



PK534 (v1.2) March 19, 2012

# 100% Material Declaration Data Sheet for Spartan®-3/-3A FG676 (Cu Wire) Package

**Average Weight: 3.0582 g**

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Silicon Die					<b>0.107655</b>	<b>3.520</b>
	Silicon	7440-21-3	100.00		0.107655	
Die Attach Material					<b>0.018830</b>	<b>0.616</b>
	Silver (Ag)	7440-22-4	77.50		0.014593	
	Bismaleimide monomer	Trade Secret	15.00		0.002825	
	Acrylate monomer	Trade Secret	7.50		0.001412	
Mold Compound					<b>1.356010</b>	<b>44.340</b>
	Solid Epoxy Resin	Trade Secret	5.00		0.067801	
	Phenol Resin	Trade Secret	3.00		0.040680	
	Phenol Novolac	9003-35-4	3.00		0.040680	
	Metal Hydroxide	Trade Secret	3.00		0.040680	
	Carbon Black	1333-86-4	0.30		0.040680	
	Silica fused	60676-86-0	70.40		0.954631	
	Silicon Dioxide	7631-86-9	15.00		0.203402	
	Silica, crystalline	14808-60-7	0.30		0.004068	
Copper Wire					<b>0.007017</b>	<b>0.229</b>
	Copper (Cu)	7440-50-8	97.28		0.006826	
	Palladium	7440-05-3	2.70		0.000189	
	Impurities	NA	0.02		0.000001	
Solder Balls					<b>0.643415</b>	<b>21.039</b>
	Tin (Sn)	7440-31-5	63.00		0.405351	
	Lead (Pb)	7439-92-1	37.00		0.238064	

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Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Substrate					<b>0.925253</b>	<b>30.255</b>
	Copper (Cu)	7440-50-8	44.47		0.411429	
	Nickel (Ni)	7440-02-0	0.23		0.016087	
	Gold (Au)	7440-57-5	1.74		0.002091	
	Copper Foil	7440-50-8	6.66		0.061608	
	BT (core)	Trade Secret 21645-51-2 65997-17-3 7440-50-8 105391-33-1 25722-66-1	40.55		0.375218	
	Solder mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 85954-11-6 Trade Secret	6.36		0.058819	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
11/15/11	1.0	Initial Xilinx release.
01/11/12	1.1	CAS# update.
03/19/12	1.2	Device family update.

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