



PK536 (v1.1) January 11, 2012

100% Material Declaration Data Sheet for Spartan®-3/-3E/-3A FG1156 (Cu Wire) Package

Average Weight: 5.6764 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	1.897
	Silicon	7440-21-3	100.00		0.107655	
Die Attach Material					0.018830	0.332
	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					2.440605	42.996
	Solid Epoxy Resin	Trade Secret	5.00		0.122030	
	Phenol Resin	Trade Secret	3.00		0.073218	
	Phenol Novolac	9003-35-4	3.00		0.073218	
	Metal Hydroxide	Trade Secret	3.00		0.073218	
	Carbon Black	1333-86-4	0.30		0.007322	
	Silica fused	60676-86-0	70.40		1.718186	
	Silica fused	7631-86-9	15.00		0.366091	
	Silica, crystalline	14808-60-7	0.30		0.007322	
Copper Wire					0.036344	0.640
	Copper (Cu)	7440-50-8	97.28		0.035355	
	Palladium	7440-05-3	2.70		0.000981	
	Impurities	NA	0.02		0.000007	
Solder Balls					1.176665	20.729
	Tin (Sn)	7440-31-5	63.00		0.741299	
	Lead (Pb)	7439-92-1	37.00		0.435366	

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Substrate					1.896289	33.407
	Copper (Cu)	7440-50-8	43.23		0.819844	
	Gold (Au)	7440-57-5	0.35		0.006726	
	Nickel (Ni)	7440-02-0	1.64		0.031042	
	Copper Foil	7440-50-8	6.58		0.124782	
	BT (core)	Trade Secret 21645-51-2 105391-33-1 25722-66-1 9003-36-5 21645-51-2	41.60		0.788874	
	Solder mask	Trade Secret 14807-96-6 7727-43-7 7631-86-9 34590-94-8 85954-11-6	6.59		0.125023	

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.

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