



100% Material Declaration Data Sheet for Spartan-3AN FTG256 Cu Wire Package

PK670 (v1.0) Oct 3, 2014

Average Weight: 0.7530 g

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Silicon Die 1					0.010425	1.384%
	Silicon	7440-21-3	100.00		0.010425	
Silicon Die 2					0.001608	0.214%
	Silicon	7440-21-3	100.00		0.001608	
Die Attach					0.002719	0.361%
	Silver	7440-22-4	77.50		0.002107	
	Bismaleimide monomer	trade secret	15.00		0.000408	
	Acrylate monomer	trade secret	7.50		0.000204	
Film					0.000007	0.001%
	Solid Epoxy Resin	NA	12.50		0.000001	
	Phenol Resin	NA	12.50		0.000001	
	Amorphous Silica	7631-86-9	35.00		0.000002	
	Synthetic Rubber	NA	40.00		0.000003	
Mold Compound					0.392035	52.063%
	Epoxy Resin	Trade secret	7.50		0.029403	
	Phenol Resin A	9003-35-4	3.00		0.011761	
	Phenol Resin B	Trade secret	3.00		0.011761	
	Silica (Amorphous) A	60676-86-0	67.95		0.266388	
	Silica (Amorphous) B	7631-86-9	15.00		0.058805	
	Metal Hydroxide	Trade secret	3.00		0.011761	
Carbon black	1333-86-4	0.55		0.002156		
Copper Wire					0.002610	0.347%
	Copper	7440-50-8	98.25		0.002564	
	Palladium	7440-05-3	1.75		0.000046	
Gold Wire					0.000222	0.029%
	Gold	7440-57-5	99.05		0.000220	
	Palladium	7440-05-3	0.95		0.000002	
	Calcium	7440-70-2	0.00		0.000000	
Solder Ball					0.124093	16.480%
	Tin	7440-31-5	95.50		0.118509	
	Silver	7440-22-4	4.00		0.004964	
	Copper	7440-50-8	0.50		0.000620	

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Substrate					0.219281	29.121%
	Gold	7440-57-5	1.39		0.003042	
	Nickel	7440-02-0	13.47		0.029536	
	Copper Plating	7440-50-8	25.78		0.056520	
	Continuous Filament Fiber Glass	65997-17-3	13.06		0.028638	
	BT Core	7440-50-8	39.18		0.085914	
	Solder mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 91-20-3 85954-11-6	7.13		0.015631	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
10/03/2014	1.0	Xilinx Initial Release

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