)	13676-54-4/ 25722-66-1	28.00		3.73071496	
	Glass fiber	65997-17-3	10.50		1.39901811	
	Halogen fire retardant	N/A	5.25		0.69950906	
	Solder mask	Trade secret	8.70		1.15918643	
<b>Solder Balls</b>					<b>0.96318</b>	<b>5.21</b>
	Tin	7440-31-5	95.50		0.91983690	
	Silver	7440-22-4	4.00		0.03852720	
	Copper	7440-50-8	0.50		0.00481590	

## 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.
6/06/06	1.1	100% Material Declaration.
6/19/06	1.2	Updated component descriptions.
9/22/06	1.3	Updated component descriptions and weights.
7/20/10	1.4	Updated Heat Spreader substance description.

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