



PK732 (v1.0) May 29, 2015

# 100% Material Declaration Data Sheet Spartan®-6 Cu Wire FG676 Package

**Average Weight: 3.1467 g**

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Silicon Die					<b>0.090946</b>	4.125%
	Silicon	7440-21-3	100.00	Main material	0.090946	
Die Attach Material					<b>0.016016</b>	1.245%
	Silver	7440-22-4	77.50	Main material	0.012412	
	Bismaleimide monomer	Trade Secret	15.00	Main material	0.002402	
	Acrylate monomer	Trade Secret	7.50	Main material	0.001201	
Copper Wire					<b>0.005681</b>	0.305%
	Cu	7440-50-8	98.25	Main material	0.005582	
	Pd	7440-05-3	1.75	Dopant	0.000099	
Mold Compound					<b>1.373571</b>	34.945%
	Epoxy Resin	Trade secret	3.00	Main material	0.041207	
	Phenol Resin A	9003-35-4	3.00	Main material	0.041207	
	Phenol Resin B	Trade secret	3.00	Main material	0.041207	
	Silica(Amorphous) A	60676-86-0	72.45	Filler	0.995152	
	Silica(Amorphous) B	7631-86-9	15.00	Filler	0.206036	
	Metal Hydroxide	Trade secret	3.00	Flame retardant	0.041207	
	Carbon black	1333-86-4	0.55	Color agent	0.007555	
Solder Balls					<b>0.643415</b>	13.264%
	Tin (Sn)	7440-31-5	63.00	Main material	0.405351	
	Lead (Pb)	7439-92-1	37.00	Main material	0.238064	

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Substrate					<b>1.017079</b>	<b>46.116%</b>
	Au	7440-57-5	0.808	Main material	0.008223	
	Ni	7440-02-0	7.849	Main material	0.079830	
	Cu foil	7440-50-8	8.010	Main material	0.081472	
	Cu plating	7440-50-8	18.124	Plating	0.184331	
	Continuous Filament Fiber Glass	65997-17-3	17.895	Glass Fiber	0.182003	
	BT Core	7440-50-8 N/A	32.636	Core	0.331938	
	Solder Mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 91-20-3 85954-11-6 N/A	10.524	Solder mask	0.107035	
	Prepregs	NA	4.154	Prepregs	0.042247	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
5/29/15	1.0	Initial Xilinx release

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