100% Material Declaration Data Sheet for FFV900

PK776 (v1.0) Jan 22, 2016

FFV900

Average Weight : 11.7917 g

Component	Substance Description	CAS # or Description	% of component	Use in product	Component weight / substance weight (in grams)	Component % of total
Silicon die 1					**0.388303**	**3.293%**
	Si	7440-21-3	100.00	basis	0.388303	
Bump					**0.015339**	**0.130%**
	Sn	7440-31-5	98.20	basis	0.015063	
	Ag	7440-22-4	1.80	basis	0.000276	
Underfill					**0.049000**	**0.416%**
	Bisphenol F type liquid epoxy resin	9003-36-5	15.00	basis	0.007350	
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.004900	
	Bisphenol A type liquid epoxy resin	25068-38-6	5.00	basis	0.002450	
	Amine type hardener	trade secret	10.00	basis	0.004900	
	Silicon dioxide	60676-86-0	58.00	filler	0.028420	
	Carbon black	1333-86-4	1.00	color agent	0.000490	
	Additives	trade secret	1.00	additives	0.000490	
Solder paste					**0.005772**	**0.049%**
	Sn	7440-31-5	96.50	metal	0.005570	
	Ag	7440-22-4	3.00	metal	0.000173	
	Cu	7440-50-8	0.50	metal	0.000029	
Capacitor 1					**0.002400**	**0.020%**
	BaTiO3 type	1304-28-5	40.00	Ceramic	0.000960	
	Titanium dioxide	13463-67-7	20.00		0.000480	
	Misc	-	6.67		0.000160	
	Ni	7440-02-0	2.42	Inner electrode	0.000058	
	Cu	7440-50-8	20.73	Out electrode	0.000498	
	Silicon dioxide	7631-86-9	1.85		0.000044	
	diboron trioxide; boric oxide	1303-86-2	0.45		0.000011	
	Ni	7440-02-0	2.12	Plating1	0.000051	
	Sn	7440-31-5	5.76	Plating2	0.000138	
Capacitor2					**0.009200**	**0.078%**
	BaTiO3 type	1304-28-5	31.67	Ceramic	0.002914	
	Titanium dioxide	13463-67-7	15.83		0.001456	
	Misc	-	5.28		0.000486	
	Ni	7440-02-0	26.67	Inner Electrode	0.002454	
	Cu	7440-50-8	15.10	Outer Electrode	0.001389	
	Silicon dioxide	7631-86-9	1.34		0.000123	
	diboron trioxide; boric oxide	1303-86-2	0.33		0.000030	
	Ni	7440-02-0	1.00	Plating1	0.000092	
	Sn	7440-31-5	2.78	Plating2	0.000256	
Capacitor3					**0.021600**	**0.183%**
	BaTiO3 type	1304-28-5	37.46	Ceramic	0.008091	
	Titanium dioxide	13463-67-7	18.73		0.004046	
	Misc	-	6.24		0.001348	
	Ni	7440-02-0	17.95	Inner Electrode	0.003877	
	Cu	7440-50-8	15.88	Outer Electrode	0.003430	
	Silicon dioxide	7631-86-9	1.41		0.000305	
	diboron trioxide; boric oxide	1303-86-2	0.35		0.000076	
	Ni	7440-02-0	0.54	Plating1	0.000117	
	Sn	7440-31-5	1.44	Plating2	0.000311	
Capacitor4					**0.003800**	**0.032%**
	BaTiO3 type	1304-28-5	37.01	Ceramic	0.001406	
	Titanium dioxide	13463-67-7	18.51		0.000703	
	Misc	-	6.17		0.000234	
	Ni	7440-02-0	4.90	Inner Electrode	0.000186	
	Indium(III) oxide	1312-43-2	9.15		0.000348	
	Tin dioxide	18282-10-5	1.83		0.000070	
	Frits	65997-18-4	5.49		0.000209	
	Nickel	7440-02-0	1.83		0.000070	
	Cu	7440-50-8	12.05	Outer Electrode	0.000458	
	Silicon dioxide	7631-86-9	0.27		0.000010	
	diboron trioxide; boric oxide	1303-86-2	1.07		0.000041	
	Ni	7440-02-0	0.49	Plating1	0.000019	
	Sn	7440-31-5	1.23	Plating2	0.000047	
Heat sink					**7.427400**	**62.988%**
	Cu	7440-50-8	98.35	Main material	7.304848	
	Ni	7440-02-0	1.65	Main material	0.122552	
Heat sink adhesive					**0.120000**	**1.018%**
	Aluminium Oxide Al2O3	-	80.00	Main material	0.096000	
	Dimethyl siloxane, dimethylvinyl-terminated	68083-19-2	20.00	Main material	0.024000	
Solder ball					**0.751829**	**6.376%**
	Sn	7440-31-5	96.50	Main material	0.725515	
	Ag	7440-22-4	3.00	Main material	0.022555	
	Cu	7440-50-8	0.50	Main material	0.003759	
Substrate					2.997057	**25.417%**
	Consigned				2.997057	

Revision History

Date	Version	Description of Revisions
01/22/2016	1	Initial Xilinx release.

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