

**Average Weight: 18.99g**

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>1.039</b>	<b>5.46</b>
	Silicon	7440-21-3	100.00		1.039	
<b>Solder Bump</b>					<b>0.051</b>	<b>0.27</b>
	Tin	7440-31-5	63.00		0.032	
	Lead	7439-92-1	37.00		0.018	
<b>Underfill</b>					<b>0.074</b>	<b>0.39</b>
	Silica	60676-86-0	70.00		0.051	
	Epoxy Resin A	9003-36-5	20.00		0.014	
	Epoxy Resin B	25068-38-6	3.00		0.002	
	Hardener	19900-65-3	7.00		0.005	
<b>Heat Spreader</b>					<b>9.000</b>	<b>47.37</b>
	Copper	7440-50-8	99.90		8.991	
	Nickel	7440-02-0	0.10		0.009	
<b>Heat Spreader Adhesive</b>					<b>0.150</b>	<b>0.79</b>
	Organopolysiloxane mixture	N/A	100.00		0.150	
<b>Substrate</b>					<b>7.250</b>	<b>38.16</b>
	Copper	7440-50-8	47.15	Metal layer	3.418	
	Nickel	7440-02-0	0.53	Metal layer	0.038	
	Gold	7440-57-5	0.12	Metal layer	0.008	
	Glass fiber	N/A	10.30		0.746	
	Halogen fire retardant	N/A	5.25		0.380	
	BT (core)	N/A	28.00		2.030	
	Solder mask	N/A	8.65		0.627	
<b>Solder Balls</b>					<b>1.433</b>	<b>7.54</b>
	Tin	7440-31-5	63.00		0.902	
	Lead	7439-92-1	37.00		0.530	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
3/23/06	1.0	Initial Xilinx release.
7/13/06	1.1	100% Material Declaration.
9/28/06	1.2	Updated component descriptions and weights.
5/21/08	1.3	Updated Chromium CAS # (was 7440-22-4).
7/20/10	1.4	Updated Heat Spreader substance description.

## Notice of Disclaimer

Xilinx regards this materials data to be correct but makes no guarantee as to its accuracy or completeness, including, but not limited to, with respect to its compliance with applicable environmental laws and regulations. Xilinx subcontracts the production, test and assembly of hardware devices to independent third-party vendors and materials suppliers ("Contractors"). All data provided hereunder is based on information received from Contractors. Xilinx has not independently verified the accuracy or completeness of this information which is provided solely for your reference in connection with the use of Xilinx products.