



PK492 (v1.2) July 11, 2012

100% Material Declaration Data Sheet for Spartan®-3 FGG900 (Cu Wire) Package

Average Weight: 3.9490 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	2.726
	Silicon	7440-21-3	100.00		0.107655	
Die Attach Material					0.018830	0.477
	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					1.862156	47.155
	Solid Epoxy Resin	Trade Secret	5.00		0.093108	
	Phenol Resin	Trade Secret	3.00		0.055865	
	Phenol Novolac	9003-35-4	3.00		0.055865	
	Metal Hydroxide	Trade Secret	3.00		0.055865	
	Carbon Black	1333-86-4	0.30		0.005586	
	Silica fused	60676-86-0	70.40		1.310958	
	Silica Dioxide	7631-86-9	15.00		0.279323	
	Silica, crystalline	14808-60-7	0.30		0.005586	
Copper Wire					0.009371	0.237
	Copper (Cu)	7440-50-8	97.28		0.009116	
	Palladium	7440-05-3	2.70		0.000253	
	Impurities	NA	0.02		0.000002	
Solder Balls					0.753863	19.090
	Tin (Sn)	7440-31-5	95.50		0.719939	
	Silver (Ag)	7440-22-4	4.00		0.030155	
	Copper (Cu)	7440-50-8	0.50		0.003769	

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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					1.197125	30.315
	Copper (Cu)	7440-50-8	40.58		0.485793	
	Nickel (Ni)	7786-81-4	0.33		0.003951	
	Gold (Au)	13967-50-5	1.52		0.018196	
	Glass Fiber	65997-17-3	5.58		0.066800	
	Non Halogen fire retardant	NA	0.10		0.001197	
	BT (core)	21645-51-2 105391-33-1 25722-66-1 9003-36-5 21645-51-2	45.21		0.541220	
	Solder mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 85954-11-6	6.68		0.079968	

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.
03/19/12	1.1	Device family update.
07/11/12	1.2	Revise component weights

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