



PK674 (v1.0) Oct 3, 2014

100% Material Declaration Data Sheet for Spartan-3AN FGG484 Cu Wire Package

Average Weight: 2.099g

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					0.024020	1.144%
	Silicon	7440-21-3	100.00		0.024020	
Silicon Die 2					0.001616	0.077%
	Silicon	7440-21-3	100.00		0.001616	
Die Attach					0.003562	0.170%
	Silver	7440-22-4	77.50		0.002761	
	Bismaleimide monomer	Trade secret	15.00		0.000534	
	Acrylate monomer	Trade secret	7.50		0.000267	
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					0.812553	38.711%
	Epoxy Resin	Trade secret	9.00		0.073130	
	Silica(Amorphous) A	60676-86-0	72.45		0.588694	
	Silica(Amorphous) B	7631-86-9	15.00		0.121883	
	Metal Hydroxide	Trade secret	3.00		0.024377	
	Carbon black	1333-86-4	0.55		0.004469	
Gold Wire					0.000326	0.016%
	Gold	7440-57-5	99.048		0.000323	
	Palladium	7440-05-3	0.95		0.000003	
	Calcium	7440-70-2	0.002		0.000000	
Copper Wire					0.006298	0.300%
	Copper	7440-50-8	98.25		0.006188	
	Palladium	7440-05-3	1.75		0.000110	
Solder Ball					0.405411	19.314%
	Tin	7440-31-5	95.50		0.387168	
	Silver	7440-22-4	4.00		0.016216	
	Copper	7440-50-8	0.50		0.002027	

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Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Substrate					0.845206	40.267%
	Gold	7440-57-5	1.14		0.009613	
	Nickel	7440-02-0	4.03		0.034099	
	Copper Plating	7440-50-8	17.79		0.150367	
	Copper Foil	7440-50-8	2.47		0.020880	
	Continuous Filament Fiber Glass	65997-17-3	20.53		0.173558	
	BT Core	7440-50-8	48.34		0.408567	
	Solder mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 91-20-3 85954-11-6	5.69		0.048122	

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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