



PK920(v1.0) August 25, 2017

# 100% Material Declaration Data Sheet for Zynq UltraScale+ SFVA625

Average Weight : 5.0678 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	0.166118	3.278%
					0.166118	
Bump	Tin	7440-31-5	98.20	basis	0.007039	0.141%
	Silver	7440-22-4	1.80	basis	0.000129	
					0.031900	0.629%
Underfill	Bisphenol F type liquid	9003-36-5	15.00	basis	0.004785	
	1,6-Bis(2,3-	27610-48-6	10.00	basis	0.003190	
	Bisphenol A type liquid	25068-38-6	5.00	basis	0.001595	
	Amine type hardener	trade secret	10.00	basis	0.003190	
	Silicon dioxide	60676-86-0	58.00	filler	0.018502	
	Carbon black	1333-86-4	1.00	color agent	0.000319	
	Additives	trade secret	1.00	additives	0.000319	
					0.006324	0.125%
Solder paste	Tin	7440-31-5	82.70	metal	0.005230	
	Silver	7440-22-4	2.70	metal	0.000171	
	Cu	7440-50-8	1.55	metal	0.000098	
	Solvent		5.50		0.000348	
	Organic amine		3.00	flux	0.000190	
	Surfactant		3.00		0.000190	
	Copolymer		1.55		0.000098	
					0.061200	1.208%
Capacitor 1	Barium oxide, obtained by	1304-28-5	37.46	Ceramic	0.022926	
	Titanium dioxide	13463-67-7	18.73		0.011463	
	Misc	-	6.24		0.003819	
	Nickel	7440-02-0	17.95	Inner electrode	0.010985	
	Copper	7440-50-8	15.88	Out electrode	0.009719	
	Silicon dioxide	7631-86-9	1.41		0.000863	
	diboron trioxide; boric	1303-86-2	0.35		0.000214	
	Nickel	7440-02-0	0.54	Plating1	0.000330	
	Tin	7440-31-5	1.44	Plating2	0.000881	
					2.950000	58.211%
Heat sink	Copper	7440-50-8	98.35	Main material	2.901325	
	Nickel	7440-02-0	1.65	Main material	0.048675	
					0.056000	1.105%
Heat sink adhesive	Aluminium Oxide Al2O3	-	80.00	Main material	0.044800	
	Dimethyl siloxane,	68083-19-2	20.00	Main material	0.011200	
					0.302143	5.962%
Solder ball	Tin	7440-31-5	96.50	Main material	0.291568	
	Silver	7440-22-4	3.00	Main material	0.009064	
	Copper	7440-50-8	0.50	Main material	0.001511	
					1.486993	29.342%
Substrate	Copper	7440-50-8	35.59		0.529221	
	Tin	7440-31-5	0.42		0.006245	
	Silver	7440-22-4	0.01		0.000149	
	Resin	N/A	0.07		0.001041	
	Core	N/A	48.42		0.720002	
	ABF	N/A	14.06		0.209071	
	Solder Mask	N/A	1.43		0.021264	

## Revision History

Date	Version	Description of Revisions
8/25/2017	1.0	Initial Xilinx Release.

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