



PK908(v1.0) May 22, 2017

# 100% Material Declaration Data Sheet for UltraScale+ FFVC1760

Average Weight : 23.6353 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	0.724022	3.063%
					0.724022	
Bump	Tin	7440-31-5	98.20	basis	0.031395	0.133%
	Silver	7440-22-4	1.80	basis	0.000565	
Underfill	Bisphenol F type liquid	9003-36-5	15.00	basis	0.085500	0.362%
	1,6-Bis(2,3-	27610-48-6	10.00	basis	0.012825	
	Bisphenol A type liquid	25068-38-6	5.00	basis	0.008550	
	Amine type hardener	trade secret	10.00	basis	0.004275	
	Silicon dioxide	60676-86-0	58.00	filler	0.008550	
	Carbon black	1333-86-4	1.00	color agent	0.049590	
	Additives	trade secret	1.00	additives	0.000855	
Solder paste	Tin	7440-31-5	82.70	metal	0.013368	0.057%
	Silver	7440-22-4	2.70	metal	0.011055	
	Copper	7440-50-8	1.55	metal	0.000361	
	Additives	trade secret	13.05	flux	0.000207	
Capacitor 1					0.001745	
	Barium oxide, obtained by	1304-28-5	31.67	Ceramic	0.000690	0.003%
	Titanium dioxide	13463-67-7	15.83		0.000219	
	Misc	-	5.28		0.000109	
	Nickel	7440-02-0	26.67	Inner electrode	0.000036	
	Copper	7440-50-8	15.10	Out electrode	0.000184	
	Silicon dioxide	7631-86-9	1.34		0.000104	
	diboron trioxide; boric	1303-86-2	0.33		0.000009	
	Nickel	7440-02-0	1.00	Plating1	0.000002	
	Tin	7440-31-5	2.78	Plating2	0.000007	
Capacitor 2					0.000019	
	Barium oxide, obtained by	1304-28-5	30.22	Ceramic	0.001200	0.005%
	Titanium dioxide	13463-67-7	15.11		0.000363	
	Misc	-	5.04		0.000181	
	Nickel	7440-02-0	33.44	Inner electrode	0.000060	
	Copper	7440-50-8	11.87	Out electrode	0.000401	
	Silicon dioxide	7631-86-9	1.06		0.000142	
	diboron trioxide; boric	1303-86-2	0.26		0.000013	
	Nickel	7440-02-0	0.81	Plating1	0.000003	
Tin	7440-31-5	2.19	Plating2	0.000010		
Heat sink					0.000026	
	Copper	7440-50-8	98.35	Main material	13.490000	57.076%
Heat sink adhesive	Nickel	7440-02-0	1.65	Main material	0.222585	
	Aluminium Oxide Al2O3	-	80.00	Main material	0.198000	0.838%
Solder ball	Dimethyl siloxane,	68083-19-2	20.00	Main material	0.039600	
					1.470244	6.221%
	Tin	7440-31-5	96.50	Main material	1.418785	
Substrate	Silver	7440-22-4	3.00	Main material	0.044107	
	Copper	7440-50-8	0.50	Main material	0.007351	
					7.620895	32.244%
	Copper	7440-50-8	40.73		3.103991	
	Tin	7440-31-5	0.40		0.030484	
	Silver	7440-22-4	0.01		0.000762	
	Core	N/A	39.62		3.019398	
ABF	N/A	17.83		1.358805		
Solder Mask	N/A	1.41		0.107455		

## Revision History

Date	Version	Description of Revisions
5/22/2017	1.0	Initial Xilinx Release.

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