



PK1104(v1.0) October 27, 2020

100% Material Declaration Data Sheet for Zynq Ultrascale+ FFVF1760

Average Weight : 26.840000 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	0.706615	2.633%
					0.031112	0.116%
Bump	Tin	7440-31-5	98.20	basis	0.030552	
	Silver	7440-22-4	1.80	basis	0.000560	
Underfill					0.074400	0.277%
	Bisphenol F type liquid	9003-36-5	15.00	basis	0.011160	
	1,6-Bis(2,3-	27610-48-6	10.00	basis	0.007440	
	Bisphenol A type liquid	25068-38-6	5.00	basis	0.003720	
	Amine type hardener	trade secret	10.00	basis	0.007440	
	Silicon dioxide	60676-86-0	58.00	filler	0.043152	
	Carbon black	1333-86-4	1.00	color agent	0.000744	
	Additives	trade secret	1.00	additives	0.000744	
Solder paste					0.015520	0.058%
	Tin	7440-31-5	85.40	metal	0.013254	
	Silver	7440-22-4	2.66	metal	0.000413	
	Copper	7440-50-8	0.44	metal	0.000068	
	Additives	trade secret	11.50	flux	0.001785	
Capacitor 1					0.464000	1.729%
	BaTiO3 type	1304-28-5	7.53	Ceramic	0.034939	
	Titanium dioxide	13463-67-7	3.77		0.017493	
	Misc	trade secret	1.26		0.005846	
	Nickel	7440-02-0	83.38	Inner electrode	0.386883	
	Copper	7440-50-8	2.98	Out electrode	0.013827	
	Silicon dioxide	7631-86-9	0.26		0.001206	
	diboron trioxide; boric	1303-86-2	0.07		0.000325	
	Nickel	7440-02-0	0.19	Plating1	0.000882	
	Tin	7440-31-5	0.56	Plating2	0.002598	
Capacitor 2					0.210000	0.782%
	BaTiO3 type	12047-27-7	34.00	Ceramic	0.071400	
	Nickel	7440-02-0	18.00	Inner Electrode	0.037800	
	Copper	7440-50-8	41.00	Outer Electrode	0.086100	
	Nickel	7440-02-0	3.40	Plating1	0.007140	
	Tin	7440-31-5	3.40	Plating2	0.007140	
Heat sink					16.340000	60.879%
	Copper	7440-50-8	98.35	Main material	16.070390	
Heat sink adhesive	Nickel	7440-02-0	1.65	Main material	0.269610	
					0.176000	0.656%
	Aluminium Oxide Al2O3	trade secret	80.00	Main material	0.140800	
Solder ball	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	20.00	Main material	0.035200	
					1.470244	5.478%
	Tin	7440-31-5	96.50	Main material	1.418785	
	Silver	7440-22-4	3.00	Main material	0.044107	
Substrate	Copper	7440-50-8	0.50	Main material	0.007351	
					7.352109	27.392%
	Copper	7440-50-8	41.39676		3.043535	
	Tin	7440-31-5	0.233048		0.017134	
	Silver	7440-22-4	0.007245		0.000533	
	Core	N/A	39.33211		2.891739	
	ABF	N/A	17.69945		1.301283	
Solder Mask	N/A	1.331391		0.097885		

Revision History

Date	Version	Description of Revisions
10/27/2020	1.0	Initial Xilinx Release.

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