



PK906 (v1.0) May 10, 2017

100% Material Declaration Data Sheet for Virtex 5 FFG1760

RoHS 6/6

Average Weight : 15.360 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die	Silicon	7440-21-3	100.00	basis	0.548866	3.57%
					0.548866	
Bump	Tin	7440-31-5	98.20	basis	0.016626	0.11%
	Silver	7440-22-4	1.80	basis	0.000305	
					0.074100	0.48%
Underfill	Bisphenol F type liquid	9003-36-5	15.00	basis	0.011115	
	1,6-Bis(2,3-	27610-48-6	10.00	basis	0.007410	
	Bisphenol A type liquid	25068-38-6	5.00	basis	0.003705	
	Amine type hardener	trade secret	10.00	basis	0.007410	
	Silicon dioxide	60676-86-0	58.00	filler	0.042978	
	Carbon black	1333-86-4	1.00	color agent	0.000741	
	Additives	trade secret	1.00	additives	0.000741	
					0.009952	0.06%
Solder paste	Tin	7440-31-5	85.40	metal	0.008499	
	Silver	7440-22-4	2.66	metal	0.000265	
	Copper	7440-50-8	0.44	metal	0.000044	
	Additives	Trade secret	11.50	flux	0.001144	
					0.006880	0.04%
Capacitor 1	BaTiO3 type	1304-28-5	34.54	Ceramic	0.002376	
	Titanium dioxide	13463-67-7	17.27		0.001188	
	Misc	-	5.76		0.000396	
	Nickel	7440-02-0	31.90	Inner Electrode	0.002195	
	Copper	7440-50-8	8.52	Outer Electrode	0.000586	
	Silicon dioxide	7631-86-9	0.76		0.000052	
	diboron trioxide; boric	1303-86-2	0.19		0.000013	
	Nickel	7440-02-0	0.29	Plating1	0.000020	
	Tin	7440-31-5	0.77	Plating2	0.000053	
					0.003600	0.02%
Capacitor2	BaTiO3 type	1304-28-5	37.46	Ceramic	0.001349	
	Titanium dioxide	13463-67-7	18.73		0.000674	
	Misc	-	6.24		0.000225	
	Nickel	7440-02-0	17.95	Inner Electrode	0.000646	
	Copper	7440-50-8	15.88	Outer Electrode	0.000572	
	Silicon dioxide	7631-86-9	1.41		0.000051	
	diboron trioxide; boric	1303-86-2	0.35		0.000013	
	Nickel	7440-02-0	0.54	Plating1	0.000019	
	Tin	7440-31-5	1.44	Plating2	0.000052	
					7.470000	48.63%
Heat sink	Copper	7440-50-8	98.35	Main material	7.346745	
	Nickel	7440-02-0	1.65	Main material	0.123255	
					0.172000	1.12%
Heat sink adhesive	Aluminium Oxide Al2O3	-	80.00	Main material	0.137600	
	Dimethyl siloxane,	68083-19-2	20.00	Main material	0.034400	
					1.474222	9.60%
Solder ball	Tin	7440-31-5	95.50	Main material	1.407882	
	Silver	7440-22-4	4.00	Main material	0.058969	
	Copper	7440-50-8	0.50	Main material	0.007371	
					5.583718	36.35%
Substrate	Copper	7440-50-8	33.20		1.853705	
	Tin	7440-31-5	0.46		0.025684	
	Silver	7440-22-4	0.01		0.000558	
	Resin	N/A	0.10		0.005853	
	Core	N/A	45.67		2.549961	
	PP	N/A	5.99		0.334449	
	ABF	N/A	12.77		0.713006	
	Solder Mask	N/A	1.8		0.100502	

Revision History

Date	Version	Description of Revisions
5/10/2017	1.0	Initial Xilinx release

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