



100% Material Declaration Data Sheet for Virtex-5 FFG1136

PK226 (v1.1) Apr 14, 2016

Average Weight : 9.7816 g

Component	Substance Description	CAS # or Description	% of Component	Use in product	Component Weight	Component % of total
Silicon Die					0.535760	5.477%
	Silicon	7440-21-3	100.000		0.535760	
Solder Bump					0.032320	0.330%
	Tin	7440-31-5	63.000		0.020362	
	Lead	7439-92-1	37.000		0.011958	
Underfill					0.026500	0.271%
	Silica	60676-86-0	70.000		0.018550	
	Epoxy Resin A	9003-36-5	20.000		0.005300	
	Epoxy Resin B	25068-38-6	3.000		0.000795	
	Hardener	19900-65-3	7.000		0.001855	
Heat Spreader					4.800000	49.072%
	Copper	7440-50-8	99.600		4.780800	
Heat Spreader Adhesive					0.019200	1.891%
	Nickel	7440-02-0	0.400		0.019200	
Solder Ball	Organopolysiloxane mixture	N/A	100.000		0.185000	9.702%
					0.185000	
Solder Ball					0.948980	9.702%
	Tin	7440-31-5	95.500		0.906276	
	Silver	7440-22-4	4.000		0.037959	
	Copper	7440-50-8	0.500		0.004745	
Substrate					3.253040	33.257%
	Copper	7440-50-8	32.09		1.043879	
	Tin	7440-31-5	1.07		0.034944	
	Lead	7439-92-1	0.14		0.004627	
	Silver	7440-22-4	0.08		0.002491	
	Core	N/A	44.57		1.449800	
	PP	N/A	5.20		0.169143	
	ABF	N/A	14.59		0.474568	
	Solder Mask	N/A	2.26		0.073589	

Revision History

Date	Version	Description of Revisions
08/06/2007	1.0	Initial Xilinx release
04/14/2016	1.1	Update substrate

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