



PK666 (v1.0) Oct 3, 2014

# 100% Material Declaration Data Sheet for Spartan-3AN FGG400 Cu Wire Package

**Average Weight: 2.000g**

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
<b>Silicon Die 1</b>					<b>0.017871</b>	<b>0.874%</b>
	Silicon	7440-21-3	100.00		0.017871	
<b>Silicon Die 2</b>					<b>0.001608</b>	<b>0.079%</b>
	Silicon	7440-21-3	100.00		0.001608	
<b>Die Attach</b>					<b>0.002719</b>	<b>0.133%</b>
	Silver	7440-22-4	77.50		0.002107	
	Bismaleimide monomer	Trade secret	15.00		0.000408	
	Acrylate monomer	Trade secret	7.50		0.000204	
<b>Film</b>					<b>0.000009</b>	<b>0.000%</b>
	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	
<b>Mold Compound</b>					<b>0.825283</b>	<b>40.343%</b>
	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	
<b>Gold Wire</b>					<b>0.000318</b>	<b>0.016%</b>
	Gold	7440-57-5	99.048		0.000315	
	Palladium	7440-05-3	0.95		0.000003	
	Calcium	7440-70-2	0.002		0.000000	
<b>Copper Wire</b>					<b>0.004796</b>	<b>0.234%</b>
	Copper	7440-50-8	98.25		0.004712	
	Palladium	7440-05-3	1.75		0.000084	
<b>Solder Ball</b>					<b>0.335050</b>	<b>16.753%</b>
	Tin	7440-31-5	95.50		0.319973	
	Silver	7440-22-4	4.00		0.013402	
	Copper	7440-50-8	0.50		0.001675	

© Copyright 2014 Xilinx, Inc. XILINX, the Xilinx logo, Virtex, Spartan, ISE, and other designated brands included herein are trademarks of Xilinx in the United States and other countries. All other trademarks are the property of their respective owners

**100% Material Declaration Data Sheet for 7 Spartan-3AN FG400 Cu Wire**

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Substrate					<b>0.812346</b>	<b>39.711%</b>
	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

---

## Notice of Disclaimer

Xilinx regards this materials data to be correct but makes no guarantee as to its accuracy or completeness, including, but not limited to, with respect to its compliance with applicable environmental laws and regulations. Xilinx subcontracts the production, test and assembly of hardware devices to independent third-party vendors and materials suppliers (“Contractors”). All data provided hereunder is based on information received from Contractors. Xilinx has not independently verified the accuracy or completeness of this information which is provided solely for your reference in connection with the use of Xilinx products.