



PK838(v1.0) November 30, 2016

100% Material Declaration Data Sheet for 7-Series (Kintex) FBG484 RoHS 6/6

Average Weight : 2.1367 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	0.182707	8.55%
					0.182707	
Bump	Tin	7440-31-5	98.20	basis	0.007370	0.35%
	Silver	7440-22-4	1.80	basis	0.000135	
					0.003200	
Underfill	Bisphenol F type liquid epoxy	9003-36-5	15.00	basis	0.004980	1.55%
	1,6-Bis(2,3-epoxypropoxy)naphthalene	27610-48-6	10.00	basis	0.003320	
	Bisphenol A type liquid epoxy	25068-38-6	5.00	basis	0.001660	
	Amine type hardener	trade secret	10.00	basis	0.003320	
	Silicon dioxide	60676-86-0	58.00	filler	0.019256	
	Carbon black	1333-86-4	1.00	color agent	0.000332	
	Additives	trade secret	1.00	additives	0.000332	
Solder paste	Tin	7440-31-5	96.50	metal	0.002706	0.13%
	Silver	7440-22-4	3.00	metal	0.000084	
	Copper	7440-50-8	0.50	metal	0.000014	
					0.000300	
Capacitor 1	BaTiO3 type	1304-28-5	40.00	Ceramic	0.000120	0.01%
	Titanium dioxide	13463-67-7	20.00		0.000060	
	Misc	-	6.67		0.000020	
	Nickel	7440-02-0	2.42	Inner electrode	0.000007	
	Copper	7440-50-8	20.73	Out electrode	0.000062	
	Silicon dioxide	7631-86-9	1.85		0.000006	
	diboron trioxide; boric oxide	1303-86-2	0.45		0.000001	
	Nickel	7440-02-0	2.12	Plating1	0.000006	
	Tin	7440-31-5	5.76	Plating2	0.000017	
Capacitor2	BaTiO3 type	1304-28-5	31.67	Ceramic	0.000291	0.04%
	Titanium dioxide	13463-67-7	15.83		0.000146	
	Misc	-	5.28		0.000049	
	Nickel	7440-02-0	26.67	Inner Electrode	0.000245	
	Copper	7440-50-8	15.10	Outer Electrode	0.000139	
	Silicon dioxide	7631-86-9	1.34		0.000012	
	diboron trioxide; boric oxide	1303-86-2	0.33		0.000003	
	Nickel	7440-02-0	1.00	Plating1	0.000009	
Tin	7440-31-5	2.78	Plating2	0.000026		
Capacitor3	BaTiO3 type	1304-28-5	37.46	Ceramic	0.001349	0.17%
	Titanium dioxide	13463-67-7	18.73		0.000674	
	Misc	-	6.24		0.000225	
	Nickel	7440-02-0	17.95	Inner Electrode	0.000646	
	Copper	7440-50-8	15.88	Outer Electrode	0.000572	
	Silicon dioxide	7631-86-9	1.41		0.000051	
	diboron trioxide; boric oxide	1303-86-2	0.35		0.000013	
	Nickel	7440-02-0	0.54	Plating1	0.000019	
Tin	7440-31-5	1.44	Plating2	0.000052		
Solder ball	Tin	7440-31-5	96.50	Main material	0.390166	18.92%
	Silver	7440-22-4	3.00	Main material	0.012130	
	Copper	7440-50-8	0.50	Main material	0.002022	
					1.501347	
Substrate	Copper	7440-50-8	37.61		0.564657	70.26%
	Tin	7440-31-5	0.57		0.008558	
	Silver	7440-22-4	0.02		0.000300	
	Core	N/A	46.04		0.691220	
	ABF	N/A	13.58		0.203883	
	Solder Mask	N/A	2.18		0.032729	

Revision History

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