XILINX

PK658 (v1.0) May 23, 2014

100% Material Declaration Data Sheet for Artix-7 FFG1156

Average Weight: 9.5270g

Component	Substance Description	CAS Number or Description	Percent of Component (%)	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total (%)
Silicon Die					**0.237267**	**2.490**
	Silicon (Si)	7440-21-3	100.00	Basis	0.237267	
Solder Bump					**0.011261**	**0.118**
	Tin (Sn)	7440-31-5	63.00	Basis	0.007094	
	Lead (Pb)	7439-92-1	37.00	Basis	0.004167	
Underfill					**0.030000**	**0.315**
	Bisphenol F/ epichlorohydrin copolymer	9003-36-5	20.00	Basis	0.006000	
	Phenolic Resin	Trade Secret	15.00	Basis	0.004500	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	Basis	0.001500	
	Amine type accelerator	Trade Secret	5.00	Basis	0.001500	
	Silicon Dioxide	60676-86-0	51.50	Basis	0.015450	
	Carbon Black	1333-86-4	1.00	Basis	0.000300	
	Additives	Trade Secret	2.50	Additive	0.000750	
Lid					**4.965400**	**52.119**
	Copper (Cu)	7440-50-8	99.35	Main Material	4.883471	
	Nickel (Ni)	7440-02-0	1.65	Main Material	0.081929	
Lid Adhesive					**0.116000**	**1.218**
	Aluminium Oxide Al2O3	1344-28-1	70.00	Main Material	0.081200	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	30.00	Main Material	0.034800	
Solder Ball					**0.964719**	**10.126**
	Tin (Sn)	7440-31-5	96.50	Main Material	0.930954	
	Silver (Ag)	7440-22-4	3.00	Main Material	0.028942	
	Copper (Cu)	7440-50-8	0.50	Main Material	0.004824	

Component	Substance Description	CAS Number or Description	Percent of Component (%)	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total (%)
Substrate					**3.202400**	**33.614**
	Copper (Cu)	7440-50-8	36.11		1.156341	
	Tin (Sn)	7440-31-5	0.78		0.024927	
	Lead (Pb)	7439-92-1	0.12		0.003880	
	Silver (Ag)	7440-22-4	0.02		0.000570	
	BT Core	N/A	49.17		1.574723	
	ABF	N/A	11.31		0.362182	
	Solder Mask	N/A	2.49		0.079778	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
05/23/2014	1.0	Initial Xilinx release.

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