



100% Material Declaration Data Sheet for FF1136

PK225 (v1.2) September 20, 2016

Average Weight : 9.9112 g

Component	Substance Description	CAS # or Description	% of Component	Use in product	Component Weight	Component % of total
Silicon Die					0.535760	5.406%
	Silicon	7440-21-3	100.000		0.535760	
Solder Bump					0.032320	0.326%
	Tin	7440-31-5	63.000		0.020362	
	Lead	7439-92-1	37.000		0.011958	
Underfill					0.026500	0.267%
	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	48.430%
	Copper	7440-50-8	99.600		4.780800	
	Nickel	7440-02-0	0.400		0.019200	
Heat Spreader Adhesive					0.185000	1.867%
	Organopolysiloxane mixture	N/A	100.000		0.185000	
Solder Ball					1.078670	10.883%
	Tin	7440-31-5	63.000		0.679562	
	Lead	7439-92-1	37.000		0.399108	
Substrate					3.253040	32.822%
	Copper	7440-50-8	32.09	Metal Layer	1.043901	
	Tin	7440-31-5	1.07	Metal Layer	0.034808	
	Lead	7439-92-1	0.14	Metal Layer	0.004554	
	Silver	7440-22-4	0.08		0.002602	
	BT (core)	N/A	44.57		1.449880	
	PP	N/A	5.20		0.169158	
	ABF	N/A	14.59		0.474619	
Solder Mask	N/A	2.26		0.073519		

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
08/06/07	1.0	Initial Xilinx release.
09/21/12	1.1	Updated CAS # of Pb (7439-92-1) in Solder Ball.
09/20/16	1.2	Updated Substrate substances description and weights.

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