100% Material Declaration Data Sheet for FFG668

PK090 (v1.4) May 13, 2016

Average Weight : 4.9150 g

Component	Substance Description	CAS # or Description	% of Component	Use in product	Component Weight	Component % of total
Silicon Die					**0.430700**	**8.747%**
	Silicon	7440-21-3	100.000		0.430700	
Solder Bump					**0.021443**	**0.436%**
	Tin	7440-31-5	63.000		0.013509	
	Lead	7439-92-1	37.000		0.007934	
Underfill					**0.044000**	**0.894%**
	Silica	60676-86-0	70.000		0.030800	
	Epoxy Resin A	9003-36-5	20.000		0.008800	
	Epoxy Resin B	25068-38-6	3.000		0.001320	
	Hardener	19900-65-3	7.000		0.003080	
Heat Spreader					**3.000000**	**60.929%**
	Copper	7440-50-8	99.900		2.997000	
	Nickel	7440-02-0	0.100		0.003000	
Heat Spreader Adhesive					**0.032500**	**1.076%**
	Zinc oxide	1314-13-2	35.000		0.017500	
	Other	NA	65.000		0.032500	
Solder Balls					**0.558020**	**11.333%**
	Tin	7440-31-5	95.500		0.532909	
	Silver	7440-22-4	4.000		0.022321	
	Copper	7440-50-8	0.500		0.002790	
Substrate					**0.819560**	**16.645%**
	Copper	7440-50-8	44.28	metal layer	0.362901	
	Tin	7440-31-5	1.01	metal layer	0.008278	
	Lead	7439-92-1	0.14	metal layer	0.001147	
	Silver	7440-22-4	0.02		0.000164	
	Core	NA	39.72		0.325529	
	ABF	NA	10.67		0.087447	
	Solder Mask	NA	4.16		0.034094	

Revision History

Date	Version	Description of Revisions
03/04/2016	1.0	Initial Initial release.
05/01/2006	1.1	100% Material Declaration.
09/22/2006	1.2	Updated component descriptions.
07/20/2010	1.3	Updated Heat Spreader substance description
05/13/2016	1.4	Updated Substrate

Notice of Disclaimer

Xilinx regards this materials data to be correct but makes no guarantee as to its accuracy or completeness, including, but not limited to, with respect to its compliance with applicable environmental laws and regulations. Xilinx subcontracts the production, test and assembly of hardware devices to independent third-party vendors and materials suppliers (“Contractors”). All data provided hereunder is based on information received from Contractors. Xilinx has not independently verified the accuracy or completeness of this information which is provided solely for your reference in connection with the use of Xilinx products.

© Copyright 2016 Xilinx