



PK664 (v1.0) Oct 3, 2014

100% Material Declaration Data Sheet for Spartan-3AN FG400 Cu Wire Package

Average Weight: 2.0457g

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					0.017871	0.874%
	Silicon	7440-21-3	100.00		0.017871	
Silicon Die 2					0.001608	0.079%
	Silicon	7440-21-3	100.00		0.001608	
Die Attach					0.002719	0.133%
	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					0.000009	0.000%
	Solid Epoxy Resin	NA	12.50		0.000001	
	Phenol Resin	NA	12.50		0.000001	
	Amorphous Silica	7631-86-9	35.00		0.000003	
	Synthetic Rubber	NA	40.00		0.000004	
Mold Compound					0.825283	40.343%
	Epoxy Resin	Trade secret	9.00		0.074275	
	Silica(Amorphous) A	60676-86-0	72.45		0.597918	
	Silica(Amorphous) B	7631-86-9	15.00		0.123792	
	Metal Hydroxide	Trade secret	3.00		0.024758	
	Carbon black	1333-86-4	0.55		0.004539	
Gold Wire					0.000318	0.016%
	Gold	7440-57-5	99.048		0.000315	
	Palladium	7440-05-3	0.95		0.000003	
	Calcium	7440-70-2	0.002		0.000000	
Copper Wire					0.004796	0.234%
	Copper	7440-50-8	98.25		0.004712	
	Palladium	7440-05-3	1.75		0.000084	
Solder Ball					0.380719	18.611%
	Tin	7440-31-5	63.00		0.239853	
	Lead	7439-92-1	37.00		0.140866	

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Substrate					0.812346	39.711%
	Plating Cu	7440-50-8	47.22		0.383561	
	Plating Au	7440-57-5	0.20		0.001657	
	Plating Ni	7440-02-0	1.57		0.012749	
	Copper Foil	7440-50-8	9.71		0.078898	
	Continuous Filament Fiber Glass	65997-17-3	11.99		0.097395	
	BT Core	7440-50-8	13.54		0.109962	
	Pre-Preg Fabric	NA	9.28		0.075403	
Solder mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 91-20-3 85954-11-6	6.49		0.052721		

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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