



100% Material Declaration Data Sheet for FBV676

PK712 (v1.0) Aug 28, 2015

Average Weight: 2.9014g

Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Silicon Die					0.296758	10.228%
	Silicon (Si)	7440-21-3	100.00	Basis	0.296758	
Solder Bump					0.011910	0.410%
	Sn	7440-31-5	98.20	basis	0.011696	
	Ag	7440-22-4	1.80	basis	0.000214	
Solder Paste					0.003468	0.120%
	Tin (Sn)	7440-31-5	96.50	Basis	0.003347	
	Silver (Ag)	7440-22-4	3.00	Basis	0.000104	
	Copper (Cu)	7440-50-8	0.50	Basis	0.000017	
Capacitor 1					0.001200	0.041%
	BaTiO3 type	1304-28-5	30.22	Ceramic	0.000363	
	Titanium dioxide	13463-67-7	15.11		0.000181	
	Misc.	trade secret	5.04		0.000060	
	Ni	7440-02-0	33.44	Inner electrode	0.000401	
	Cu	7440-50-8	11.87	Out electrode	0.000142	
	Silicon dioxide	7631-86-9	1.06		0.000013	
	boric oxide	1303-86-2	0.26		0.000003	
	Ni	7440-02-0	0.81	Plating1	0.000010	
	Sn	7440-31-5	2.19	Plating2	0.000026	
Capacitor 2					0.007360	0.254%
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.002331	
	Titanium dioxide	13463-67-7	15.83		0.001165	
	Misc.	-	5.28		0.000389	
	Ni	7440-02-0	26.67	Inner Electrode	0.001963	
	Cu	7440-50-8	15.10	Outer Electrode	0.001111	
	Silicon dioxide	7631-86-9	1.34		0.000099	
	boric oxide	1303-86-2	0.33		0.000024	
	Ni	7440-02-0	1.00	Plating1	0.000074	
	Sn	7440-31-5	2.78	Plating2	0.000205	

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Component	Substance Description	CAS Number or Description	Percentage of Component	Use in Product	Component Weight/ Substance Weight (grams)	Component Percent of Total
Capacitor 3					0.010800	0.372%
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.003420	
	Titanium dioxide	13463-67-7	15.83		0.001710	
	Misc.	-	5.28		0.000570	
	Ni	7440-02-0	26.67	Inner Electrode	0.002880	
	Cu	7440-50-8	15.10	Outer Electrode	0.001631	
	Silicon dioxide	7631-86-9	1.34		0.000145	
	diboron trioxide; boric oxide	1303-86-2	0.33		0.000036	
	Ni	7440-02-0	1.00	Plating1	0.000108	
	Sn	7440-31-5	2.78	Plating2	0.000300	
Underfill					0.045000	1.551%
	Bisphenol F type liquid epoxy resin	9003-36-5	15.00	basis	0.006750	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.004500	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	basis	0.002250	
	Amine type hardener	trade secret	10.00	basis	0.004500	
	Silicon dioxide	60676-86-0	58.00	filler	0.026100	
	Carbon black	1333-86-4	1.00	color agent	0.000450	
	Additives	trade secret	1.00	additives	0.000450	
Solder Ball					0.564707	19.463%
	Sn	7440-31-5	96.50	basis	0.544942	
	Ag	7440-22-4	3.00	basis	0.016941	
	Cu	7440-50-8	0.50	basis	0.002824	
Substrate					1.960197	67.560%
	Cu	7440-50-8	36.975		0.724783	
	Sn	7440-31-5	1.112		0.021803	
	Ag	7440-22-4	0.035		0.000678	
	Core	trade secret	48.199		0.944795	
	ABF	trade secret	11.204		0.219628	
	Solder Mask	trade secret	2.475		0.048510	

Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
08/28/2015	1.0	Initial Xilinx release.

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