



PK828(v1.0) November 30, 2016

100% Material Declaration Data Sheet for 7-Series (Kintex) FFG900 RoHS 6/6

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					0.388303	3.293%
	Silicon	7440-21-3	100.00	basis	0.388303	
Bump					0.015339	0.130%
	Tin	7440-31-5	98.20	basis	0.015063	
	Silver	7440-22-4	1.80	basis	0.000276	
Underfill					0.049000	0.416%
	Bisphenol F type liquid epoxy	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	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	
Solder paste					0.005772	0.049%
	Tin	7440-31-5	96.50	metal	0.005570	
	Silver	7440-22-4	3.00	metal	0.000173	
	Copper	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	
	Nickel	7440-02-0	2.42	Inner electrode	0.000058	
	Copper	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	
	Nickel	7440-02-0	2.12	Plating1	0.000051	
	Tin	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	
	Nickel	7440-02-0	26.67	Inner Electrode	0.002454	
	Copper	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	
	Nickel	7440-02-0	1.00	Plating1	0.000092	
	Tin	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	
	Nickel	7440-02-0	17.95	Inner Electrode	0.003877	
	Copper	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	
	Nickel	7440-02-0	0.54	Plating1	0.000117	
	Tin	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	
	Nickel	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	
	Copper	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	
	Nickel	7440-02-0	0.49	Plating1	0.000019	
Tin	7440-31-5	1.23	Plating2	0.000047		
Heat sink					7.427400	62.988%
	Copper	7440-50-8	98.35	Main material	7.304848	
Heat sink adhesive					0.120000	1.018%
	Nickel	7440-02-0	1.65	Main material	0.122552	
Solder ball					0.751829	6.376%
	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%
	Tin	7440-31-5	96.50	Main material	0.725515	
	Silver	7440-22-4	3.00	Main material	0.022555	
Substrate					2.997057	25.417%
	Copper	7440-50-8	41.03		1.229693	
	Tin	7440-31-5	0.99		0.029671	
	Silver	7440-22-4	0.03		0.000899	
	Core	N/A	42.64		1.27794500	
	ABF	N/A	13.15		0.394113	
Solder Mask	N/A	2.16		0.064736		

Revision History

Date	Version	Description of Revisions
11/30/2016	1.0	Initial Xilinx release.