



PK614 (v1.0) September 10, 2013

# 100% Material Declaration Data Sheet for 7 Series FFG1930 Package

**Average Weight: 25.9100 g**

Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
<b>Silicon Die</b>					<b>0.893576</b>	<b>3.449%</b>
	Silicon	7440-21-3	100.00	Basis	0.893576	
<b>Solder Bump</b>					<b>0.043347</b>	<b>0.167%</b>
	Tin	7440-31-5	63.00	Basis	0.027309	
	Lead	7439-92-1	37.00	Basis	0.016038	
<b>Underfill</b>					<b>0.093450</b>	<b>0.361%</b>
	Bisphenol F	9003-36-5	20.00	Basis	0.018690	
	Phenolic Resin	Trade Secret	15.00	Basis	0.014018	
	Epoxy Resin	25068-38-6	5.00	Basis	0.004673	
	Amine type Accelerator	Trade Secret	5.00	Basis	0.004673	
	Silicon Dioxide	60676-86-0	51.50	Filler	0.048127	
	Carbon Black	1333-86-4	1.00	Color Agent	0.000935	
Additives	Trade Secret	2.50	Additives	0.002336		
<b>Solder Paste</b>					<b>0.014400</b>	<b>0.056%</b>
	Tin	7440-31-5	96.50	Metal	0.013896	
	Silver	7440-22-4	3.00	Metal	0.000432	
	Copper	7440-50-8	0.50	Metal	0.000072	
<b>Capacitor 1</b>					<b>0.041280</b>	<b>0.159%</b>
	BaTiO3 type	12047-27-7	70.60	Ceramic	0.029144	
	Nickel	7440-02-0	6.70	Inner Electrode	0.002766	
	Copper	7440-50-8	20.10	Outer Electrode	0.008297	
	Nickel	7440-02-0	0.80	Plating 1	0.000330	
	Tin	7440-31-5	1.80	Plating 2	0.000743	
<b>Capacitor 2</b>					<b>0.022800</b>	<b>0.088%</b>
	BaTiO3 type	12047-27-7	61.70	Ceramic	0.014068	
	Nickel	7440-02-0	4.89	Inner Electrode	0.001115	
	Indium tin oxide	50926-11-9	18.30	Outer Electrode	0.004172	
	Copper	7440-50-8	13.40	Outer Electrode	0.003055	
	Nickel	7440-02-0	0.49	Plating 1	0.000112	
Tin	7440-31-5	1.22	Plating 2	0.000278		

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Component	Substance Description	CAS# or Description	% of Component	Use in Product	Component Weight/ Substance Weight (in grams)	Component % of Total
<b>Capacitor 3</b>					<b>0.003600</b>	<b>0.014%</b>
	BaTiO3 type	12047-27-7	66.00	Ceramic	0.002376	
	Nickel	7440-02-0	2.67	Inner Electrode	0.000096	
	Copper	7440-50-8	23.33	Outer Electrode	0.000840	
	Nickel	7440-02-0	2.33	Plating 1	0.000084	
	Tin	7440-31-5	5.67	Plating 2	0.000204	
<b>Capacitor 4</b>					<b>0.016740</b>	<b>0.065%</b>
	BaTiO3	12047-27-7	51.10	Ceramic	0.008554	
	Nickel	7440-02-0	27.00	Inner Electrode	0.004520	
	Copper	7440-50-8	16.00	Outer Electrode	0.002678	
	Glass	65997-17-3	0.90		0.000151	
	Nickel	7440-02-0	2.00	Plating 1	0.000335	
	Tin	7440-31-5	3.00	Plating 2	0.000502	
<b>Heat Sink</b>					<b>14.214000</b>	<b>54.859%</b>
	Copper	7440-50-8	99.15	Main Material	14.093181	
	Nickel	8049-31-8	0.85	Main Material	0.120819	
<b>Heat Sink Adhesive</b>					<b>0.357000</b>	<b>1.378%</b>
	Aluminium Oxide	1344-28-1	70.00	Main Material	0.249900	
	Dimethyl Siloxane	68083-19-2	30.00	Main Material	0.107100	
<b>Solder Ball</b>					<b>1.607244</b>	<b>6.203%</b>
	Tin	7440-31-5	96.50	Main Material	1.550990	
	Silver	7440-22-4	3.00	Main Material	0.048217	
	Copper	7440-50-8	0.50	Main Material	0.008036	
<b>Substrate</b>					<b>8.602573</b>	<b>33.202%</b>
	Copper	7440-50-8	48.53		4.174780	
	Tin	7440-31-5	0.08		0.00694	
	Lead	7439-92-1	0.11		0.009659	
	Silver	7440-22-4	0.47		0.040774	
	BT Core	N/A	39.52		3.399440	
	ABF	N/A	10.28		0.884560	
	Solder Mask	N/A	1.00		0.086420	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
09/10/13	1.0	Initial Xilinx release.

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