PK918 (v1.0) June 27, 2017

100% Material Declaration Data Sheet for 7-Series Kintex FFG1156 RoHS 6/6

Average Weight : 14.3166 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die					**0.446519**	**3.119%**
	Silicon	7440-21-3	100.00	basis	0.446519	
Bump					**0.018109**	**0.126%**
	Tin	7440-31-5	98.20	basis	0.017783	
	Silver	7440-22-4	1.80	basis	0.000326	
Underfill					**0.053000**	**0.370%**
	Bisphenol F type liquid	9003-36-5	15.00	basis	0.007950	
	1,6-Bis(2,3-	27610-48-6	10.00	basis	0.005300	
	Bisphenol A type liquid	25068-38-6	5.00	basis	0.002650	
	Amine type hardener	trade secret	10.00	basis	0.005300	
	Silicon dioxide	60676-86-0	58.00	filler	0.030740	
	Carbon black	1333-86-4	1.00	color agent	0.000530	
	Additives	trade secret	1.00	additives	0.000530	
Solder paste					**0.005496**	**0.038%**
	Tin	7440-31-5	96.50	metal	0.005304	
	Silver	7440-22-4	3.00	metal	0.000165	
	Copper	7440-50-8	0.50	metal	0.000027	
Capacitor 1					**0.004800**	**0.034%**
	BaTiO3 type	1304-28-5	40.00	Ceramic	0.001920	
	Titanium dioxide	13463-67-7	20.00		0.000960	
	Misc	-	6.67		0.000320	
	Nickel	7440-02-0	2.42	Inner electrode	0.000116	
	Copper	7440-50-8	20.73	Out electrode	0.000995	
	Silicon dioxide	7631-86-9	1.85		0.000089	
	diboron trioxide; boric	1303-86-2	0.45		0.000022	
	Nickel	7440-02-0	2.12	Plating1	0.000102	
	Tin	7440-31-5	5.76	Plating2	0.000276	
Capacitor2					**0.007360**	**0.051%**
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.002331	
	Titanium dioxide	13463-67-7	15.83		0.001165	
	Misc	-	5.28		0.000389	
	Nickel	7440-02-0	26.67	Inner Electrode	0.001963	
	Copper	7440-50-8	15.10	Outer Electrode	0.001111	
	Silicon dioxide	7631-86-9	1.34		0.000099	
	diboron trioxide; boric	1303-86-2	0.33		0.000024	
	Nickel	7440-02-0	1.00	Plating1	0.000074	
	Tin	7440-31-5	2.78	Plating2	0.000205	
Capacitor3					**0.037800**	**0.264%**
	BaTiO3 type	1304-28-5	37.46	Ceramic	0.014160	
	Titanium dioxide	13463-67-7	18.73		0.007080	
	Misc	-	6.24		0.002359	
	Nickel	7440-02-0	17.95	Inner Electrode	0.006785	
	Copper	7440-50-8	15.88	Outer Electrode	0.006003	
	Silicon dioxide	7631-86-9	1.41		0.000533	
	diboron trioxide; boric	1303-86-2	0.35		0.000132	
	Nickel	7440-02-0	0.54	Plating1	0.000204	
	Tin	7440-31-5	1.44	Plating2	0.000544	
Heat sink					**8.957100**	**62.564%**
	Copper	7440-50-8	98.35	Main material	8.809308	
	Nickel	7440-02-0	1.65	Main material	0.147792	
Heat sink adhesive					**0.148000**	**1.034%**
	Aluminium Oxide Al2O3	-	80.00	Main material	0.118400	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	20.00	Main material	0.029600	
Solder ball					**0.965683**	**6.745%**
	Tin	7440-31-5	96.50	Main material	0.931884	
	Silver	7440-22-4	3.00	Main material	0.028970	
	Copper	7440-50-8	0.50	Main material	0.004828	
Substrate					**3.672733**	**25.654%**
	Copper	7440-50-8	40.49		1.487090	
	Tin	7440-31-5	0.95		0.034891	
	Silver	7440-22-4	0.03		0.001102	
	Core	N/A	43.19		1.586252	
	ABF	N/A	13.16		0.483332	
	Solder Mask	N/A	2.18		0.080066	

Revision History

Date	Version	Description of Revisions
6/27/2017	1.0	Initial Xilinx Release

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 2017 Xilinx