PK734 (v1.0) May 29, 2015

100% Material Declaration Data Sheet Spartan®-6 Cu Wire FGG676 Package

Average Weight: 3.068 g

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Silicon Die					**0.090946**	**2.964%**
	Silicon	7440-21-3	100.00	Main material	0.090946	
Die Attach Material					**0.016016**	**0.522%**
	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					**0.005681**	**0.185%**
	Cu	7440-50-8	98.25	Main material	0.005582	
	Pd	7440-05-3	1.75	Dopant	0.000099	
Mold Compound					**1.373571**	**44.771%**
	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					**0.564707**	**18.406%**
	Tin (Sn)	7440-31-5	96.50	Main material	0.544942	
	Silver (Ag)	7440-22-4	3.00	Main material	0.016941	
	Copper (Cu)	7440-50-8	0.50	Main material	0.002824	

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Substrate					**1.017079**	**33.151%**
	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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