



# 100% Material Declaration Data Sheet for 7 Series RF900 Package

PK618 (v1.1) April 3, 2015

**Average Weight: 9.8041 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>0.297103</b>	<b>3.030%</b>
	Silicon	7440-21-3	100.00	Basis	0.297103	
<b>Bump</b>					<b>0.014081</b>	<b>0.144%</b>
	Tin	7440-31-5	63.00	Basis	0.008871	
	Lead	7439-92-1	37.00	Basis	0.005210	
<b>Underfill</b>					<b>0.045000</b>	<b>0.459%</b>
	Bisphenol F/ Epichlorohydrin	9003-36-5	20.00	Basis	0.009000	
	Phenolic Resin	Trade Secret	15.00	Basis	0.006750	
	Bisphenol A Type Liquid Epoxy Resin	25068-38-6	5.00	Basis	0.002250	
	Amine Type Accelerator	Trade Secret	5.00	Basis	0.002250	
	Silicon Dioxide	60676-86-0	51.50	Basis	0.023175	
	Carbon Black	1333-86-4	1.00	Basis	0.000450	
	Additives	Trade Secret	2.50	Additive	0.001125	
<b>Solder Paste</b>					<b>0.006300</b>	<b>0.064%</b>
	Tin	7440-31-5	63.00	Metal	0.003969	
	Lead	7439-92-1	37.00	Metal	0.002331	
<b>Capacitor 1</b>					<b>0.023400</b>	<b>0.239%</b>
	Barium	12047-27-7	88.86	Ceramic	0.020793	
	Manganese	1313-13-9	1.43	Ceramic	0.000334	
	Nickel	7440-02-0	4.29	Internal Electrode	0.001003	
	Copper	7440-50-8	0.70	Termination	0.000164	
	Boron	1303-86-2	0.01	Termination	0.000003	
	Nickel	7440-02-0	3.57	Plating	0.000836	
	Tin	7440-31-5	0.90	Plating	0.000211	
	Lead	7439-92-1	0.24	Plating	0.000057	

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<b>Capacitor 2</b>					<b>0.004100</b>	<b>0.042%</b>
	Barium	12047-27-7	88.86	Ceramic	0.003643	
	Manganese	1313-13-9	1.43	Ceramic	0.000059	
	Nickel	7440-02-0	4.29	Internal Electrode	0.000176	
	Copper	7440-50-8	0.70	Termination	0.000029	
	Glass Oxide	65997-17-3	0.01	Termination	0.000001	
	Nickel	7440-02-0	3.57	Plating	0.000146	
	Tin	7440-31-5	0.86	Plating	0.000035	
Lead	7439-92-1	0.29	Plating	0.000012		
<b>Capacitor 3</b>					<b>0.002500</b>	<b>0.025%</b>
	Barium	12047-27-7	71.29	Ceramic	0.001782	
	Manganese	1313-13-9	10.43	Ceramic	0.000261	
	Nickel	7440-02-0	2.00	Internal Electrode	0.000050	
	Copper	7440-50-8	11.57	Termination	0.000289	
	Boron	1303-86-2	0.21	Termination	0.000005	
	Nickel	7440-02-0	1.80	Plating	0.000045	
	Gold	7440-57-5	2.70	Plating	0.000068	
<b>Capacitor 4</b>					<b>0.012880</b>	<b>0.131%</b>
	Barium	12047-27-7	72.40	Ceramic	0.009325	
	Manganese	1313-13-9	10.60	Ceramic	0.001365	
	Nickel	7440-02-0	4.00	Internal Electrode	0.000515	
	Copper	7440-50-8	5.80	Termination	0.000747	
	Glass Oxide	65997-17-3	0.20	Termination	0.000026	
	Nickel	7440-02-0	2.66	Plating	0.000343	
	Tin	7440-31-5	3.99	Plating	0.000514	
Lead	7439-92-1	0.35	Plating	0.000045		
<b>Heat Sink</b>					<b>5.818000</b>	<b>59.343%</b>
	Copper	7440-50-8	99.80	Main Material	5.806364	
	Nickel	7440-02-0	0.10	Main Material	0.005818	
	Nickel Sulfate	7786-81-4	0.10	Main Material	0.005818	
<b>Heat Sink Adhesive</b>					<b>0.120000</b>	<b>1.224%</b>
	Aluminium Oxide Al2O3	1344-28-1	70.00	Main Material	0.084000	
	Dimethyl Siloxane, Dimethylvinyl-terminated	68083-19-2	30.00	Main Material	0.036000	

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<b>Solder Ball</b>					<b>0.856618</b>	<b>8.737%</b>
	Tin	7440-31-5	63.00	Main Material	0.539669	
	Lead	7439-92-1	37.00	Main Material	0.316949	
<b>Substrate</b>					<b>2.604098</b>	<b>26.561%</b>
	Copper	7440-50-8	40.10		1.044296	
	Tin	7440-31-5	0.82		0.021224	
	Lead	7439-92-1	0.17		0.004427	
	Silver	7440-22-4	0.02		0.000417	
	BT Core	N/A	43.50		1.132886	
	ABF	N/A	13.14		0.342231	
	Solder Mask	Trade Secret	2.25		0.058617	

## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
09/17/13	1.0	Initial Xilinx release.
04/03/15	1.1	Correct error in Solder Paste

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