



PK530 (v1.3) March 19, 2012

100% Material Declaration Data Sheet for Spartan®-3/-3A FGG676 (Cu Wire) Package

Average Weight: 2.9810 g

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Silicon Die					0.107655	3.611
	Silicon	7440-21-3	100.00		0.107655	
Die Attach Material					0.018830	0.632
	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					1.356010	45.488
	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		0.004068	
	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					0.007017	0.235
	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					0.566235	18.995
	Tin (Sn)	7440-31-5	95.50		0.540754	
	Silver (Ag)	7440-22-4	4.00		0.022649	
	Copper (Cu)	7440-50-8	0.50		0.002831	

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Substrate					0.925253	31.038
	Copper (Cu)	7440-50-8	44.47		0.411429	
	Nickel (Ni)	7440-02-0	1.74		0.016087	
	Gold (Au)	7440-57-5	0.23		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
02/15/12	1.2	Component % update.
03/19/12	1.3	Device family update.

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