



PK642 (v1.0) April 4, 2014

# 100% Material Declaration Data Sheet for Spartan 3A DSP FG676 Package

**Average Weight: 3.2832g**

Component	Substance Description	CAS Number or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
<b>Silicon Die</b>					<b>0.083924</b>	<b>2.556</b>
	Silicon	7440-21-3	100.00		0.083924	
<b>Silver Epoxy</b>					<b>0.014829</b>	<b>0.452</b>
	Silver	7440-22-4	77.50		0.011492	
	Bismaleimide monomer	Trade Secret	15.00		0.002224	
	Acrylate monomer	Trade Secret	7.50		0.001112	
<b>Mold Compound</b>					<b>1.379825</b>	<b>42.027</b>
	Epoxy Resin A	Trade Secret	3.00		0.041395	
	Epoxy Resin B	Trade Secret	3.00		0.041395	
	Phenol Resin	Trade Secret	3.00		0.041395	
	Silica(Amorphous)A	60676-86-0	72.45		0.999683	
	Silica(Amorphous)B	7631-86-9	15.00		0.206974	
	Metal Hydroxide	Trade Secret	3.00		0.041395	
	Carbon Black	1333-86-4	0.55		0.007589	
<b>Copper Wire</b>					<b>0.007841</b>	<b>0.239</b>
	Copper	7440-50-8	98.25		0.007704	
	Palladium	7440-05-3	1.75		0.000137	
<b>Solder Ball</b>					<b>0.643415</b>	<b>19.597</b>
	Tin	7440-31-5	63.00		0.405351	
	Lead	7439-92-1	37.00		0.238064	
<b>Substrate</b>					<b>1.153346</b>	<b>35.129</b>
	Gold	7440-57-5	0.23		0.002614	
	Nickel	7440-02-0	1.74		0.020110	
	Copper Foil	7440-50-8	49.72		0.573391	
	Copper Plating	7440-50-8	8.12		0.093599	
	BT Core	65997-17-3 / 105391-33-1 / 25722-66-1 / 9003-36-5 / 21645-51-2	33.62		0.387769	
	Solder Mask	34590-94-8 / 7727-43-7	6.58		0.075862	

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## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
04/04/14	1.0	Initial Xilinx release.

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