



PK764 (v1.1) Jan 8, 2016

100% Material Declaration Data Sheet Spartan®-6 Cu Wire CSG225 Package

Average Weight: 0.383 g

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
Silicon Die					0.007758	2.026%
	Silicon	7440-21-3	100.00	Main material	0.007758	
Die Attach Material					0.002083	0.544%
	Silver	7440-22-4	77.50	Main material	0.001614	
	Bismaleimide monomer	Trade Secret	15.00	Main material	0.000312	
	Acrylate monomer	Trade Secret	7.50	Main material	0.000156	
Copper Wire					0.001834	0.479%
	Cu	7440-50-8	98.25	Main material	0.001802	
	Pd	7440-05-3	1.75	Dopant	0.000032	
Mold Compound					0.170822	44.601%
	Epoxy Resin	Trade secret	7.50	Main material	0.012812	
	Phenol Resin A	9003-35-4	3.00	Main material	0.005125	
	Phenol Resin B	Trade secret	3.00	Main material	0.005125	
	Silica (Amorphous) A	60676-86-0	67.95	Filler	0.116074	
	Silica (Amorphous) B	7631-86-9	15.00	Filler	0.025623	
	Metal Hydroxide	Trade secret	3.00	Flame retardant	0.005125	
Carbon black	1333-86-4	0.55	Color agent	0.000940		
Solder Balls					0.055691	14.541%
	Tin (Sn)	7440-31-5	96.50	Main material	0.053742	
	Silver (Ag)	7440-22-4	3.00	Main material	0.001671	
	Copper (Cu)	7440-50-8	0.50	Main material	0.000278	

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Substrate					0.144812	37.810%
	Au	7440-57-5	1.291	Main material	0.001869	
	Ni	7440-02-0	9.156	Main material	0.013259	
	Cu plating	7440-50-8	21.258	Plating	0.030784	
	Continuous Filament Fiber Glass	65997-17-3	15.863	Glass Fiber	0.022971	
	BT Core	7440-50-8 N/A	47.588	Core	0.068913	
	Solder Mask	14807-96-6 7727-43-7 7631-86-9 34590-94-8 91-20-3 85954-11-6 N/A	4.845	Solder mask	0.007017	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
8/7/15	1.0	Initial Xilinx release
1/8/16	1.1	Fix typo in Solder Ball composition

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